

Short-Circuits in the Mind

How They Work in the Spreading of Cults and Fake News

Aden A. Chen

June 30, 2021

Short-Circuits in the Mind

How They Work in the Spreading of Cults and Fake News

Our brains, by necessity, are programmed to short-circuit themselves. Every second, our senses are bombarded with information, but our brain will always manage to avoid being overwhelmed and manages to give outputs to stimulus almost instantaneously. This is made possible through its short-circuiting mechanism: stopping the over-computation on one subject to leave out more space for others. For us to answer the question about the function of religions and cults, this paper will first examine how our brain processes information to determine the nature of the so-called “common sense” process of doubt and investigation and how the “short-circuiting” happens. Then, it will discuss how religions and cults can potentially utilize this short-circuiting by charting how a few of history’s most infamous ideologies reached their “common sense”-defying conclusions. Finally, it will argue why knowing how our brains function is more important now than ever in an age of fake news, and offer a potential solution moving forward by embracing mindfulness.

Fast and Slow

As described in a commonly-used model of Kahneman (2011), there are two processes responsible for the creation of our thoughts: System 1 and System 2. The former is fast, automatic, unconscious; the latter slow, controlled, conscious. If “common sense” is the process of “doubt” and “investigation”, then it must involve both processes. Any initial feeling of “doubt” would arise intuitively, when System 1 runs into difficulty assessing the situation and calls upon System 2 to help; here’s when

we can begin “investigation”, a search for evidence.

When we imagine ourselves as thinkers, we like to regard ourselves as ruled by System 2: a rational being evaluating situations critically. However, in reality, System 1 plays a bigger role in how we think. System 1 is always continuously, effortlessly, and nearly instantly generating feelings on the information we perceive. In the process of System 1, much more is computed than needed; the over-computation offers a variety of substitution questions based on memory, which System 1 answers in place of the initial question when it's too difficult. Meanwhile, System 2 is used relatively infrequently. Not only does System 2 require more effort, but it's lazy, causing it to endorse many intuitive assumptions of System 1 without any adjustments. (Evans, 2003; Kahneman, 2011) In philosopher David Hume's words, reasoning is “the slave of the passions” (Haidt, 2012).

While we're all capable of the “common sense” process, the “investigation” will only follow after “doubt” is triggered in System 1. But what causes doubt to occur at all will be different for each person, as the fast System 1 closely reflects people's embedded past experiences. In an empirical study of the cognitive processing of atheists and evangelicals, the data suggests people's positive/negative associations depended more on their deep dispositions, even when it was at odds with their deliberately expressed beliefs (Moore, 2017). Our past experiences and memories create our implicit beliefs, which in turn lead our System 1 to make an intuitive judgment—all without any conscious process. Since different individuals have different background experiences, we cannot assume the point at which System 1 casts “doubt” will be consistent across

the population.

Religions and Cults

Religions and cults don't need to intentionally short-circuit "common sense" to operate. Given how the dual-process model functions—System 1 finding and answering substitution questions raised by associating memory and System 2's inherent laziness endorsing this answer—our brains require little help to short-circuit itself. However, since the "common sense" process relies on System 1 outputting "doubt", which itself relies on our associative memories, our "common sense" is vulnerable to manipulation. Once a belief system overcomes the initial hurdle of System 1 casting doubt, it's possible for that belief system to create new memories which further cause System 1 to avoid casting doubt, a cycle of short-circuiting and reinforcement. It's within this snowballing cycle that history's most infamous ideological cults existed. A rulebook and a good memory aren't required—the only preconditions are a gathering of people with similar background experiences (thus similarly not reaching the initial "doubt" trigger) and a leader progressing the ideology step-by-step.

This was the case with the Manson Family murders. While Charles Manson appeared sinister to the outside observer by the time he entered national headlines in 1969, he was a visionary messiah to his followers—an image that had been built up over time (Dubrow-Marshall & Dubrow-Marshall, 2017). His initial messaging to his first followers (two years earlier in San Francisco) was one of love and anti-consumption, not the one of race war and *Helter Skelter* he was eventually infamous for. His followers all shared the same qualities: young, rebellious, blamed their parents

for everything wrong, and looking for identity, direction, and acceptance—the perfect combination of experiences for which System 1 to not illicit doubt when Manson promised the counter-culture message of freeing them from their past and forming a new family. The ones who did display “common sense” initially were never initiated into the family (Altman, 2015). For the others, the cult progressed in snowballing steps—first moving from San Francisco to Los Angeles, then from the city to Spahn Ranch, further away from doubt. Furthermore, the use of LSD was a key component to Manson’s leadership; it induces bliss (Liechti, 2017) which then associates with his words in System 1 and never letting doubt trigger System 2’s investigation.

By 1969, when Manson introduced the concept of Helter Skelter and the race war, his followers’ Systems 1 were ready to accept it without “common sense”. The idea, that a select few people (including The Beatles) would emerge the victors of the coming race war and usher in a new, white era as the leaders, would appear far-fetched to any individuals outside the family and easily incur doubt and investigation. And if Manson had preached this message in San Francisco in 1967, it’s unlikely his prospective family would accept without doubt or investigation. But with the family’s new positive associations with their messiah by 1969, System 1 never created doubt.

A similar loop can be seen on a state-wide level, as was evidenced by Nazi Germany from 1933-1945. The Völkisch belief system that placed Jews as enemies of the German community was a unifying force. The majority of its supporters had a childhood under the shadow of World War I and the Great Depression, and now faced the Marxist challenge of a classless society. Antisemitism was already high among the

youth, and Hitler spreading the Völkisch ideology provided a direction (Waite, 2000); the mythical “Jew” became the incarnation of everything opposed to German solidarity (Cesarani, 2002).

But while agreeing the mythical Jew is behind the nation’s woes is a small step made possible by those particular experiences leading to intuitive System 1 judgment, to accept a conclusion as radical as the Final Solution only happened after many steps to override “doubt”. The initial idea of racial exclusivity allowed acceptance for the economic exclusion of the Jews, which then provided a precedent for increasingly invasive, and ultimately lethal, forms of expulsion. Propaganda aided each step’s legitimacy, as did the German cultural norm of respecting academics and experts—the sterilization program required public involvement of many trained legal officials, and German citizens who might otherwise undergo the “common sense” process were predisposed to feel all was in order (Cesarani, 2002).

Fake News and You

Understanding how our “common sense” functions and can be disrupted is more important today than ever due to our increasing preference and exposure to news and information through online mediums. In a 2020 poll of US adults news, 67-71% of responders under 50 reported “often” getting news from the Internet, with 42% of responders ages 18-29 “often” getting news from social media compared to 25% and 15% respectively for the 30-39 and 50-64 age groups (Shearer, 2021). While much has concern has been raised about the dangers of ideological “echo chambers”, and this paper does acknowledge the possibility of membership in an echo chamber leading to

the snowballing, reinforcement loop, the majority of active news consumers tend to visit multiple sites and thus are exposed to ideologically discrepant information (Guess et al., 2018). A study of 10.1 million active Facebook users with self-reported ideological affiliations indicated users routinely received exposure to ideologically opposed viewpoints (Bakshy et al., 2015). Nevertheless, one does not need to cut out exposure entirely to opposing viewpoints in order to short-circuit “common sense”; rather, one only needs to let the dual-process run its course. As System 1 performs associating memory and System 2 works to find confirming evidence, the brain tends to search for information that supports its prior beliefs, which is known as the confirmation bias (Kahneman, 2011).

It’s through understanding how our dual-process functions and how confirmation bias happens that we can observe how fake news and misinformation are able to spread. An estimated 9-15% of active Twitter accounts and up to 60 million Facebook accounts in 2016-17 were bots posting political content trying to influence the 2016 US and 2017 French elections (Lazer et al., 2018), an important phenomenon today as fake news has politics as its most popular topic and is spread chiefly to manipulate the social situation by altering public opinion (Berduygina, 2019). Under one’s dual-process thinking, when one encounters a fake news story supporting an opposing ideology, System 1 is able to immediately cast doubt and initiate System 2’s investigation to determine the new information is of dubious veracity. However, if the fake news article supports our intuitive beliefs, System 1 is liable to inherently trust it and System 2 works only to confirm System 1’s belief.

So powerful is System 1's judgment that even when fake news articles are flagged as "false" when presented, there is little effect. In a study by Dennis (2018), participants were presented with headlines of both fake and real news with randomly added "fake-news" flags. The participants were found to spend more time examining the headlines flagged false, especially those in line with their beliefs. The results of EEG analyses showed that additional cognition was activated when people saw headlines flagged as false, but it only caused them to distrust the flag and continuing to believe the false information.

So, what is a defense against fake news? How can we better ensure our "common sense" isn't short-circuited? We can all improve the mobilization of our System 2 through interventions like mindfulness practices. Scheps and Walsh (2020) conducted a study revealing that mindfulness, the behaviors of maintaining attention on present moments and holding one's judgments, had effects on reducing implicit racial bias. Participants who had low mindfulness presented more stereotypes of minorities, but after going through a series of mindfulness induction, their implicit racial bias declined. Scheps and Walsh found mindfulness placed the participants in a stage where System 2 took over, inhibiting the biased judgments System 1 obtained from long-term memory. As we learn to slow down, pause, and reflect, we enter a non-judgmental state where stimuli are distanced with reaction. This is a state where our System 2 thinking becomes more active, a state where we feel connected and have empathy even towards those on the other side. Our preference to use our intuitive over analytic thinking is also related to a form of cognitive miserliness, which is our tendency of relying on information

easily found on the Internet to think in a less effortful way (Barr et al., 2015).

“Common sense” is not quite as common as the name implies. While doubt and investigation are something we’re all capable of, the nature of our dual-process minds makes the short-circuiting of “common sense” a necessary phenomenon for our daily lives. Nevertheless, we must recognize when this short-circuiting has the potential to cause harm and take the proper steps to reduce our biases, such as practicing mindfulness.

References

- Altman, R. (2015). Sympathy for the Devil: Charles Manson's Exploitation of California's 1960s Counter-Culture.
https://scholar.colorado.edu/concern/undergraduate_honors_theses/w66344235
- Bakshy, E., Messing, S., & Adamic, L. A. (2015). Exposure to ideologically diverse news and opinion on Facebook. *Science*. <https://doi.org/348.10.1126/science.aaa1160>
- Barr, N., Pennycook, G., Stolz, J. A., & Fugelsang, J. A. (2015). The brain in your pocket: Evidence that Smartphones are used to supplant thinking. *Computers in Human Behavior*. <https://doi.org/10.1016/j.chb.2015.02.029>
- Berduygina, O. N., Vladimirova, T. N., & Chernyaeva, E. V. (2019). Trends in the spread of fake news in the mass media. *Media Watch*, 10(1).
<https://doi.org/10.15655/mw/2019/v10i1/49561>
- Cesarani, D. (2002). *The Final Solution: Origins and implementation*. Routledge.
- Dennis, A. R. (2018). Fake News on Social Media: People Believe What They Want to Believe When it Makes No Sense at All. *SSRN Electronic Journal*.
<https://doi.org/10.2139/ssrn.3269541>
- Dubrow-Marshall, L. J., & Dubrow-Marshall, R. (2017). How cult leader Charles Manson was able to manipulate his 'family' to commit murder.
<http://usir.salford.ac.uk/id/eprint/45244/>

-
- Evans, J. S. (2003). In two minds: Dual-process accounts of reasoning. *Trends in Cognitive Sciences*, 7(10), 454-459. <https://doi.org/10.1016/j.tics.2003.08.012>
- Guess, A., Lyons, B., Nyhan, B., & Reifler, J. (2018). *Avoiding the echo chamber about echo chambers: Why selective exposure to like-minded political news is less prevalent than you think*.
https://www.researchgate.net/publication/330144926_Avoiding_the_echo_chamber_about_echo_chambers_Why_selective_exposure_to_like-minded_political_news_is_less_prevalent_than_you_think
- Haidt, J. (2012). *The righteous mind: Why good people are divided by politics and religion*. Vintage.
- Kahneman, D. (2011). *Thinking, fast and slow*. Farrar, Straus and Giroux.
- Lazer, D. M. J., Baum, M. A., Benkler, Y., Berinsky, A. J., Greenhill, K. M., Menczer, F., Metzger, M. J., Nyhan, B., Pennycook, G., Rothschild, D., Schudson, M., Sloman, S. A., Sunstein, C. R., Thorson, E. A., Watts, D. J., & Zittrain, J. L. (2018). The science of fake news: Addressing fake news requires a multidisciplinary effort. *Science*. <https://doi.org/10.1126/science.aao2998>
- Liechti, M. E. (2017) Modern Clinical Research on LSD. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5603820/>
- Moore, R. (2017). Fast or slow: Sociological implications of measuring dual-process cognition. *Sociological Science*, 4, 196-223. <https://doi.org/10.15195/v4.a9>
- Shearer, E. (2021) More than eight in ten Americans get news from digital devices. *Pew Research Center*. Retrieved from <https://www.pewresearch.org/fact->

[tank/2021/01/12/more-than-eight-in-ten-americans-get-news-from-digital-devices/](https://www.bbc.com/news/health-55444444)

Scheps, M. H., & Walsh, J. J. (2020). The moderating effect of trait mindfulness on implicit racial bias following a brief mindfulness induction: A pilot study.

<https://repository.uel.ac.uk/item/88477>

Waite, R. G. L., (2000). Hitler's appeal to young Germans. In Stalcup, B. (Ed.), *Adolf Hitler* (pp. 75-84). Greenhaven Press.