

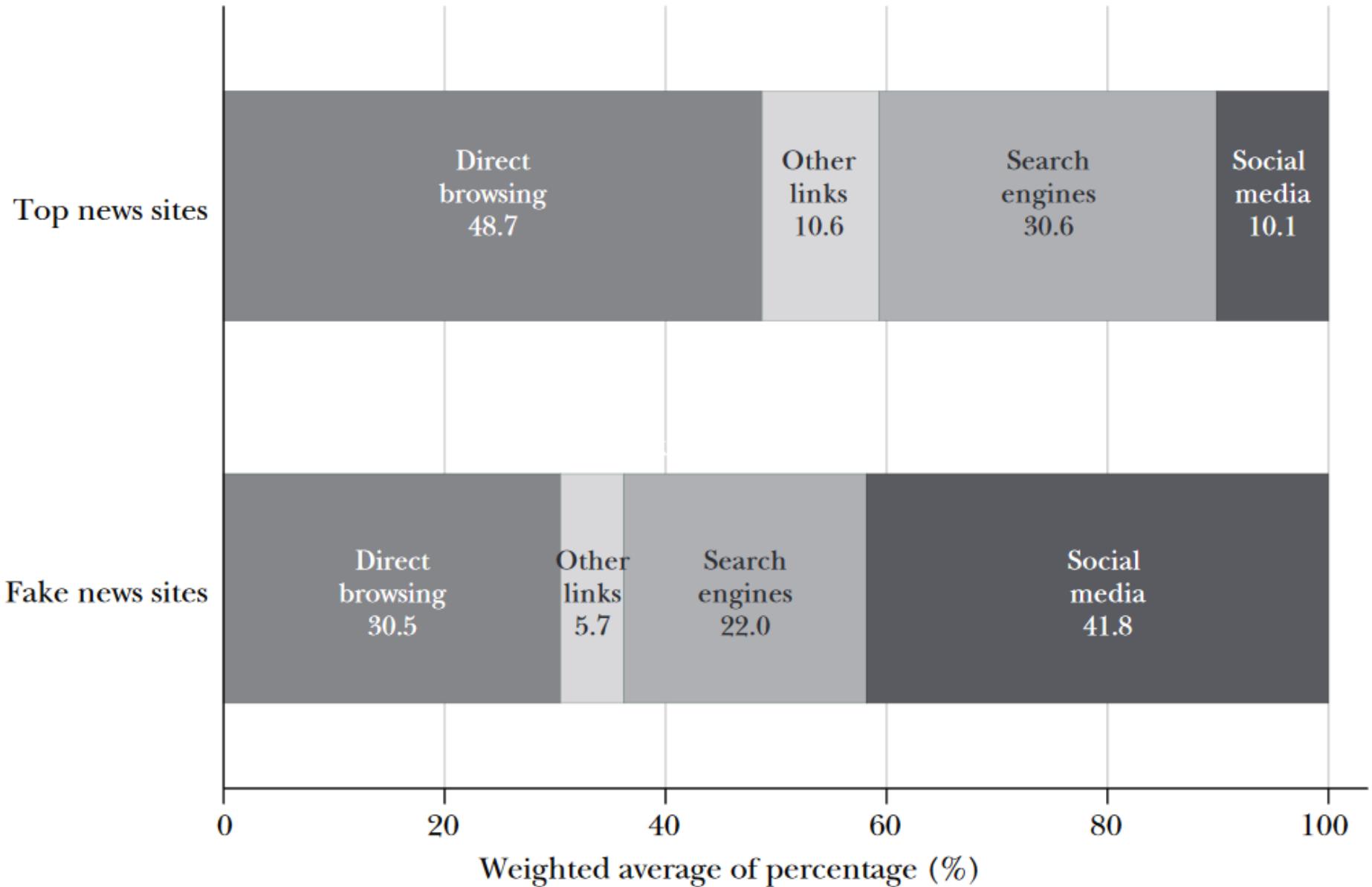
# T B V s g

BURSTING THE FAKE NEWS FILTER BUBBLE

DAVID ANDERSON, JOSHUA KETTLEWELL, TOMMASO DEMARIE, ANDREI BYTES, BALU  
FAKE NEWS MUST DIE HACKATHON

**PEOPLE LIKE  
FAKE NEWS**

## Share of Visits to US News Websites by Source



**people live in  
filter bubbles**

**they don't want to  
leave**

FILTER FEEDS BY TOPIC:

PRESIDENT TRUMP HEALTH CARE GUNS ABORTION ISIS BUDGET EXECUTIVE ORDER IMMIGRATION

LIBERAL

SHOWING POSTS ABOUT:  
"BUDGET"

CONSERVATIVE

CREDO Mobile

18 hours ago

"Kansas Republicans say they are worried that Congress and the Trump administration will repeat the mistake they made in enacting budget-busting tax cuts."

Tell Congress: No more corporate handouts <http://credo.com/KupmQy>



Kansas Republicans Warn Congress: 'You Bette...'

The Trump administration and its allies on the Hill seem to be ignoring...  
<THEATLANTIC.COM>

CREDO Mobile

19 hours ago

We need to prioritize spending money on health care, education and Infrastructure, not on the already bloated Pentagon budget.



Here's Where Your Tax Dollars for 'Defense' Ar...

The Pentagon's spending is a scandal of epic proportions.  
<THENATION.COM>

U.S. Senator Bernie Sanders

20 hours ago

Let's be clear about something: the economic theory Senate Republicans and President Trump have embraced with their budget, trickle-down economics, is an abysmal failure and a fraud.

Since Ronald Reagan and George W. Bush slashed taxes on the wealthy and deregulated Wall Street, trillions of dollars in wealth have been redistributed from the middle class and working families to a handful of millionaires and billionaires.



Gateway Pundit

last Saturday

Judicial Watch fearlessly takes on Juggernaut Mueller for hiding his budget from the American people!



Judicial Watch Takes on Mueller With New La...

Once again, Judicial Watch is doing the heavy lifting. The DOJ is hidin...  
<THEGATEWAYPUNDIT.COM>

WND

last Saturday

"Not above the law and he shouldn't be able to keep his budget secret"



Lawsuit demands Mueller reveal spending on R...

Former FBI director and now special counsel Robert Mueller is investig...  
<WND.COM>

Twitchy

about a week ago

She's a senator ... let that sink in.



ADORBS: Kamala Harris lists 3 'functions' of go...

Kamala never lets us down ... LOL.

<TWITCHY.COM>

## Motivated Skepticism in the Evaluation of Political Beliefs

Charles S. Taber Stony Brook University  
Milton Lodge Stony Brook University

We propose a model of motivated skepticism that helps explain when and why citizens are biased-information processors. Two experimental studies explore how citizens evaluate arguments about affirmative action and gun control, finding strong evidence of a prior attitude effect such that attitudinally congruent arguments are evaluated as stronger than attitudinally incongruent arguments. When reading pro and con arguments, participants (*Ps*) counterargue the contrary arguments and uncritically accept supporting arguments, evidence of a disconfirmation bias. We also find a confirmation bias—the seeking out of confirmatory evidence—when *Ps* are free to self-select the source of the arguments they read. Both the confirmation and disconfirmation biases lead to attitude polarization—the strengthening of  $t_2$  over  $t_1$  attitudes—especially among those with the strongest priors and highest levels of political sophistication. We conclude with a discussion of the normative implications of these findings for rational behavior in a democracy.

So convenient a thing it is to be a rational creature, since it enables us to find or make a reason for everything one has a mind to.

Ben Franklin

Physicists do it (Glanz 2000). Psychologists do it (Kruglanski and Webster 1996). Even political scientists do it (cites withheld to protect the guilty among us). Research findings confirming a hypothesis are accepted more or less at face value, but when confronted with contrary evidence, we become “motivated skeptics” (Kunda 1990), mulling over possible reasons for the “failure,” picking apart possible flaws in the study, re-coding variables, and only when all the counterarguing fails do we rethink our beliefs. Whether this systematic bias in how scientists deal with evidence is rational or not is debatable, though one negative consequence is that bad theories and weak hypotheses, like prejudices, persist

tists the consequences would be similar—hanging on to one’s beliefs and attitudes longer and stronger than warranted. Of course, it would be foolish to push this analogy too hard since scientific practice has such built-in safeguards as peer review and double-blind experiments to prevent bad ideas from driving the good ones out of the marketplace.

Ideally, one’s prior beliefs and attitudes—whether scientific or social—should “anchor” the evaluation of new information and then, depending on how credible is some piece of evidence, impressions should be adjusted upward or downward (Anderson 1981). The “simple” Bayesian updating rule would be to increment the overall evaluation if the evidence is positive, decrement if negative. Assuming one has established an initial belief (attitude or hypothesis), normative models of human decision making imply or posit a two-step updating process, beginning with the collection of belief-relevant evidence, followed by

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1998, Vol. 2, No. 2, 175–220

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1089-2680/98/\$3.00

## Confirmation Bias: A Ubiquitous Phenomenon in Many Guises

Raymond S. Nickerson  
Tufts University

*Confirmation bias*, as the term is typically used in the psychological literature, connotes the seeking or interpreting of evidence in ways that are partial to existing beliefs, expectations, or a hypothesis in hand. The author reviews evidence of such a bias in a variety of guises and gives examples of its operation in several practical contexts. Possible explanations are considered, and the question of its utility or disutility is discussed.

When men wish to construct or support a theory, how they torture facts into their service! (Mackay, 1852/1932, p. 552)

Confirmation bias is perhaps the best known and most widely accepted notion of inferential error to come out of the literature on human reasoning. (Evans, 1989, p. 41)

If one were to attempt to identify a single problematic aspect of human reasoning that deserves attention above all others, the *confirmation bias* would have to be among the candidates for consideration. Many have written about this bias, and it appears to be sufficiently strong and pervasive that one is led to wonder whether the bias, by itself, might account for a significant fraction of the disputes, altercations, and misunderstandings that occur among individuals, groups, and nations.

*Confirmation bias* has been used in the psychological literature to refer to a variety of phenomena. Here I take the term to represent a generic concept that subsumes several more

question, evaluates it as objectively as one can, and draws the conclusion that the evidence, in the aggregate, seems to dictate. In the second, one selectively gathers, or gives undue weight to, evidence that supports one’s position while neglecting to gather, or discounting, evidence that would tell against it.

There is a perhaps less obvious, but also important, difference between building a case consciously and deliberately and engaging in case-building without being aware of doing so. The first type of case-building is illustrated by what attorneys and debaters do. An attorney’s job is to make a case for one or the other side of a legal dispute. The prosecutor tries to marshal evidence to support the contention that a crime has been committed; the defense attorney tries to present evidence that will support the presumption that the defendant is innocent. Neither is committed to an unbiased weighing of all the evidence at hand, but each is motivated to

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2001, Vol. 80, No. 4, 557–571

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0022-3514/01/\$15.00 DOI: 10.1037/0022-3514.80.4.557

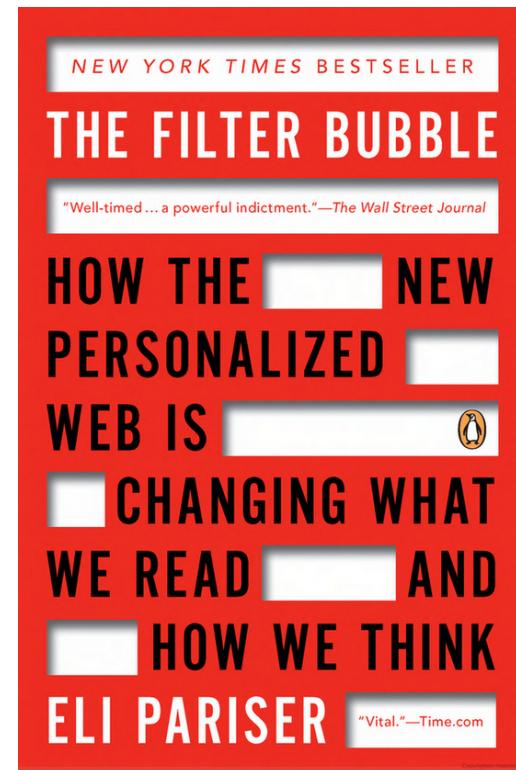
## Confirmation Bias in Sequential Information Search After Preliminary Decisions: An Expansion of Dissonance Theoretical Research on Selective Exposure to Information

Eva Jonas, Stefan Schulz-Hardt, Dieter Frey, and Norman Thelen  
Ludwig-Maximilians-University

Research on selective exposure to information consistently shows that, after having made a decision, people prefer supporting over conflicting information. However, in all of these experiments participants were given an overview of all available pieces of information, selected them simultaneously, and did not process the requested information during the selection phase. In the present research the authors show that an even stronger preference for supporting information arises if information is presented and processed sequentially. This finding is interpreted as evidence for a confirmation bias that is due to sequential presentation and not to sequential processing of information (Experiment 2). The authors provide evidence that the increase in confirmation bias under sequential presentation is caused by heightened commitment due to the participants’ increased focusing on their decision (Experiments 3 and 4).

When people seek new information, these information search processes are often biased in favor of the information seeker’s previously held beliefs, expectations, or desired conclusions. For example, people have been shown to favor information that supports their social stereotypes (Johnston 1996), attitudes (Lindgreen & Petty 1994), expectations in medical contexts (Fiske & Fazio 1992), and self-protecting conclusions (Frey, 1984; Frey & Pyszczynski, 1989). These biased information search processes lead to the maintenance of the information seeker’s position, even if this position is not justified on the basis of all available information (Johnston, 1996; Pinkley et al., 1995).

Such processes are of particular relevance in normative decision making, where people are often faced with the need to make decisions that are likely to have negative consequences (Rogers 1996), an information search that is clearly biased in favor of a preferred alternative may be dangerous, because potential risks and warning signals may be overlooked and, thus, decision fiascos may be the consequence. If the decision maker fails to consider disconfirming pieces of information, it is difficult for him or her to correct a faulty decision and thereby avoid loss escalation.



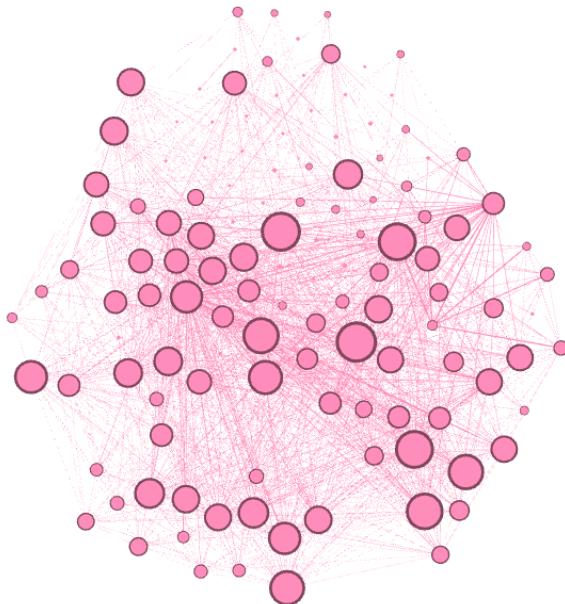
**passively crowdsource  
source critiques**

**automatically deliver to  
open-minded individuals**

# find insular groups with opposing views

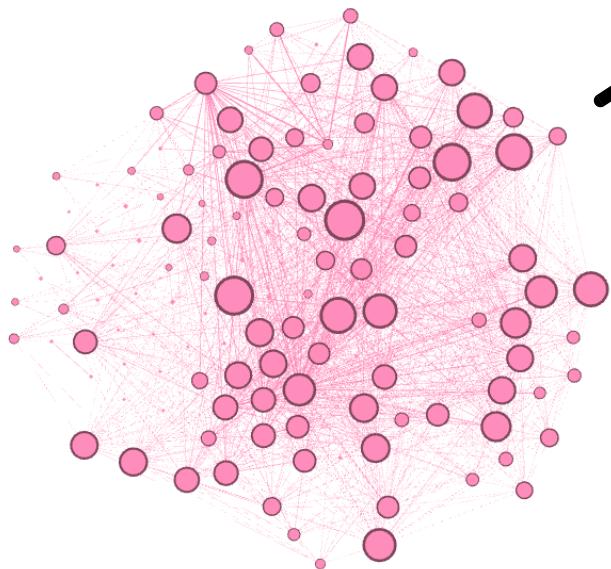


Breitbart News @BreitbartNews  
News, commentary, and destruction of the political/media establishment.  
[breitbart.com](http://breitbart.com)  
Joined January 2012



The Straits Times @StraitsTimes  
Breaking news from the online site of Singapore's most widely read newspaper  
 Singapore  
 straitstimes.com  
Joined May 2009  
[Tweet to](#) [Message](#)

# identify trending fake articles + source



**NYT & YOUTUBE COLLUSION SPAWNS FAKE NEWS 'BASTARD CHILD'**

MSM and Silicon Valley teaming up to push globalist lies

U.S. NEWS 39 Comments

```
1 import json
2
3 def canonicalize_url(url):
4     try:
5         url = url.split('://')[1]
6     except IndexError:
7         return None
8     url = url.split('/')[0]
9     url = url.lower().strip()
10    return url
11
12 def make_is_fake_source():
13     """Load the the source file of fake urls, and provide a function which can validate a provided link"""
14     with open("fake_sites.json", "r") as f:
15         blob = f.read().strip()
16         blob.decode("utf-8")
17         data = json.loads(blob)
18         fake_urls = [datum["siteUrl"].lower().strip() for datum in data]
19         fake_url_roots = set([canonicalize_url(url) for url in fake_urls])
20
21     def is_fake_source(url):
22         root = canonicalize_url(url)
23         return root in fake_url_roots
24
25     return is_fake_source
26
27 if __name__ == '__main__':
28     is_fake_source = make_is_fake_source()
29     assert is_fake_source('http://21stcenturywire.com/'), True
30     assert is_fake_source('http://shareblue.com/'), True
```

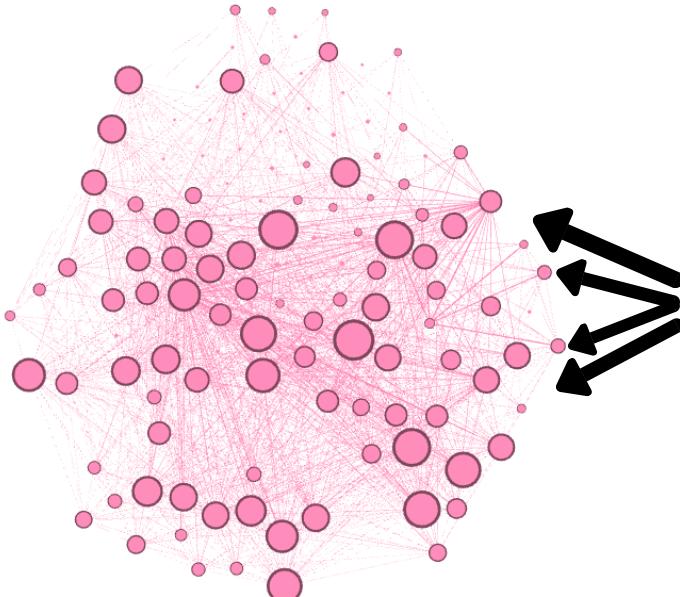


# collect critiques of source



A screenshot of a Twitter search results page for the query 'breitbart from:MailOnline OR from:CNN OR from:SkyNews OR from:nytimes OR from:gu...'. The results show several tweets from different news organizations. The first tweet is from CNN (@CNN) dated Aug 22, replying to @CNN, mentioning Jared Kushner &amp; Ivanka Trump being ousted from the White House. It includes a photo of Kushner and Ivanka Trump. The second tweet is also from CNN (@CNN) dated Aug 22, mentioning Breitbart editor being tricked by an email prankster and pledging to do 'dirty work' for Bannon. It includes a photo of Steve Bannon. The third tweet is from CNN (@CNN) dated Aug 22, mentioning Breitbart chiding President Trump for his 'flip-flop' on Afghanistan policy. It includes a photo of Donald Trump and Steve Bannon. The fourth tweet is from The Guardian (@guardian) dated Aug 22, mentioning Breitbart attacking Trump's Afghanistan proposals. It includes a photo of a soldier in a helmet.

# send critiques to non-central clique members



Breitbart editor, seemingly tricked by self-described "email prankster," pledges to do "dirty work" for Bannon [cnn.it/2wC1DMm](http://cnn.it/2wC1DMm)



1:14 PM - 22 Aug 2017

211 Retweets 331 Likes

61 211 331

- ✓ automated clique detection
- ✓ fake news identification
- ✓ critique aggregation
- ✓ critique dispatch
- ✓ monitoring & direct response

<https://github.com/jketts/tbv>

**continuous, automatic,  
fake news inoculation  
for Singapore**