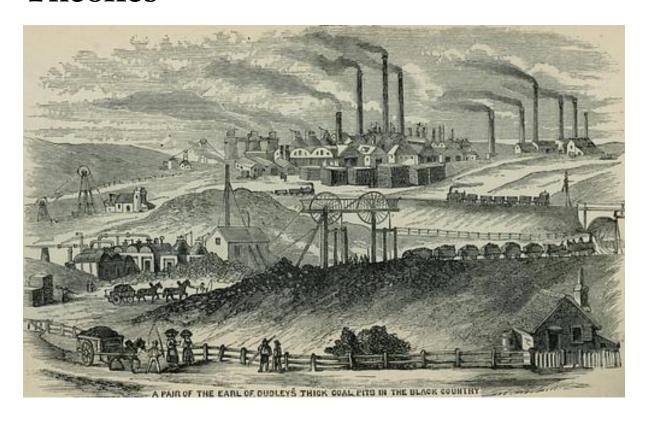
The Scientific Purpose of Conspiracy Theories



Maybe they were crazy

Few things are addictive to the mind as a conspiracy theory. Fewer things make the mind do such feats without a shred of evidence. We can take a crack at why this is happening within an individual using a combination of bounded computations, bad structural priors or suboptimal error representations (and adaptations to it) but that won't answer the quenching question - why do this persist? It's as old as human time, yet there is no sign of it stopping. What's the use of this phenomenon anyway?

I admit me, nor anyone else has an answer to this much like politics, religion, and prostitution; they exist, and they help get some things done for us without much effort, but it's a problem when too many people support it. What I do want to entertain here, an interesting perspective brought forth by some colorful examples from history.

Dr Robert Fludd was a London physician in the 1600s who, like many men, thought of making a machine run mill running on infinite power. His big idea was to make a mill that ran on some perpetual force which does not require renewal. This was seen as foolish (even in 1600s) but that didn't stop a host of people to attempt this as the running 'conspiracy' theory was there was an element in nature that is hidden and we must discover it. Yes the philosopher's stone is a much more famous cousin on this sentiment (though misunderstood by most). The intriguing thing is, this distributed set of experiments by a wide range of people in the UK, directly paved the way to inventing the steam engine & with it the Great Industrial Revolution. I say this because, its in the nature of man from time immemorial to find the 'unlimited energy' which he can utilize forever. If this idea was the prey, then the first law of thermodynamics is its predator, killing this idea too many times over the course of our lifetime, yet everytime it kills (or tries) to kill this, something completely unexpected emerges that defines the next epoch.

Dr Hans Berger was no simpleton to believe in such nonsense, but when his sister had a vision of him facing death, while him, being some 500 km away (in the age of telegram) narrowly missed the cannonball while on horseback, it occurred to him there could be a medium which transcribes information between brains. After all this was the 1900s where telegraph was the metaphor for the brain (before computation would topple it) and ether was still around as a possibility (albeit less so than 1800s because of another German physicist). The conspiracy element here evolved over the next five years into what we call now as the EEG. For the first time in human history, we could 'see' our thoughts. On a graph paper at that.

Nothing in recent times birthed conspiracy theories like COVID-19/2020 but it also brought forth the fact that there was indeed a Wuhan lab (as conspired), the government did indeed try to control unnecessarily (as conspired) and the election was indeed rigged by the Biden admin (as conspired).

Two Kinds of Conspiracy Theories

So here's the big hypothesis. There are two classes of Conspiracy Theories.

- 1. Conspiracy Theories of People
- 2. Conspiracy Theories of Nature

Conspiracy theories related to secrets of society might be more likely true, say 80% of the time. This is because humans are poor in making up COMPLETELY bogus things about others'; their mental states, quirks or relationships. We can only TRANSFORM something from a pre-existing content. And thus most conspiracies regarding people/societies would be true. Their main property is that they are confirmatory but yet only marginally utilitarian. That is, they will be denied by one party and even if evidence for it is found, it of marginal utility to most of society.

Conspiracy theories related to the secrets of Nature however, has a very, very large proportion of being wrong, like 95%. Think of the entire scientific beliefs by Greeks, Romans, Egyptians, ancient Indians/Chinese, Koreans. Even the great Babylonians who could predict the skies for their maritime commerce, had flawed belief (the understanding vs prediction is a key part of the Leo Breiman's two statistical cultures, for the interested). But, unlike the previous one, it prompts a large amount of people to set out to prove it. And humans by nature adopt vastly distinct methodologies for the same goal. It is precisely this mechanism that harvests serendipity over and over again when science reaches a rut. So many great minds were absorbed into proving the Phlogiston theory, calorific heat theory, ether, spontaneous generation, geocentrism, philosopher's stone (and hopefully panpsychism). They were all wrong and the ones who found contrary evidence propelled us to where we are now. The net effect of this is 1) disprove old myths through surprising findings and 2) massively utilitarian for the society. Like a decentralized scientific tinkering by obsessed (and likely mislead) minds, which beckons the case - how much is determined by raw ambition & vast but rigorous experimentation than clarity & evidence-based, rational approaches.

As the ghost of Kuhn towers over us to mock, we can't help but to say scientific funding should most definitely have an element of randomness to it, and quirky theories (provided in the hand of strong methodists, experimentalists or theorists) should be given some chance so that we know what it is that is underneath we tried to approximate and failed.