

The Anatomy of a Conspiracy

Why Our Brains Embrace Secret Plots

The Identity Filter

Why Group Loyalty Shapes Truth

Identity Overrides Information



In the "Deflategate" scandal, knowledgeable fans were more polarized by team loyalty than casual observers.



Out-Group Anxiety as a Driver

Research shows Tea Party support is more strongly linked to out-group resentment than fiscal conservatism.

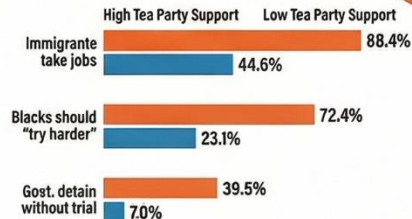


Alienation and Powerlessness



Feelings of insignificance within society (anomie) correlate positively with high levels of conspiracy belief.

TRUE BELIEVER ATTITUDES & OUT-GROUPS



The Cognitive Mirror

How Brains Manufacture "Evidence"

The Need for Cognitive Closure (NFCC)



High NFCC leads to less scrutiny of evidence and a desire for quick, unambiguous answers.

Organizational "Errors" Misread as Cover-Ups

Overloaded agencies often misfile data, which outsiders mistake for deliberate suppression.



COMMUNICATION THEMES (2010)



The Proportionality Bias



People struggle to accept that a "minor" cause (one person) can result in a "major" event.

Down the Rabbit Hole?

*Debunking 3 Common Myths
about Conspiracy Theories*

Adam Enders

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3 COMMON BELIEFS

01

CTs Are Spreading

News reports: Conspiracy theories "have never spread this swiftly" or "lodged this deeply in the American psyche." 73% of Americans believe CTs are "out of control."

02

Social Media Is to Blame

Conspiracy theories spread primarily via internet and social media. 77% of Americans believe social media and the internet are to blame.

03

CTs Cause Violence

Conspiracy theories cause violence and other non-normative behaviors and attitudes.

POTENTIAL IMPLICATIONS

If social media use → conspiracy beliefs → violence, we should be worried

Perhaps prompt policy changes that impact First Amendment speech protections:

- Regulating content on social media, punishing social media companies
- Removing Section 230 of Communications Decency Act

"No provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider"

(Requires determinations from some sort of "epistemic authority" about what is true/reasonable/plausible/dangerous)

More serious policing of "extremist" groups based on associations with conspiracy theories

"National Strategy for Countering Domestic Terrorism" (2021)

THE RUB...

Despite the popularity of these claims, there's no evidence that conspiracy beliefs are on the rise, that they are primarily driven by social media, or that they are primary causal forces behind violence.

BUT FIRST...DEFINITIONS!

CONSPIRACY THEORY

An idea alleging that a powerful group is working in secret, for their own benefit, against the common good, and in a way that undermines norms, rules, or laws.

Unlike scientific theories, they lack supportive evidence from relevant epistemic authorities/experts (may not even be falsifiable).

BUT FIRST...DEFINITIONS!

Do these count?

1. *"Biden has been avoiding public appearances because he has dementia and is unable to speak coherently for more than a few minutes at a time."*
2. *"The one percent (1%) of the richest people in the U.S. control the government and the economy for their own benefit."*
3. *"There is a "deep state" embedded in the government that operates in secret and without oversight."*
4. *"Donald Trump colluded with Russians to steal the presidency."*

AN EPISTEMOLOGICAL QUANDARY

CTs are typically considered to be false, unlikely, unevidenced, or irrational

Not synonyms...so which is it?

- Absence of evidence does not equal evidence of absence
- Rarely do we have consensus; instead, science is probabilistic
- What's the right probability for determining the epistemic value of an idea?
51%? 80%?
- What constitutes a good test of a conspiracy theory? How do we observe actions that are definitionally unobservable?

Who count as appropriate epistemic authorities?

Experts: scientists, lawyers (?), doctors (?), researchers, judges (?), elected leaders (?)

Are some scientists/researchers/judges more credible than others?

AN EPISTEMOLOGICAL QUANDARY

Even researchers try to circumvent this issue:

- Classify CTs by characteristics of believers
Sometimes what "counts" as a CT is who believes them...people exhibiting paranoia, "dark" personalities, crippled epistemologies, or epistemic vices
- Classify CTs by causes of ideas/beliefs
- Sometimes what "counts" is seemingly based on the (perceived) consequences (e.g., violence) of conspiracy theories

These strategies blur the line between idea, belief, exposure, believer, and consequence

DISTINGUISHING TERMS

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One who believes in conspiracy theories...?

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One who believes in conspiracy theories...?

CONSPIRACY THINKING

A general predisposition to interpret major events as the product of conspiracy theories.

HOW DO WE KNOW WHICH/WHO?

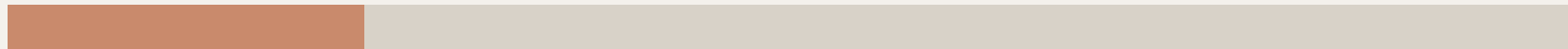
Truth is a continuum...we have more/less evidence for center claims and this changes as science happens



Little/No Evidence

Lots of Evidence

Same with conspiracy theories...we have more/less evidence based on epistemic authorities



Not Supported by Evidence

Supported by Evidence

Black and white terms like "conspiracy theorist" aren't very useful if this is true – better to think of truth and our interaction with it as a continuum

CHANGE OVER TIME?

Examine a wide range of conspiracy beliefs over time

Compare Time 1 to Time 2 – have the proportion of believers increased?

Need to have variation in:

- Topic of the conspiracy theories (e.g., politics, government malfeasance, health, aliens)
- Time span
- Salience (COVID CTs are more relevant now than JFK assassination)
- Survey mode (e.g., phone, internet, face-to-face)

If we find systematic patterns, we'll have supportive evidence!

PRIMARY DATA

Fielded large survey in May 2021 (n=2,021)

Reflects population based on gender, race, age, and educational attainment

Normal quality assurances (e.g., screen for speeders, 4 attention checks)

Compare this to old conspiracy belief polls from Roper Center

- Use the exact same question wording
- Oldest we have is JFK assassination beliefs from 1966
- Also: U.S. government killed Lennon and Tupac, MLK assassination, Reagan made deal with Iranians, FDR knew about Pearl Harbor attack in advance

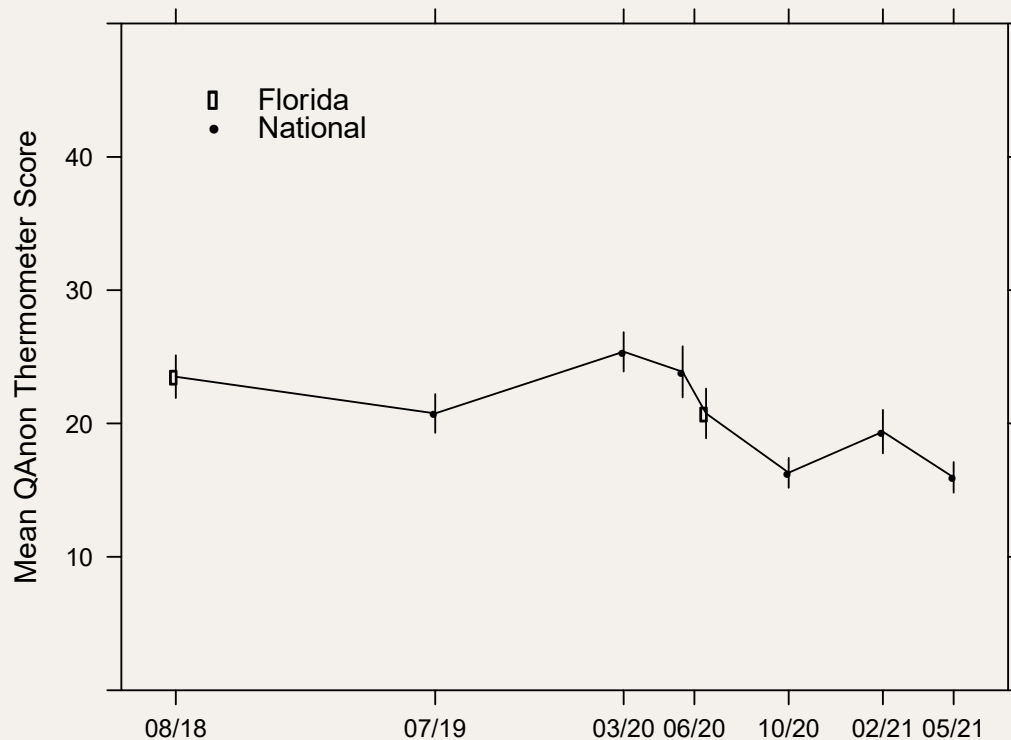
COVID CTS AND MISINFORMATION

Question wording	June 2020	May 2021	Diff.	<i>p</i> -value for difference
<u>Conspiracy theories</u>				
1. The coronavirus is being used to force a dangerous and unnecessary vaccine on Americans.	25	24	−1	0.541
2. Bill Gates is behind the coronavirus pandemic.	13	10	−3	0.012
3. The coronavirus is being used to install tracking devices inside our bodies.	18	12	−6	<0.001
<u>Misinformation</u>				
1. The number of deaths related to the coronavirus has been exaggerated.	29	36	+7	<0.001
2. Hydroxychloroquine can prevent or cure COVID-19.	18	18	0	>0.999
3. 5G cell phone technology is responsible for the spread of the coronavirus.	11	7	−4	<0.001
4. Putting disinfectant into your body can prevent or cure COVID-19.	12	6	−6	<0.001

SUPPORT FOR QANON MOVEMENT

Belief that a high-level U.S. security official was communicating with the American people, using the pseudonym "Q," about Donald Trump's battle with the deep state.

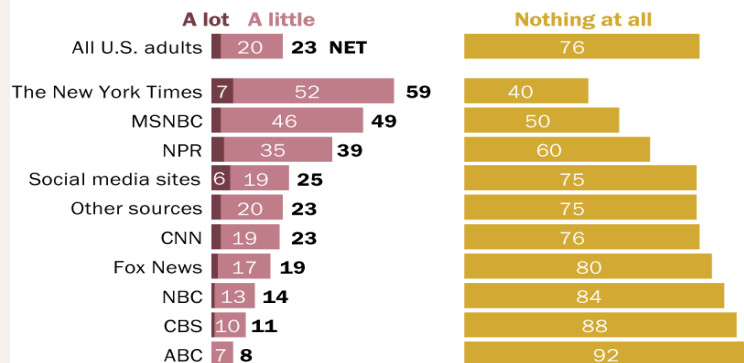
Lots of ancillary beliefs regarding child trafficking, Satanic baby-eaters, JFK Jr. being alive, mole people, etc.



YET...MORE KNOW WHAT QANON IS

Familiarity with QAnon connected with Americans' news diets

% who say they have heard or read _____ about QAnon, by main source of political and election news

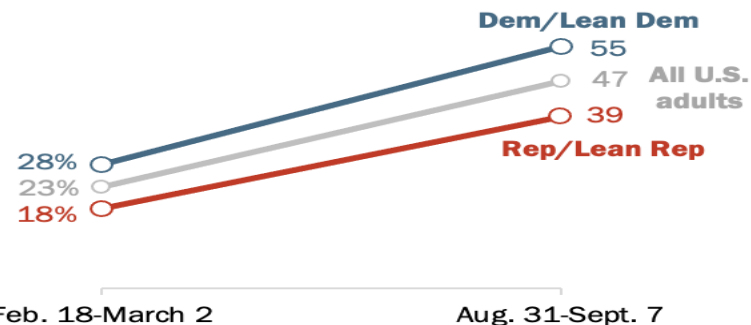


Note: Respondents who didn't give an answer are not shown.
Source: Survey of U.S. adults conducted Feb. 18-March 2, 2020.

PEW RESEARCH CENTER

About half of Americans say they've heard about QAnon conspiracy theories

% of U.S. adults who say they have heard or read a lot or a little about QAnon



Source: Survey of U.S. adults conducted Aug. 31-Sept. 7, 2020.

PEW RESEARCH CENTER

More people have knowledge of it over time (left). Much of that knowledge comes from mainstream sources (right).

Question wording	Percentage 1 (Time 1)	Percentage 2 (Time 2)	Diff.	<i>p</i> -value for difference
1. Humans have made contact with aliens and this fact has been deliberately hidden from the public.	23 (07/2019)	33 (03/2020)	+10	<0.001
2. Do you think the U.S. government has engaged in the assassination of entertainers who have tried to spread a counterculture message they didn't like, such as John Lennon, Kurt Cobain, Tupac Shakur, and others, or not?*	12 (09/2013)	20 (05/2021)	+8	<0.001
3. Billionaire George Soros is behind a hidden plot to destabilize the American government, take control of the media, and put the world under his control.	19 (10/2011)	26 (05/2021)	+7	<0.001
4. Do you think one man was responsible for the assassination of President Kennedy, or do you think there were others involved?	50 (12/1966)	56 (05/2021)	+6	<0.001
5. Do you believe that the pharmaceutical industry is in league with the medical industry to "invent" new diseases in order to make money, or not?*	15 (03/2013)	20 (05/2021)	+5	<0.001
6. Thinking about space exploration, do you think the government staged and faked the Apollo moon landings, or don't you feel that way?	6 (07/1995)	10 (05/2021)	+4	<0.001
7. Do you believe media or the government adds secret mind-controlling technology to television broadcast signals, or not?*	15 (03/2013)	17 (05/2021)	+2	0.132
8. Do you believe the government adds fluoride to our water supply, not for dental health reasons, but for other, more sinister reasons, or not?*	9 (03/2013)	11 (05/2021)	+2	0.067
9. Do you think the government is keeping information from the public that shows U.F.O.'s (Unidentified Flying Objects) are real or that aliens have visited the Earth?	49 (06/1996)	50 (05/2021)	+1	0.637
10. Hillary Clinton conspired to provide Russia with access to nuclear materials.	28 (03/2020)	29 (04/2021)	+1	0.481
11. The U.S. government is mandating the switch to compact fluorescent light bulbs because such lights make people more obedient and easier to control.	11 (10/2011)	12 (05/2021)	+1	0.325
12. Health officials know that cell phones cause cancer but are doing nothing to stop it because large corporations won't let them.	20 (09/2013)	20 (05/2021)	0	>0.999
13. Certain U.S. government officials planned the attacks of September 11, 2001, because they wanted the United States to go to war in the Middle East.	19 (10/2011)	19 (05/2021)	0	>0.999

14. Regardless of who is officially in charge of governments and other organizations, there is a single group of people who secretly control events and rule the world together.	35 (03/2020)	35 (10/2020)	0	>0.999
15. The number of Jews killed by the Nazis during World War II has been exaggerated on purpose.	15 (03/2020)	15 (10/2020)	0	>0.999
16. Climate change is a hoax perpetrated by corrupt scientists and politicians.	19 (07/2019)	19 (10/2020)	0	>0.999
17. Barack Obama faked his citizenship to become president.	20 (03/2020)	19 (05/2021)	-1	0.422
18. Do you completely agree, mostly agree, mostly disagree, or completely disagree that AIDS is a form of systematic destruction of minorities like blacks and Hispanics?	16 (11/1995)	15 (05/2021)	-1	0.416
19. The dangers of vaccines are being hidden by the medical establishment.	30 (03/2020)	29 (05/2021)	-1	0.486
20. The Food and Drug Administration is deliberately preventing the public from getting natural cures for cancer and other diseases because of pressure from drug companies.	37 (09/2013)	35 (05/2021)	-2	0.235
21. The one percent (1%) of the richest people in the U.S. control the government and the economy for their own benefit.	55 (03/2020)	52 (05/2021)	-3	0.056
22. A powerful family, the Rothschilds, through their wealth, controls governments, wars, and many countries' economies.	29 (03/2020)	26 (05/2021)	-3	0.033
23. The AIDS virus was created and spread around the world on purpose by a secret organization.	22 (03/2020)	19 (06/2020)	-3	0.054
24. The dangers of 5G cellphone technology are being covered up.	26 (03/2020)	23 (10/2020)	-3	0.027
25. Do you feel that the Assassination of Senator Robert Kennedy was the act of one individual or part of a larger conspiracy?	48 (03/1981)	43 (05/2021)	-5	0.009
26. The dangers of genetically-modified foods are being hidden from the public.	45 (03/2020)	40 (05/2021)	-5	0.001
27. School shootings, like those at Sandy Hook, CT and Parkland, FL are false flag attacks perpetrated by the government.	17 (03/2020)	12 (10/2020)	-5	<0.001
28. Do you believe that Osama bin Laden is dead, or do you think he is still alive?	11 (06/2011)	5 (05/2021)	-6	<0.001
29. Donald Trump colluded with Russia to rig the 2016 presidential election.	41 (07/2019)	34 (05/2021)	-7	<0.001
30. Some people have argued that President Franklin D. Roosevelt knew about Japanese plans to bomb Pearl Harbor but did nothing about it because he wanted an excuse to involve the U.S. (United States) on the side of the allies in the war.	31 (11/1991)	19 (05/2021)	-12	<0.001

31. Republicans won the presidential elections in 2016, 2004, and 2000 by stealing them.	27 (03/2020)	15 (05/2021)	-12	<0.001
32. Do you believe global warming is a hoax, or not?	37 (03/2013)	19 (05/2021)	-18	<0.001
33. Some people are hiding the truth about the December 14, 2012 school shooting at Sandy Hook Elementary in order to advance a political agenda.*	37 (04/2013)	16 (05/2021)	-21	<0.001
34. Do you think there was a police conspiracy to frame O.J. Simpson or not?	34 (10/1995)	11 (05/2021)	-23	<0.001
35. Do you feel that the Assassination of Martin Luther King was the act of one individual or part of a larger conspiracy?	59 (03/1981)	33 (05/2021)	-26	<0.001
36. Do you think there is, or is not, a national conspiracy to kill police?	44 (11/1970)	16 (05/2021)	-28	<0.001
37. Do you think that the Reagan campaign made a deal with the Iranians to hold the American hostages in Iran until after the 1980 presidential election or not?	43 (07/1991)	12 (05/2021)	-31	<0.001

Of these 37, only 6 show an increase (in magnitude from 4 to 10 points)

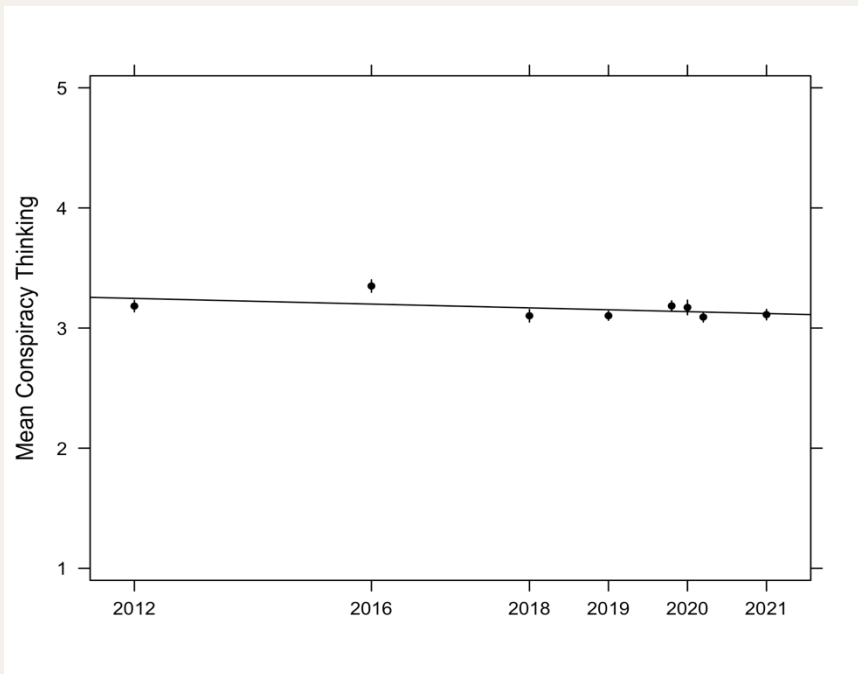
16 show no significant change over time

15 show a statistically significant decrease (in magnitude from 3 to 31 points).

Average change across all conspiracy beliefs: -4.57 points

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GENERAL PREDISPOSITION?



Summary of questions designed to tap into the general predisposition to interpret events and circumstances as the product of real conspiracies. Ranges from 1 (weakest) to 5 (strongest).

No trend over time ($B=-0.45$, $p=0.269$). Technically 2021 levels are lower than 2012 ($p=0.039$).

ROLE OF (SOCIAL) MEDIA?

It's easy to assume that people uncritically accept information/ideas they randomly encounter online – they're unwillingly dragged down “rabbit holes”!

ROLE OF (SOCIAL) MEDIA?

The "hypodermic needle" model of media effects posits a direct effect from exposure to belief

Decades of research into media effects, advertising, and propaganda show that's not how it works

- People don't believe things simply because they were exposed, because they were told to, or because the information is from "experts"

(Hence why efforts to "correct" beliefs in dubious ideas is so difficult)

- Instead, we selectively expose ourselves to and/or selectively ignore that which is (in)congruent with previously held beliefs, identities, and ideologies

Think about your own online behavior and consumption habits!

MOTIVATED REASONING

Change the behavior or the cognition ("I'll eat no more of this doughnut.")

Justify the behavior by changing the conflicting cognition ("I'm allowed to cheat my diet every once in a while.")

Justify by adding new cognitions ("I'll spend thirty extra minutes at the gym to work off the doughnut.")

Ignore or deny information that conflicts with existing beliefs ("This doughnut is not a high-sugar food.")

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MOTIVATED REASONING

Rather than search rationally for information that either confirms or disconfirms a particular belief, people actually seek out information that confirms what they already believe

One of the strongest, most consistent findings in all of social science

- We consume media that shares our values and ideologies, and avoid, ignore that which doesn't
- We ignore or explain away evidence that runs counter to our ideologies or partisan affiliations (more knowledgeable people are best at this!)
- We label ideas as conspiracy theories or misinformation based on whether those ideas match our priors, make us feel confident that we're on the side of truth, morality, virtue

SO WHY DO PEOPLE BELIEVE???

People have motivations to believe CTs – reasons!

People don't uncritically believe everything they hear; instead they act on their motivations, even if that requires fabricating or ignoring evidence.

01

Epistemic

Truth-seeking, interest/need for explanation and meaning-making

02

Existential

Desire to feel safe and secure, exert control over environment

03

Social

Protect image of oneself or group at expense of out-group

WHY DO PEOPLE BELIEVE? – EPISTEMIC

Epistemic motivations

Truth-seeking, interest/need for explanation and meaning-making

We're naturally inclined to want to know the truth, even if we aren't good at finding it

Many cognitive biases fit here:

- Patternicity – we see patterns where there is only random, signal when there is only noise
- Intentionality bias – we believe that outcomes are the product of intentional causes, rather than coincidence or accident
- Need for cognitive closure – we desire firm answers to questions and are uncomfortable with ambiguity, confusion, and uncertainty

WHY DO PEOPLE BELIEVE? – EXISTENTIAL

Existential motivations

We want to feel safe and secure in our environment and to exert control over the environment as autonomous individuals and as members of collectives

- Perhaps CTs make people feel safe by imposing a familiar structure on a messy, uncertain world
- Cheater detection – determines who the bad guys are and keeps them at bay
- Feelings of anxiety and powerlessness are related to CT beliefs – the less we feel in control, the more likely we are to posit that unseen forces are to blame

WHY DO PEOPLE BELIEVE? – SOCIAL

Social motivations

- CTs may help protect the image of oneself or their group at the expense of an out-group
- CTs can be used to damage outgroups or express out-group animus in a new way
Religious, racial, ethnic, class, sexuality, partisanship, ideology...basically any identity category

Status management and expression

- Perceived threats to status can be expressed in the form of CTs and misinformation (this threat doesn't need to be born of prejudice or semi-conscious animus)

EXAMPLE: CTS ARE FOR LOSERS

Tend to observe more beliefs in specific conspiracy theories, and higher levels of conspiratorial thinking among political losers

- CTs are used to explain loss – "the other side cheated!"
- This preserves our identities, beliefs, and feelings, if even in a seemingly illogical way
- It also maligns the out-group, which is "useful" in times of heightened polarization

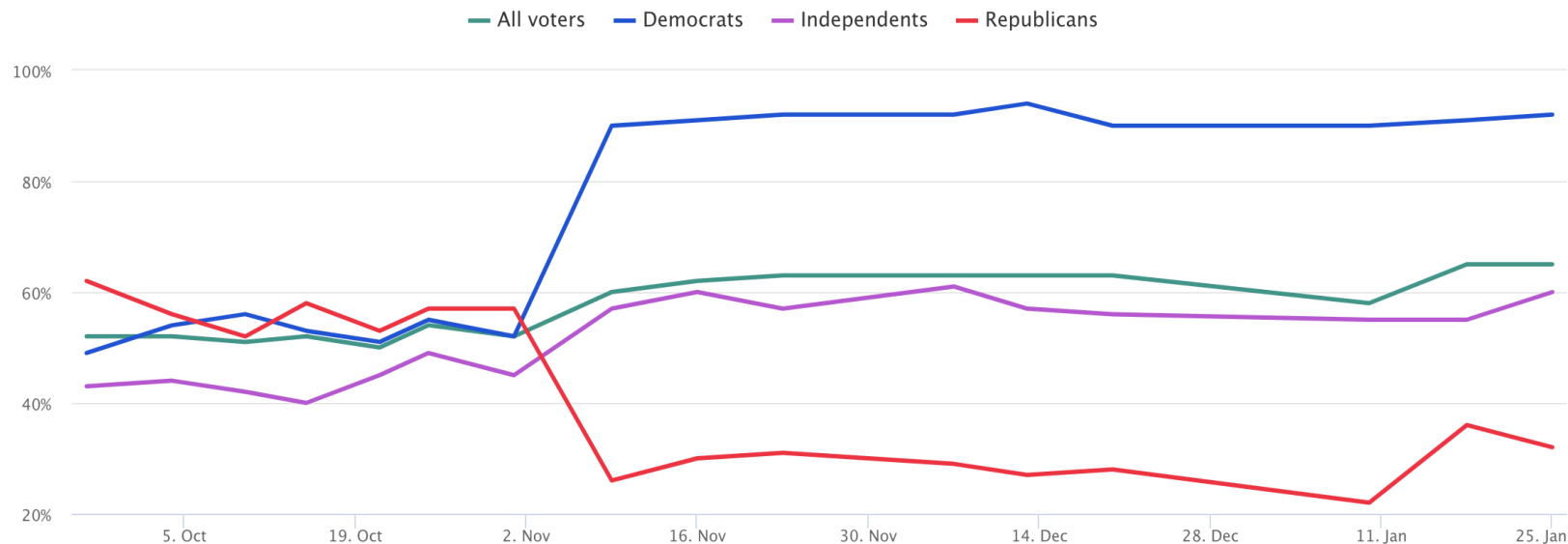
We observe this phenomenon across countries, across time, and across party affiliation

Strong correlation between conspiracy thinking and both perceived victimhood and feelings of political loss outside the context of elections

EXAMPLE: CTS ARE FOR LOSERS

65% of voters believe the 2020 election was free and fair

The share of registered voters who say the 2020 presidential election was “probably” or “definitely” free and fair. In pre-election surveys, voters were asked if they expected the election to be free and fair.



HOW GULLIBLE ARE WE?

Perhaps we're much more epistemically vigilant than even researchers oftentimes seem to think we are

Our tendency to change our minds in a fashion that is suggestive of gullibility only occurs under certain conditions:

- Having no prior knowledge AND no particular attachment to a belief (i.e., low centrality)

In other words...when we don't know or care

- We trust the information sender; sometimes this is directionally motivated (e.g., politicians), but frequently isn't (e.g., scientists, doctors, mechanics)

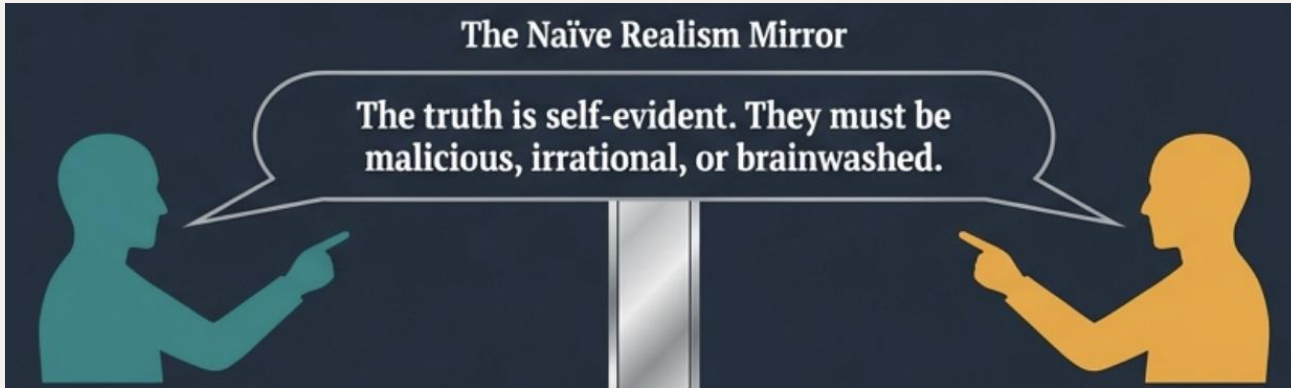
Which is to say...when motivated reasoning is in play!

BUT WE ARE NAÏVE REALISTS...

Epistemological judgements are the product of various motivations, ideologies, values, and experiences, rather than some unique access to the truth

This is contrary to our innate assumptions about ourselves and the world around us

We're naïve realists: We assume the truth is readily apparent



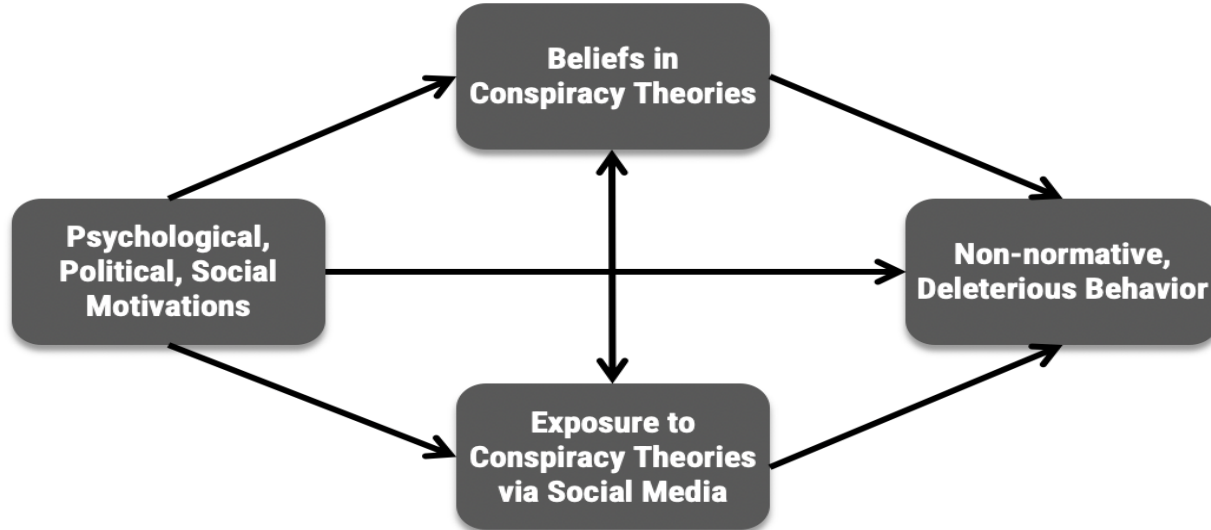
But if the truth were self-evident, there'd be no disagreement...

CONSPIRACY THEORIES CAUSE BAD STUFF?

A



B



CONCLUSIONS

- People don't seem to be any more conspiratorial today than in the past
If we could stretch our analysis back 100+ years, we'd likely find that people are considerably less conspiratorial
- Conspiracy beliefs have the same DNA as other beliefs
Consequence of a variety of individual-level political, psychological, and social motivations, plus elite rhetoric, information environments, and situational factors
- We're not the best at reasoning to the truth...but in ways that also mean we aren't that gullible or irrational either
- Political elites play a strong role in activating and reinforcing pre-existing conspiratorial dispositions
This seems to be what's changed, rather than bottom-up tendencies

Thank You

Questions? Comments?

Adam Enders | University of Louisville



*"It's only a conspiracy theory now,
but with the right marketing it
could become a widely held belief."*