Media Power Through Epistemic Funnels

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ABSTRACT

Media companies are often accused of having too much power. But what sort of "power" do they have? In this essay, I offer an account of one crucial form of media power: the power to change a person's beliefs. Such power is possible when the person gets most of their information on a given topic from one media company—that is, when the person has fallen within what I call an epistemic funnel. A company exercises this power by severely skewing the information pools of persons within their funnel in favor of or against certain viewpoints. I claim that exercising this form of power, like exercising coercive forms of power, subverts the target's agency. It does so not by thwarting the target's plans but by undermining their epistemic rationality, i.e., their ability to form justified beliefs. The latter, I argue, requires reviewing evidence from multiple and competing viewpoints. Thus, to contain this form of media power, measures should be taken to diversify media consumers' evidence pools.

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The criticism is commonly heard that the biggest American information companies, like Meta and Alphabet, have too much political power.[1] This criticism pops up whenever these companies act in a way that has sweeping consequences for public discourse, such as suspending Donald Trump's personal Twitter account, suppressing a news story that might have hurt Joe Biden's candidacy prior to the 2020 election, or demoting misinformation about the 2020 American presidential election.[2] This concert about excessive power has grounded calls, from both left and right, for legally constraining or even breaking up these information-technology giants.[3]

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1. *See, e.g.*, TIM WU, THE CURSE OF BIGNESS: ANTITRUST IN THE NEW GILDED AGE (2018); K. SABEEL RAHMAN, DEMOCRACY AGAINST DOMINATION (2016); Genevieve Lakier, *The Great Free Speech Reversal*, ATLANTIC (Jan. 27, 2021), https://www.theatlantic.com/ideas/archive/2021/01/first-amendment-regulation/617827/ [https://perma.cc/XME8-66R9]; Nathan J. Robinson, *What Rights Do We Have on Social Media?*, CURRENT AFFS. (Jan. 13, 2021), https://www.currentaffairs.org/2021/01/what-rights-do-we-have-on-social-media [https://perma.cc/D5NT-FUWM]; *see also* Brooke Auxier, *How Americans See U.S. Tech Companies as Government Scrutiny Increases*, PEW RSCH. CTR. (Oct. 27, 2020), https://www.pewresearch.org/fact-tank/2020/10/27/how-americans-see-u-s-tech-companies-as-government-scrutiny-increases/ [https://perma.cc/N5UJ-FMFT] (72% of American adults say that "social media companies have too much power and influence in politics today").

2. *See, e.g.,* Naomi Nix et al., *Facebook, Twitter, Google Face Calls to Ban Trump Accounts*, BLOOMBERG (Jan. 8, 2021), https://www.bloomberg.com/news/articles/2021-01-08/facebook-twitter-google-face-calls-to-ban-trump-from-accounts [https://perma.cc/AHT5-35QV]. *See also* Hannah Murphy & Max Seddon, *Big Tech Caught in Information War Between West and Russia*, FIN. TIMES (Feb. 28, 2022), https://www.ft.com/content/e0a31741-ee65-42c0-b045-59c382a8a081 [perma.cc/92YW-2PWX]; Tim Murtaugh, *Media Suppression of Hunter Biden's Laptop Was Election Interference*, WASH. TIMES (March 24, 2022), https://www.washingtontimes.com/news/2022/mar/24/medias-suppression-of-hunter-laptop-was-election-i/ [https://perma.cc/UN2E-FQEQ]; Shannon Bond & Bobby Allyn, *How the "Stop the Steal" Movement Outwitted Facebook Ahead of the Jan. 6 Insurrection*, NPR (Oct. 22, 2021), https://www.npr.org/2021/10/22/1048543513/facebook-groups-jan-6-insurrection [https://perma.cc/TY7T-MAU4].

3. *See, e.g.*, WU, *supra* note 1 (endorsing antitrust solutions); Francis Fukuyama et al., *How to Save Democracy from Technology*, 100 FOREIGN AFFS. 98 (2021) (rejecting antitrust solutions and advocating market interventions that might require government regulation); Josh Simons & Dipayan Ghosh, *Utilities for Democracy: Why and How the Infrastructure of Facebook and Google Must Be Regulated*, BROOKINGS INST. (Aug. 2020), https://www.brookings.edu/wp-content/uploads/2020/08/Simons-Ghosh_Utilities-for-Democracy_PDF.pdf [https://perma.cc/QK8L-MX7Q] (calling for the regulation

Yet what is meant by political "power"? A definition is rarely offered. It might mean direct power over political actors, such as through lobbying. Yet this seems a relatively narrow conception. It might mean market power, or the ability to set prices within an economic marketplace. But this does not, on its own, capture the political nature of the criticisms, which tend to assume that these companies' power undermines democracy. It might mean the power to change what Americans see and hear every day: to set agendas, to change narratives, etc. This seems closer, but it does not seem to capture the root of the criticism. What many critics mean by power, I think, is power *over* media consumers, or power to make media consumers believe and act in certain ways—to change public opinion and even electoral outcomes.[4] Whether this is what is *typically* meant or not, it seems to be the most worrying sort of power that media could have. This essay offers one way of thinking about that sort of power with more precision.

The power that an agent can have *over* another agent is in political theory called social power. On the normative account of social power that I offer here, building on Robert Dahl's account, an agent A (including a media company) has power over another agent B to the extent that A (1) "can get B to do something that B otherwise would not do"[5] (2) by subverting B's agency.[6] By agency, I mean a person's ability to do all of the following: set their own ends, form their own plans for achieving those ends, and then execute those plans.[7] The second part of the above definition of social power excludes from power certain *ways* of being able to get a person to do something that seem fully compatible with the target's agency and hence unobjectionable.

But what counts as a "subversion" of agency? The most obvious example is coercion, i.e., force or the threat of force. Coercion outright prevents an agent from *executing* their plans. Another example—the one this essay focuses on—is the disruption of a person's epistemic rationality, i.e., their ability to form rational, justified beliefs. Because epistemic rationality is a crucial part of a person's *forming* their own ends and plans in the first place, its disruption also subverts agency. If A wants B to abandon his plan and hypnotizes him to believe that his plan will fail, thereby seriously subverting

of Facebook and Google as public utilities); Eugene Volokh, *Treating Social Media Platforms Like Common Carriers?*, 1 J. FREE SPEECH L. 377 (2021) (tentatively proposing the regulation of social media platforms as common carriers).

4. *See, e.g.*, FRANCIS FUKUYAMA ET AL., MIDDLEWARE FOR DOMINANT DIGITAL PLATFORMS: A TECHNOLOGICAL SOLUTION TO A THREAT TO DEMOCRACY 2 (2021), https://fsi-live.s3.us-west-1. amazonaws.com/s3fs-public/cpc-middleware_ff_v2.pdf [https://perma.cc/M5LL-AUWW] ("The ultimate fear is that the platforms have amassed so much power that they could sway an election, either deliberately or unwittingly.").

5. This first half of the definition just is Robert Dahl's classical, descriptive definition of power. Robert Dahl, *The Concept of Power*, 2 BEHAV. SCI. 201, 202–03 (1957).

6. This second half of the definition—which adds the normative element to Dahl's original version— builds on work on the concept of manipulation. *See, e.g.*, Allen W. Wood, *Coercion, Manipulation, Exploitation*, *in* MANIPULATION: THEORY AND PRACTICE 35 (Christian Coons & Michael Weber eds., 2014). *See also* discussion *infra* Section III.A.

7. *Cf.* CHRISTIAN LIST & PHILIP PETTIT, GROUP AGENCY: THE POSSIBILITY, DESIGN, AND STATUS OF CORPORATE AGENTS 20 (2013).

his epistemic rationality, then A exercises power over him. By contrast, if A presents B with compelling arguments that his plan will fail, then A does not exercise power over him in my sense. Persuasion *engages*, rather than subverts, epistemic rationality.

None of this has yet made clear how a media company could have power over its consumers. The media specializes in what I call *speech filtering*—drawing attention to some speech rather than other speech. Generally speaking, merely drawing attention to speech does not interfere with epistemic rationality or any other aspect of agency. Indeed, it often resembles persuasion. However, I contend that a media company's speech filtering can undermine the epistemic rationality of a person in at least one circumstance: when that person gets most of their information (on at least one issue) from the company. I call the situation this person is in an *epistemic funnel* controlled by the company.

One facet of epistemic rationality, I argue, is that one must, in forming a belief on a matter of opinion, hear speakers on both sides of the matter.[8] For a media company to ensure that someone does *not* hear both sides is not easy. Most consumers get their information from multiple media sources. Even if one source excluded all speakers on one side of an issue, other media sources would presumably fill the gap. However, if a person occupies an epistemic funnel, getting most of their information from a single media company, then it becomes much easier for that company to skew the speech that he hears in order to prevent him from hearing both sides—in the process disrupting his epistemic rationality and thus agency. If the company could thereby also change his beliefs, then the company would have power over him. I call this *skewing power*.

Whether or not a media company has skewing power over a given listener will depend not only on whether the company is the listener's primary information source but also on the susceptibility of the listener and any constraints (e.g., economic or political) on the company's ability to skew.

Of all media companies, the new online-media companies like Meta, which owns Facebook and Instagram, and Alphabet, which owns YouTube and Google, seem best positioned to undermine the public's epistemic rationality, for two main reasons. First, people are likelier to use them as primary filterers of information, because they provide such a vast quantity of speech across such a broad range of topics, both public and private. Second, these companies' filtering choices are often highly opaque and so any subtle or occasional skewing may be hard to detect.[9]

The theoretical problems that this essay poses could show up in the empirical world in three ways. The most concerning would be if American media companies are actually exercising skewing power over American consumers—biasing the information they consume in order to instill in them particular beliefs. This would be disastrous both for those consumers and for democratic decision-making. Still concerning, though less immediately alarming, would be if media

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8. I simplify the principle here. I also use "matters of opinion" as shorthand for matters of *unsettled* opinion. For a fuller explanation, see discussion *infra* Section II.A.

9. See discussion *infra* Section IV.C.

companies hold, but are not yet exercising, skewing power. This still leaves open the possibility that these companies—or some future iteration of them, with different leaders at the helm—could exercise this terribly tempting power. The least concerning scenario—though far from *un*concerning—would be if epistemic funnels exist but media companies cannot actually use them to change consumers' beliefs, because consumers are unsusceptible to such changes or the companies are constrained. Even the threat that these problems could materialize should push us to think of and advance remedies for constraining and ultimately breaking open epistemic funnels and educating the public about their danger.

The essay proceeds as follows. In Section I, I explain the important epistemic function that media companies play by "filtering" speech. I also describe how a media consumer can end up in an "epistemic funnel," with just one company filtering most of their information on certain topics. In Section II, I argue for the epistemic perils of these funnels. Epistemic funnels can easily violate an important principle of epistemic rationality: that, in forming beliefs on matters of unsettled opinion, we should consult sources who hold competing opinions. In Section III, I offer a normative account of power as one agent's ability to get another agent to do something by subverting the latter's agency, one aspect of which is epistemic rationality. On this account, a media company that serves as a person's primary filterer of information may have power over them by skewing their information pool ("skewing power"). I also here address concerns that the individuals inside epistemic funnels may bear responsibility for entering in the first place (and conclude that they mostly do). In Section IV, I explore the core factors that determine whether and how much a media company has power over a given media consumer: the extent to which an epistemic funnel is closed, the susceptibility of the consumer, and any constraints on the company's filtering. I also conclude that new forms of online-media like social media platforms and search engines are more likely to have power over their users than more traditional forms of media. In conclusion, I explore some of the broader consequences of skewing power and some broad types of remedies that they point us toward.

I. MEDIA AND EPISTEMIC FUNNELS

We engage in speech "filtering" every time we direct attention toward some speech (and, therefore, away from other speech). We filter speech *for ourselves* whenever we choose which sources to consult. We select whom to ask about professional dilemmas, about romantic relationships, about furniture purchases, etc.— often knowing that whom we consult will shape our ultimate decisions. We filter speech *for others* every time we speak to a listener, because we are directing the listener's attention toward our *own* speech; and toward *these* words rather than others we might have spoken. We also engage in filtering for others when we draw their attention toward other people's speech—e.g., by recounting a podcast interview or recommending an article.

Speech filtering can be a zero-sum game when attention is limited. If a person reads an article that I recommend about a recent event, she might not be inclined to read another one about the same event.[10]

In deciding which speech we will consume each day, most of us rely heavily on intermediaries to filter speech for us—*filterers*, I will call them. Filterers used by the average person might include a collection of newspapers, magazines, podcasts, list-serves, social media accounts, Substack newsletters, news aggregators, and search engines. These filterers are indispensable given the limits of both our time and our cognitive abilities and the quantity of speech produced each day. Just as a sample, every minute approximately 350,000 tweets are posted on Twitter and 500 hours of video are uploaded to YouTube, by the most recent estimates.[11] Hopefully, though not always, our filterers do not just cut down on the sheer volume of speech but promote quality, separating the wheat from the chaff.

Many, if not most, of the filterers we depend on are *media companies*. I will use the term loosely, to refer to any corporate entity, for-profit or nonprofit, whose primary function is to make speech available to audiences on a relatively broad range of issues. Media companies include traditional newspapers and television channels, but also general interest websites, Twitter, TikTok, Reddit, and Apple News. Compared to individual filterers, media filterers often have larger audiences and a larger number of inputs. They have more inputs, because they have a much broader pool of speech from which to filter than most individuals do. Their broader pool derives from a division of labor among employees/affiliates who review speech, employees who create speech, and/or outside parties who directly submit speech. By contrast, individual filterers tend to simply re-filter the information that they get from media companies.

Media companies vary, however, in how they filter. I want to distinguish here—using the broadest strokes—between filtering done by two different types of media companies: "traditional media" companies like book publishers, (online or print) newspapers, radio stations, and television channels; and "new media" companies like social media platforms and search engines.[12] Traditional media companies tend to filter by choosing which of the speech produced by their own employees and affiliates to publish (or air) on their platform. Most filtering decisions are made personally by editors. By contrast, new media companies tend to filter mostly speech created by a massive population of "users" who are not affiliated with the company. New media filters this speech by "promoting" or

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10. Alternatively, if her curiosity is piqued, she may seek out many more sources about the event.

11. L. Ceci, *Hours of Video Uploaded to YouTube Every Minute 2007–2020*, STATISTA (Apr. 4, 2022), https://www.statista.com/statistics/259477/hours-of-video-uploaded-to-youtube-every-minute/ [https://perma.cc/HQ8N-RBEZ]; Raffi Kirikorian, *New Tweets Per Second Record, and How!*, TWITTER: ENG'G BLOG (Aug. 16, 2013), https://blog.twitter.com/engineering/en_us/a/2013/new-tweets-per-second-record-and-how [https://perma.cc/H4RU-ZWFB] (5,700 Tweets per second on a typical day).

12. I would also call television and radio *shows* smaller-scale media companies, on my broad definition of that term.

"demoting" each piece of content within spaces where it is most visible to other users (e.g., a "newsfeed" or a "recommended videos" list). Because the quantity of speech that must be filtered is itself massive, these companies tend to allow most filtering decisions to be made by computer algorithms, rather than human editors. New media also tends to provide personalized filtering for each user: not every user has their attention drawn to the same speech. I will have much more to say about the differences between traditional and new media—and particularly the transparency of their filtering—in Section IV.[13]

Most of us use multiple media filterers to sort through the speech out there. But occasionally a person has a single filterer—whether a traditional or new media company—from which they get a large majority of their information. In such a situation, which lays the groundwork for media power, I will say that the person occupies an *epistemic funnel*. It is rare that an epistemic funnel will cover a very large range of subjects—it is usually limited to a subject or set of subjects, or even a specific issue or set of issues within one subject.

A media consumer can enter an epistemic funnel in several ways. One is through the consumer's deliberate choice. The funnel company may simply have earned brand loyalty and the consumer may not want to waste time getting information elsewhere. But a consumer can also accidentally stumble into an epistemic funnel. Let me offer two examples. First, the consumer may end up getting all of their information on a given subject from one filterer because they were not seeking information on that topic at all. For instance, say that a politically apathetic person visits a social media website to see friends' trip and pet photos. While she is there, she encounters some political news and commentary as well. However, because she is politically apathetic, she is not motivated to seek out additional sources of political information online and has no political conversations offline. The social media website becomes her de facto primary filterer of political information. Second, the person may believe that she is getting information on the topic from multiple filterers, but actually these filterers have a common or coordinated source. For instance, say that our protagonist gets political news from a television show and two newspapers. However, unbeknownst to her, a single individual or corporation owns all three of these media firms, and coordinates coverage across them. Here, too, she has fallen into an epistemic funnel.

II. A Basic Epistemology of Epistemic Funnels

In the last section, I explained how people can end up, deliberately or not, in epistemic funnels, with a single filterer delivering most of their information on some topic. Here, I spell out the epistemic perils of these funnels—that is, how they can undermine the truth and justification of the beliefs of those inside them.

Let me begin with some epistemological background. We come to hold most beliefs based on evidence. *Evidence* will be broadly defined here as anything that

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13. See discussion *infra* Section IV.C.

tells in favor of or against a belief, and can include observations, arguments, interpretations, theories, etc. Evidence can be provided by others' speech (known in epistemology as "testimony").[14] Our total evidence pool will be composed *primarily* of testimony for certain common types of beliefs—e.g., those about a distant event or a public policy proposal—because it is difficult or impossible to make our own observations. For these types of beliefs, it should be apparent how speech filterers—and epistemic funnels in particular—will have a significant impact.

In the section below, I argue that entering an epistemic funnel should presumptively be avoided, at least on what I call "matters of unsettled opinion," because funnels systematically generate skewed evidence pools for those inside them. My arguments yield two principles of epistemic rationality: Consultation of Balanced Sources (loosely, skewed evidence pools are to be avoided) and Consultation of Balanced Filterers (loosely, epistemic funnels are to be avoided). The former applies when we are engaging in filtering for ourselves or others; the latter applies to our choice of filterers.

A. Consultation of Balanced Sources

Most of us have been advised that we should listen to "both sides" before judging for ourselves. This familiar and commonsense advice might be seen as the jumping-off point for the more formalized (and somewhat more stringent) epistemic principle that I defend in this subsection. The principle, *which applies only to beliefs for which relevant evidence is primarily testimonial*, is as follows:

> *Consultation of Balanced Sources* ("CBS"). In forming a belief that *p*, an epistemic agent should consider—in very roughly equal proportions—testimony from both defenders of *p* and defenders of *not-p*, including the testimony that each defender considers to be most persuasive.

While CBS is my own formulation, it roughly tracks the thinking of the nineteenth-century philosopher John Stuart Mill. Mill argued that, in forming one's beliefs on a subject, one must "hear[] what can be said about [the subject] by persons of every variety of opinion,"[15] including, in particular, the "obvious[]"

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14. Whether testimony should be treated as evidence is contested in epistemology. I do not mean to take a position in this debate; I treat testimony as a kind of evidence just for ease of reference. Nothing in my larger argument should hinge on this classification—I could just as easily make the argument with respect to testimony as a primitive contributor to beliefs.

15. JOHN STUART MILL, ON LIBERTY (RETHINKING THE WESTERN TRADITION) 90 (David Bromwich & George Kateb eds., 2003). Mill's actual recommended process is more robust in that it requires a certain dedication and attempt to fully understand the counterarguments. *Id.* at 90–91 ("The steady habit of correcting and completing his own opinion by collating it with those of others . . . is the only stable foundation for a just reliance on it: for, being cognisant of all that can, at least obviously, be said against him, and having taken up his position against all gainsayers—knowing that he has sought for objections and difficulties, instead of avoiding them, and has shut out no light which can be thrown upon the

counterarguments to one's own views.[16]

CBS says that we should strive to achieve a "very rough" parity of testimony for and against a belief—which just means to avoid egregious imbalances. Because the parity is rough, it could be established by balancing the number of speakers for each side, the number of arguments considered for each side, or the time spent reading/listening to speech for each side. While Mill himself does not expressly recommend parity of any degree of roughness, it seems consistent with his larger argument that he would have done so.[17]

CBS is a default or defeasible principle, i.e., one that applies in the absence of good reason (whether epistemic or practical) to abandon it. Crucially, it does not apply when the belief in question concerns a matter of expertise and the vast majority of experts are likely to agree on it.[18] In such a case, it is epistemically rational to consult just one trusted expert because further consultation would be redundant.[19] For example, I do not need to check with multiple trusted historians to identify who the king of France was in 1789. However, if I want to judge for myself whether the French Revolution was justified, then I would be better off asking a group of trusted historians, political theorists, and other social thinkers for their opinions. To summarize, I will say that CBS applies strictly only to "matters of unsettled opinion," such as contested political and moral questions.[20]

What is the epistemic significance of failing to consult balanced sources? One possibility, which I will argue for here, is that the belief lacking consultation will not be "justified" (or, put differently, will not be "epistemically rational" to hold). We aim for beliefs that are not just true but justified. A justified (or warranted) belief is one that is formed through what we might term epistemic best practices. For many, that means that the belief was formed in a way that is conducive to truth—that is, through a process that tends over the long run to produce true beliefs—and that can be reasonably expected of epistemic agents.[21] The fact that

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subject from any quarter—he has a right to think his judgment better than that of any person, or any multitude, who have not gone through a similar process.").

16. *Id*. at 90.

17. A rough parity of sources is consistent with his general idea that one should know one's opponent's arguments as well as one's own. He also states that if any viewpoints need to be protected in discourse, they are not the dominant ones but the least popular ones. *Id*. at 114.

18. While not much should hang on this precise definition, let us say that an expert is one who "through specialized training has acquired the evidence needed for rationally assessing these kinds of beliefs." *See* Robert Pierson, *The Epistemic Authority of Expertise*, 1 PHIL. SCI. ASS'N 398, 399 (1994). In other words, an expert is one who has already carefully reviewed the evidence on both sides. *See id*. By this definition, it is possible to have moral and political experts.

19. Mill might well concur. He did concede that his version of CBS would not apply to questions like mathematical ones for which there is "nothing at all to be said on the wrong side of the question." MILL, *supra* note 15, at 104. By contrast, on "subjects infinitely more complicated, to morals, religion, politics, social relations, and the business of life, three-fourths of the arguments for every disputed opinion consist in dispelling the appearances which favour some opinion different from it." *Id*.

20. One further limitation: if we have complied with CBS in first establishing one belief, then we need not return to it every time that belief is invoked as a premise for a new belief.

21. Because I am not here concerned with the definition of knowledge, I am deliberately combining what are known as both "internalist" and "externalist" concerns about justified belief in order to

a belief is justified (or epistemically rational) allows us to act with confidence in its truth, even though we cannot confirm its truth with absolute certainty.

In *On Liberty*, Mill offered at least two compelling reasons for thinking that CBS is truth-conducive. I briefly explain and expand upon these here. First, listening to speakers on only one side of a debatable issue means that the listener is likely to be missing significant (and potentially decisive) evidence from the opposing side.[22] They will tend to present evidence in favor of their beliefs in its "most plausible and persuasive form."[23] But the same does not go for evidence on the other side: speakers will tend to downplay or discredit that, if they present it at all. Consider how a host of a right-wing news show reports and rebuts only a diluted version of a left-wing counterargument—and how a left-wing news show host does the opposite. This need not be the product of intentional manipulation. Perhaps the speaker simply cannot see the strength of the counterarguments, cannot come up with stronger counterarguments, has never actually been exposed to the strongest counterarguments, or is simply engaging in an activity for which counterarguments seem irrelevant, like self-expression.

Second, listening to speakers on opposing sides provides a stimulus to our faculty of reasoning. It requires that we trace the interaction between evidence and counterevidence; this back-and-forth will usually better expose the weaknesses and strengths of the various positions. This process provides assurance that our reasoning faculties are operating properly and that we are not simply passively absorbing beliefs from those around us. Mill worried that humans have a tendency to hold beliefs as "dead dogma[s], not . . . living truth[s]."[24] That is, we acquire and maintain beliefs without truly understanding their grounds and without being able to "make a tenable defence of [them] against the most superficial objections."[25] The only way people could gain a "lively apprehension" of truth, Mill thought, was to "throw . . . themselves into the mental position of those who think differently from them."[26] And the best way for that to happen is to hear from those differently thinking people.

Third, I will add a contemporary spin on an argument that could be implicitly read into *On Liberty*: compliance with CBS helps to combat cognitive biases. Let me name just a few relevant ones. First, and most significantly, we are all subject to motivated reasoning or confirmation bias, which leads us not only to seek out confirming rather than dis-confirming evidence but to interpret evidence in ways that are partial to our existing beliefs—or even our expectations and hypotheses.[27]

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construct an epistemic best practice: an internalist concern with being a responsible believer and an externalist concern with following truth-conducive practices. Both concerns recommend following CBS.

22. MILL, *supra* note 15, at 112.

23. *Id.* at 104.

24. MILL, *supra* note 15, at 103.

25. *Id.*

26. *Id.* at 105, 107.

27. *See, e.g.*, Raymond S. Nickerson, *Confirmation Bias: A Ubiquitous Phenomenon in Many Guises*, 2 REV. GEN. PSYCH. 175 (1998).

Second, we sometimes believe things just because they are repeated.[28] If we hear twice as much testimony in favor of *p* as in favor of not-*p*, then we will hear the basic conclusion of *p*—and possibly basic facts supporting it—repeated, potentially many times. Third, sometimes we doubt our own inclinations and beliefs when they are contrary to those of a large majority.[29] And hearing substantially more testimony in favor of *p* than against it can lead us, even unconsciously, to infer that *p* is the more popular belief.

One might worry that CBS demands too much of epistemic agents. By its standard, I expect that most of us will find quite a few of our beliefs to be unjustified. But let me partially alleviate this concern with two points. The first is that gathering information in a digitized world is much easier than it used to be for those who have internet access and some digital literacy. Still, even cursory online research on every single matter of unsettled opinion would be infeasible for most ordinary people. But a further consideration should help: epistemic justification/rationality can be seen as a sliding scale. I said earlier in this section that the bar for justified belief is in part determined by how much can reasonably be expected of us.[30] How much consulting and balancing of sources we need to do for epistemic justification will likewise depend on the importance of the issue we are investigating. CBS arguably does not apply at all to trivial questions, such as which Greek yogurt brand one ought to buy. At the same time, CBS does apply, in full force, to any of our moral and political beliefs that make a difference for our significant other-regarding actions.

Yet if CBS still seems too demanding, there is a final point: CBS is an epistemic principle only; failure to comply does not automatically bring, for instance, moral condemnation. There may be cases where it is permissible (all things considered) to do less than is required of an epistemically rational agent because doing more would thwart other important, non-epistemic goals. For instance, a person who must work three jobs to feed their children can be excused for cutting corners when reading the news and then voting anyway. By contrast, a politician could be morally condemned for forming and acting on unjustified beliefs about political issues.[31]

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28. *See, e.g.*, Susanne Schmidt & Martin Eisend, *Advertising Repetition: A Meta-Analysis on Effective Frequency in Advertising*, 44 J. ADVERT. 415 (2015).

29. *See* Solomon E. Asch, *Studies of Independence and Conformity: A Minority of One Against a Unanimous Majority*, 70 PSYCH. MONOGRAPHS: GEN. & APPLIED 1 (1956) (finding that people tend to switch their views when everyone else in a group disagrees with them); DANIEL KAHNEMAN, THINKING, FAST AND SLOW 62 (2011) (describing how falsehoods come to be believed through frequent repetition).

30. *Cf., e.g.*, Richard Foley, *Justified Belief As Responsible Belief*, *in* CONTEMPORARY DEBATES IN EPISTEMOLOGY 321 (Matthias Steup & Ernest Sosa eds., 2005).

31. That said, if one continues to believe that CBS is too demanding, then one can rerun my argument using a less stringent version of CBS that does not require rough parity. For instance, once might say that we should seek only to avoid *epistemic bubbles*, "social epistemic structure[s] in which other relevant voices have been left out," either deliberately or by mere omission. C. Thi Nguyen, *Echo Chambers and Epistemic Bubbles*, 17 EPISTEME 141, 142 (2018). The principle's significance would thereby be attenuated, but it is arguable that some tightly closed epistemic funnels would still provide opportunities for undermining epistemic rationality.

B. Consultation of Balanced Filterers

CBS is a principle to govern speech filtering. It is most obviously to be relied upon when one is seeking out speech on a given topic (filtering) for oneself to consume. But what about when we are selecting filterers to do that filtering for us? Does CBS have any application? There is one clear implication: we should choose filterers who can be depended upon to comply with CBS. However, this subset of filterers may be vanishingly small.

Remember that CBS is built on the assumption that most people speak in ways that skew toward their beliefs; they do not present a balanced set of evidence. It seems plausible to believe that filterers are the same way: that in choosing which of *other people's* speech to draw attention toward, they will choose speech that skews toward their own beliefs. It is no mystery why, to return to a prior point, talk shows and magazines tend to showcase speech that reflects the ideologies of their hosts or editors. In addition, a filterer who knows that she controls an epistemic funnel for some or many of her listeners may have an uncommonly strong incentive to skew her filtering.

Hence, a tandem principle to the CBS:

> *Consultation of Balanced Filterers* ("CBF"). In forming a belief that *p*, an epistemic agent should consult diverse filterers for testimony relating to *p*.

A set of filterers will be "diverse" if some of its members are likely to skew their filtering in different ways. The idea is that the skews of the various filterers should cancel one another out. So, if we have reason to believe that filterer A believes that *p* and filterer B believes that *not-p*, then we have reason to offset the filtering of A with the filtering of B. To achieve this diversity of filterers when we do not know the likely skews of each filterer, it is best to err on the side of multiple—and potentially many—filterers.

CBF is, like CBS, a default principle. It can be defeated in the presence of good epistemic reason to deviate. For instance, if I have good reason to believe that a single filterer will after all comply with CBS, at least on some topics, then it can be epistemically rational to get a large majority of my speech on that topic from that filterer. Additionally, expertise can defeat CBF just as it can defeat CBS: if the belief is one that builds on expert knowledge and experts can be expected to agree on it, then one expert filterer may suffice. If I visit my doctor about a routine physical ailment, then I am epistemically rational to rely on her alone to report the relevant findings of medical science.[32]

One might question how relevant CBF is for collective or corporate filterers, like media companies. Such filterers may have different skewing tendencies than individual filterers. Some might be formed in a way that makes skewing more

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32. Note, however, that expertise is limited, and so one should not be under a person's epistemic funnel on too many issues because they could not plausibly be an expert on all of them.

likely, such as expressly ideological organizations. But other collective filterers may have no substantive bent and recruit members based only on viewpoint-neutral criteria like talent. For these filterers, one might think that diversity present *internally* is enough to ensure CBS compliance: the varying skews among collective members will result in the collective publication or promotion of diverse voices. For-profit corporate filterers might even have an incentive to actively enforce CBS in order to appeal to the largest possible audience.

These distinctive features about collective filterers could make them provide slightly more balanced sources of speech on average—but likely not enough to override the need for CBF. Take internal diversity. Filtering decisions produced by a diverse group may actually mute all but centrist voices, since the exclusion of every voice outside of the mainstream might get majority support. Indeed, this might be a reason to consciously include among one's filterers at least some from outside the mainstream. Now take the profit motive. Corporate filterers often, at least to some extent, promote the speech that raises revenue: speech that audiences are most likely to pay for or that holds their attention long enough that they are likely to also stumble across more advertisements—e.g., shocking, emotionally arousing, entertaining, or even comforting speech. One might well think that this will include speech on both sides of issues. But it may not deliver the evidence that advocates on either side deem most persuasive. Moreover, when algorithms can deliver personalized filtering for each consumer, the company has an incentive to give the consumer a steady diet of exactly the speech that the consumer wants—whether diverse or not.

C. Echo Chambers and Backfire Effects

One might doubt the fitness of CBS and CBF as truth-conducive epistemic principles based on recent reporting on two psychological phenomena: echo chambers and backfire effects. I here explain why neither threatens the arguments of this section.

Epistemology has recently begun to distinguish between epistemic bubbles and echo chambers, though these two concepts are often conflated in contemporary discourse. While an epistemic bubble is a social epistemic structure from which relevant voices have been omitted, an echo chamber is a "social epistemic structure in which some relevant voices have been actively discredited."[33] The discrediting part here is critical: members of an echo chamber are taught that outsiders are deliberately trying to mislead them and must be distrusted.[34] Attempts at persuasion by outsiders will often be seen as confirmation of these teachings.[35] CBS and CBF would thus offer little to no prospect of relief to those within an

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33. Nguyen, *supra* note 31, at 142. *See also id.* at 156 ("[E]cho chambers are local background conditions that turn generally good epistemic practices into locally unreliable ones.").

34. *See* KATHLEEN HALL JAMIESON & JOSEPH N. CAPPELLA, ECHO CHAMBER: RUSH LIMBAUGH AND THE CONSERVATIVE MEDIA ESTABLISHMENT 164–66, 177–90 (2008).

35. Nguyen, *supra* note 31, at 147–49.

echo chamber, at best; at worst, they could actually entrench false beliefs. For one in an echo chamber, opposing voices cannot add evidence to one's total evidence pool, and they paralyze rather than stimulate one's reasoning capacities.

Even assuming that echo chambers are an epistemic problem that CBS could exacerbate, CBS is still a sound default principle. First, despite a great deal of media attention on echo chambers, there is little evidence that technical ones—those in which impenetrable distrust of dissenting voices is established—are widespread enough to set the default for epistemic inquiry.[36] Echo chambers appear to operate only at the extreme margins of society.[37] Second, CBS still offers a strong prophylactic approach. CBS is what epistemic agents should follow *before* they have fallen into an echo chamber, and what they should follow again if they are somehow extracted from it.[38]

One of the effects of an echo chamber can also be seen outside of any chamber: the cognitive bias known as the backfire effect. This effect occurs when, even in the absence of an echo chamber's social architecture of distrust, exposure to evidence against one's beliefs actually leads one to become *more* confident in those beliefs.[39] But it is important to recognize that the prevalence of the backfire effect, like that of echo chambers, may have been overstated. One of the original researchers on backfire, Brendan Nyhan, has argued that the media has construed his team's findings too broadly.[40] Nyhan writes that, "an emerging research consensus finds that corrective information is typically at least somewhat effective at increasing belief accuracy when received by respondents."[41] He, and others, are working on better and longer-lasting responses to backfire effects, most of which involve changing *how* challenging information is presented to people.[42]

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36. *See, e.g.*, Nic Newman & Richard Fletcher, *Platform Reliance, Information Intermediaries, and News Diversity*, *in* DIGITAL DOMINANCE: THE POWER OF GOOGLE, AMAZON, FACEBOOK, AND APPLE 133–34 (Martin Moore & Damian Tambini eds., 2018); ANDREW GUESS ET AL., AVOIDING THE ECHO CHAMBER ABOUT ECHO CHAMBERS: WHY SELECTIVE EXPOSURE TO LIKE-MINDED POLITICAL NEWS IS LESS PREVALENT THAN YOU THINK 8–9 https://kf-site-production.s3.amazonaws.com/media_elements/files/000/000/133/original/Topos_KF_White-Paper_Nyhan_V1.pdf [https://perma.cc/LGV4-PMSX] (finding that most news consumption is from large mainstream websites).

37. *Id.* at 9.

38. *See* Nguyen, *supra* note 31, at 156–58 (arguing that extraction from an echo chamber would require a "reboot" of one's belief system and may be somewhat fanciful).

39. *See generally* Brendan Nyhan & Jason Reifler, *When Corrections Fail: The Persistence of Political Misperceptions*, 32 POL. BEHAV. 303 (2010); Jay D. Hmielowski et al., *Talking Politics: The Relationship Between Supportive and Opposing Discussion With Partisan Media Credibility and Use*, 49 COMMC'N RES. 221 (2020) (finding that conservatives' engagement in conversation with liberals tended to reinforce trust in conservative news sources while increasing distrust in liberal sources).

40. *See generally* Brendan Nyhan, W*hy the Backfire Effect Does Not Explain the Durability of Political Misperceptions*, 118 PNAS 1 (2021).

41. *Id.* at 1.

42. *Id.* at 4–5. *See also* Emily K. Vraga et al., *Creating News Literacy Messages to Enhance Expert Corrections of Misinformation on Twitter*, 49 COMMC'N RES. 245 (2020) (finding that expert organizations can successfully correct misinformation on social media across two controversial issues with a single tweet).

All told, this research suggests not that CBS fails as an epistemic best practice, but rather that it is only one part of a strategy for achieving true, justified beliefs.

III. EXERCISING POWER THOUGH EPISTEMIC FUNNELS

I have argued that a person who gets most of her speech on a topic from a single filterer will not be able to form epistemically rational beliefs on that topic unless the filterer provides her with a balanced pool of evidence. In this section, I contend that the ability to skew someone's evidence pool, and thereby upset her epistemic rationality, can also be a form of power: skewing power. Toward the end, I also explain how the target's own choices to enter and stay within an epistemic funnel do not preclude the filterer from holding power over her—but also that this power does not necessarily shield the target from moral responsibility for acts she takes under the filterer's power.

A. Defining Power

To begin, it is important to establish what I mean by power. Distinguish first between the power *to* achieve certain results in the world and power *over* other people's actions (called social power in political theory).[43] Media has the power *to* publish one author rather than another, *to* endorse certain causes, or even *to* buy a corporate office building. But as explained in the introduction, the most consequential form of power that media could have is power *over* people. All usages of the word "power" in this essay, unless otherwise indicated, therefore refer to social power.

The classical definition of social power comes from the political scientist Robert Dahl: "A has power over B to the extent that [A] can get B to do something that B would not otherwise do."[44] Notice that this definition counts A as having power over B no matter which *way* she "gets" B to do what he otherwise would not have done. What matters here is just the likelihood of A causing B to act as she pleases. Call this *descriptive* (social) power.

Without a doubt, many media companies have a great deal of descriptive power over their consumers. This power operates through influence over consumers' beliefs. If the media company can get a consumer B to *believe* something that he otherwise would not have, then it can often also get B to *do* something that he otherwise would not.[45] For instance, my beliefs about global warming may affect my votes, my transportation choices, my product purchases, etc.

But I have not chosen to describe media power in terms of descriptive power because the former concept does not on its own advance our understanding of what might be objectionable about media power. Whether or not descriptive

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43. *See* Arash Abizadeh, *The Grammar of Social Power: Power-to, Power-with, Power-despite, and Power-over*, 69 POL. STUD. 1 (2021) (explaining the traditional distinction between power-over and power-to).

44. Dahl, *supra* note 5, at 202–03.

45. Arguably one could include as a means of power being able to change a person's tastes and preferences, but for simplicity I restrict my account to cognitive changes in beliefs.

power is objectionable depends on the way in which it is exercised. For example, if a newspaper employs a brilliant environmental scientist as an editorial writer, and the scientist's powerful arguments persuade thousands of people that climate change is the most important voting issue and therefore to vote for Green Party candidates, then this may reflect the newspaper's descriptive power over those voters. Yet this particular *way* of getting voters to choose Green candidates—whether or not one thinks they should have so chosen—does not seem troubling.

I submit that power becomes inherently objectionable when it is exercised over B in a certain *way*—namely, *in a way that subverts B's agency*.[46] Agency is a person's ability to determine their own ends, determine their plans to achieve those ends, and carry out those plans.[47] B's agency is subverted when another agent A blocks any of these abilities of B or—in the worst case—uses these abilities of B to achieve *A*'s ends instead.[48] We might think of agency-subversion cases as ones in which one agent hijacks or co-opts the agency of another. Through her hijacking, A makes the target's act less (or not at all) his own and partly (or entirely) A's. Such hijacking or subversion occurs when A coerces B but not—as I will explain in the next subsection—when A persuades B, as the environmental scientist does above. With some rare exceptions,[49] the exercise of agency-subverting power constitutes a serious harm to the target; by contrast, the exercise of descriptive but non-agency-subverting power often will not harm the target.[50]

To be clear, then, I define power in the following way: an agent A has power over another agent B to the extent that A (1) can get B to do something that B otherwise would not have done (2) by subverting B's agency. All further mentions

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46. *Cf.* Allen W. Wood, *Coercion, Manipulation, Exploitation*, *in* MANIPULATION: THEORY AND PRACTICE 35 (Christian Coons & Michael Weber eds., 2014) (explaining that manipulation "influences people's choices in ways that circumvent or subvert their rational decision-making processes, and that undermine and disrupt the ways of choosing that they themselves would critically endorse if they considered the matter in a way that is lucid and free of error"). For simplicity, I count cases in which agency is "circumvented" (like hypnosis or subliminal messaging) as cases of subversion.

47. *Cf.* CHRISTIAN LIST & PHILIP PETTIT, GROUP AGENCY: THE POSSIBILITY, DESIGN, AND STATUS OF CORPORATE AGENTS 20 (2011) (describing the basic conditions of agency as having representational states specifying how things are in the environment, having motivational states specifying how things should be in the environment, and the capacity to intervene in order to make the environment match the motivations state).

48. I follow Philip Pettit in thinking that an exercise of power (or what Pettit would think of as an invading hindrance on freedom) must be triggered by the target's exercise of their agency or the prospect of their exercising their agency. *See* PHILIP PETTIT, ON THE PEOPLE'S TERMS: A REPUBLICAN THEORY AND MODEL OF DEMOCRACY 38 (2012) [hereinafter PEOPLE'S TERMS]. In other words, the powerful agent must intend to change the target's beliefs or actions in some way—they cannot simply take some action that incidentally changes the target's beliefs/actions.

49. For instance, a parent who forces a child to do things in order to educate them may ultimately benefit the child thereby.

50. *See* T.M. SCANLON, WHAT WE OWE TO EACH OTHER 298 (2000) ("[T]here is a strong generic reason to want to be able to direct one's efforts and resources toward aims one has chosen and not to have one's planning co-opted . . . .").

of power in this essay will, unless otherwise indicated, refer to this form of agency-subverting power.

The reader should note two critical things about my definition. Notice that it, like Dahl's definition, characterizes power as scalar ("to the extent that . . ."). For Dahl, a political scientist attempting to measure the power of political actors, power could occur at barely detectable levels.[51] If I have a 0.02% chance of getting someone to do something they would not otherwise have done, then I have power over them according to Dahl. By contrast, I will assume that the ability to get someone to do something counts as "power" only after a certain probabilistic threshold. For argument's sake, perhaps one needs more than a 50% likelihood of getting someone to do something in order to have power over them. The precise threshold should not matter for my theoretical arguments here, though it would for establishing whether a particular agent has power or not. I depart from Dahl mostly in order to align myself with more common usage; one does not often hear that A has power over B when she has a 0.02% chance of changing his behavior.

Second, power is an *ability*; the wielder need not actually exercise it, or even be predisposed to exercise it.[52] So, to take Philip Pettit's arresting example, a nineteenth-century husband had power over his wife—given the laws and social norms—even if he was an egalitarian-minded fellow and would not have thought of restricting her behavior.[53] It is enough for A to have power over B that A *could* get B to do something *if* A wanted. At the same time, having the ability to make someone do something is a high bar. An ability is much more than a theoretical possibility. It must be possessed presently.[54] It must also be exercisable without significant cost to oneself. In the case of agency-subverting power, A, to have power over B, needs to have a presently possessed ability to get B to do something that he would not otherwise have done, *and* a presently possessed ability to subvert his agency, in order to count as having power over him.[55]

B. Defining Agency Subversion

The most obvious way to subvert a person's agency is through coercion. A coerces B to do *c* when she deliberately changes his options: she either physically blocks B from choosing *not-c* or else raises the costs of choosing *not-c* so that they are prohibitively high.[56] The subversion of agency happens because B ends

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51. *See, e.g.*, Dahl, *supra* note 5, at 205 (explaining that the probabilities relevant to power can be zero, and indeed that power itself can be negative in value).

52. PETIT, PEOPLE'S TERMS, *supra* note 48, at 67.

53. *See* Philip Pettit, *Freedom as Antipower*, 106 ETHICS 576, 600 (1996).

54. *Id.* at 580.

55. When the ability is not actually exercised, its existence must be inferred. For instance, it makes sense to say that I have power over someone if I can take their job away without much cost to myself, just so long as losing the job would be a huge loss to them and they are not prone to extreme self-sacrifice. It will still be *possible* that the person would ultimately resist me and accept the job loss—it is just highly unlikely.

56. *Cf.* PETIT, PEOPLE'S TERMS, *supra* note 48, at 53 (describing the removing or replacing of an option as an interference in one's freedom).

up doing *c* not because he rationally deemed it the correct course of action but because A deemed it so. He loses the ability to execute his own plans.

But it also seems plausible that B's agency may be subverted by disrupting his ability to develop his own plans and ends in the first place. If A gets B to *believe* that c is the best option by hypnotizing or drugging him, then she arguably commandeers his agency as surely as if she had coerced him into compliance. The hypnosis or the drugging disables his ability to form rational beliefs about the best course of action on his own. By contrast, if A gets B to choose *c* by persuading him with a fantastically compelling argument, this does not seem to subvert his agency.[57] Indeed, when someone offers me arguments, information, or ideas, I tend to think that they *aid* me in the intelligent and informed exercise of my agency.

Something seems to go "right" in the persuasion case. B takes A's inputs, runs them through his own rational process of belief formation, gains some critical distance from them, and then is able to possibly take them "on board," so to speak, as his own.[58] This is the process by which B is able to make his output belief fully his *own*—even if he would not have arrived at the belief but for A. Otherwise, he will essentially just passively absorb his beliefs from those around him who offer inputs. By persuading B, A does not undermine this process for B: she *engages* it.

I submit that this process of belief formation cannot go "right" unless it accords with epistemic rationality. If B's belief formation process does not produce justified beliefs—one of its main aims—then it is seriously malfunctioning.[59] It will be too warped to play the role it does in the persuasion case of allowing B to take A's inputs on board as his *own*. If B is in this way moved to believe by A, then the belief will be more A's than his.

Of course, one can badly form beliefs all on one's own. B might, for instance, form irrational beliefs after drugging *himself*, or might lazily defer to the beliefs of others without bothering to investigate them himself. B will, in many cases, therefore form false beliefs. These beliefs will be attributable to him but will not be *fully* his own in the sense described above. The only difference is in how this state of affairs comes about: B's beliefs will not be fully his own, but they will

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57. *See* STEVEN LUKES, POWER: A RADICAL VIEW 35–36 (2005) (declining to count persuasion as power); Keith Dowding, *Power and Persuasion*, 64 POL. STUD. 4, 5 (2016) (distinguishing persuasion from "coercive power"). *But see* Talcott Parsons, *On the Concept of Political Power*, 107 PROCS. AM. PHIL. SOC'Y 232, 238 (1963) (counting persuasion as a type of power).

58. *Cf., e.g.*, Dowding, *supra* note 57, at 7 (characterizing the distinction between coercive and non-coercive deliberation as that "between someone being forced or fooled into assenting to S and choosing to assent to S").

59. It matters that this is a "serious" malfunction. I do not mean to suggest that the target's process of belief formation must operate *ideally* in order for a belief to be fully their own. One borderline case might be "nudging" in the Thaler-Sunstein sense, which involves changing someone's beliefs by subtly rearranging their environment in order to capitalize on cognitive biases. *See generally* RICHARD H. THALER & CASS R. SUNSTEIN, NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH, AND HAPPINESS (2008). It is unclear whether the "nudged" beliefs are formed in a way so deficient that the nudger subverts the agency of the nudged.

not have been brought about by the subversion of another agent. Even if B's agency is in a sense *diminished*, it will not be *subverted* and he will not be under anyone else's power. That said, B may, through his bad epistemic habits, open himself up to being the target of power.[60]

C. Skewing Power

We now finally have all pieces of the puzzle on the table. We defined power at the beginning of this section so that A has power over B if she can, by subverting his agency, get him to do what he otherwise would not have done. We have just established that she may subvert his agency by getting him to believe something in a way that disrupts his epistemic rationality. We also established, in Section II, that Consultation of Balanced Sources is a requirement of epistemic rationality. Therefore, if A can get B to do something that he would not otherwise have done by skewing his evidence pool, contrary to CBS, then she has power over him. I call this *skewing power*. It seems plausible that this is a sort of power that media companies could have over those within their epistemic funnels.

Notice that skewing power is usually indexed to a particular topic or set of topics. For instance, filterer A could have skewing power over B with respect to all political issues, or only with respect to Zoroastrian rituals. The scope of the skewing power simply depends on the scope of the epistemic funnel B occupies.

Does A always have skewing power over B if she has the ability to skew his total evidence pool? No, other factors need to be considered. A will only have power over B if she can, through her skewing, get B to believe what he otherwise would not have. This depends on B's susceptibility to skewing, as well as any constraints on A's ability to skew (factors to be further considered in Section IV). For example, B might become less susceptible to A's skewing power if A goes so far in her skewing that B becomes skeptical of her filtering.

Let me illustrate what skewing power looks like in practice. Suppose that Bolivar, who hates politics, visits his aunt each Election Day to get information about the candidates and ballot measures. Bolivar feels obligated to vote, but otherwise hates politics and tries to avoid coverage of the candidates before then. Each time, his aunt gives him arguments both in favor of and against each candidate. Bolivar has no particular reason to trust that his aunt will present the arguments in a balanced fashion; he just goes to her because she likes talking about politics.

It is likely, under the circumstances, that Bolivar's aunt has skewing power over him. She could skew Bolivar's evidence pool: she could easily present only the strongest arguments for the candidates she prefers and only the weakest arguments for their opponents. Bolivar seems fairly susceptible, since he has no political information or opinions of his own and is himself seeking out his aunt's counsel. And there is no reason to think the aunt is constrained.

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60. *See* discussion *infra* Section III.D.

D. Objections

Here I address objections to my claim that a filterer may be able to subvert the agency of someone within their epistemic funnel. There are two main (and common) scenarios in which I see grounds for insisting that the target retains his full agency in this circumstance. One is if the target himself chooses the filterer. The second is if the target may exit the epistemic funnel at any time. The first scenario prompts me to build an exception into my account of power—one that is in line with existing theoretical accounts of power. The second is answerable.

1. The Target's Choice of Filterer

In many cases, we choose our filterers. If a Facebook user gets most of his political news on Facebook, this is not because Facebook forced him to do so: he freely chose to create an account and—repeatedly—log on and scroll through his newsfeed. One might think that this weakens any claim that Facebook thereby exercises power over him through what he reads there.

Sometimes, this thought will be correct. If power is *controlled* by the target himself, then it can be at most descriptive power in Dahl's sense but not agency-subverting power.[61] The target B controls the power if it is exercised at B's behest or on his behalf—like Odysseus's shipmates tying him to the mast or a surgeon cutting into an unconscious patient who needs life-saving surgery.[62] In cases such as this, it is hard to see how B's agency is subverted because he in some sense chooses to restrict his own agency. Consider a politician who directs an intern to collect arguments about a given legislative bill, but only arguments in favor of the bill; then, when the intern complies, it would be odd to say that the politician was under the power of the intern. While the politician's beliefs about the bill will likely be unjustified, that seems to be due to the politician herself as much as the intern.

But a target's control over power should be narrowly construed. In the case of skewing power, the target controls the power only if the particular skewing decisions are made at the target's behest or on his behalf. Modify the politician's case. Say now that multiple versions of the bill have been proposed, and the intern has a secret agenda to get her preferred version passed. She gives to the politician arguments in favor of the bill—but only in favor of her preferred version—and the politician votes for her version. This time, the intern exercises power. The politician was not in control of this further filtering decision to skew the arguments presented to her.

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61. I here draw on Philip Pettit's well-known account of domination, which is a concept quite closely related to my normative concept of power. For Pettit, the ability to "intervene" in the choices of others counts as domination only when its exercise is not controlled by those over whom it is exercised. PETIT, PEOPLE'S TERMS, *supra* note 48, at 50; *see also id.* at 57 (the ability to intervene is not domination when it is "shaped by [the target's] influence so as to assume a form that appeals to [him]").

62. *Id.* at 57.

In the case of speech filtering, the connection between the target's choice and the filtering that occurs is considerably looser. Arguably, in some cases, the choice of a filterer is not a choice to have speech filtered at all. It is simply a choice that *results* in speech being filtered. Social media platforms, in particular, are usually chosen for reasons other than their algorithmic filtering: because they are where friends post updates about their lives, or because they are where someone must sell products for their business. Reading filtered speech on other topics may simply be a predictable consequence.

2. The Target's Ability to Exit

Even if the target does not control the filtering inside an epistemic funnel, one might still object that any target who can readily *exit* the epistemic funnel is not subject to the filterer's power. In today's digital world, nearly everyone can exit. For most people, counter-opinions are readily accessible online within a few mouse clicks and keystrokes. It is rare that a filterer will be able to coercively prevent this from happening. If a person has fallen under an epistemic funnel, it is not because they are unable to leave but because they are *disinclined* to.

But perhaps, the objection goes, agency is not subverted if the target remains free to reclaim his epistemic rationality at any time. If A locks B in a room, she is arguably diminishing his agency. But if A also leaves a key to the room within B's reach, B gains the option to leave and—therefore—his agency seems restored. Even if B is disinclined to leave, his choice to stay is a genuinely free choice.

But this assumes that B is consciously aware of the predicament that he is in and the option to leave. Say that, in the locked room scenario, B lacks this awareness. Perhaps, in his distress, he does not see the key. Perhaps he sees the key but is so confident that A would not leave him a means of escape that he thinks the key must not fit the lock and does not bother trying it. Now his agency seems to be restricted again. An awareness of one's options and their consequences is particularly difficult to achieve in cases of non-coercive power, which operate not by changing the target's options but by changing their beliefs about their options. The target might be vaguely aware that they are getting most of their information from a single source but still unaware of the risk to their agency that they thereby take.

I suspect that the discomfort with saying that agency is undermined in these cases stems at least partly from the expectation that agency is tightly linked with moral responsibility. You might think that one cannot be held responsible for acts that they perform in a state of diminished agency, when they are under another's power.[63] At the same time, you might doubt that being in an epistemic funnel that one could easily exit provides adequate grounds for any excuse from moral responsibility. But I submit that one can *both* have one's agency subverted by a filterer *and* be responsible for one's acts in that state. The solution lies in different

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63. It is commonly believed that an agent needs power over himself when he commits an act in order to be responsible for it. *See* PETER MORRISS, POWER: A PHILOSOPHICAL ANALYSIS 38–40 (2d ed. 2002).

degrees of agency. Arguably moral responsibility requires agency only in the minimal sense that one is in possession of their basic rational capacities—but not in the more demanding sense that one is able to form justified beliefs. For instance, someone who commits murder at the direction of a blackmailer would still be responsible for the murder: while the blackmail would place the killer under the power of the blackmailer, it would not remove the former's basic rational capacities. The murder would, however, still reflect the power of the blackmailer and the murderer's diminished agency.

But while being under the skewing power of another would likely not provide an excuse for serious moral wrongdoing, it may nonetheless—to return to a point mentioned briefly in Section II—be understandable in some cases.[64] A disinclination to seek further, balancing testimony can be caused by many factors, such as the lack of time, motivation, knowledge, or resources necessary to understand and/or remedy the deficiency in one's evidence pool. But the existence of such factors may not itself be entirely the fault of the disinclined person. For some, it may be due to what Thomas Christiano calls *socially induced cognitive scarcity*.[65] Ordinary cognitive scarcity refers to the fact that the amount of speech that we can cognitively process is limited by our biology and psychology. But the cognitive limit is lowered further when we have many responsibilities in the day, from long work hours to childcare, that consume our time.[66] The mental resources left over to research, for instance, political issues may be nil.

IV. THE DETERMINING FACTORS FOR SKEWING POWER

I argued in the last section that a media company that provides most of a consumer's information on a topic can have power over him if it can get him to form unjustified beliefs by, say, skewing the speech that he hears. But I have not yet addressed the conditions under which such skewing actually *works* to get someone to form an (unjustified) belief. A company does not have power if, for all its skewing, the target's beliefs are in fact unlikely to change.

Predicting how likely a target's beliefs are to change is a difficult exercise. But several factors are critical to the analysis, and I explain them in this section. The most important—discussed above—is the percentage of the target's evidence that they get from a single filterer. The other two core factors—not yet explored—are the susceptibility of the target and any constraints on the filterer. I also explore a fourth quasi-factor, the transparency of filtering, which is not actually an independent factor but strongly affects the other three.

I am not in a position to offer a conclusive empirical analysis of these factors. However, I can at least make a couple of overarching observations about the

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64. *See* discussion *supra* Section II.A.

65. Thomas Christiano, *Money in Politics*, *in* THE OXFORD HANDBOOK OF POLITICAL PHILOSOPHY 248–50 (David Estlund ed., 2012).

66. *See, e.g.*, Jiaying Zhao & Brandon M. Tomm, *Psychological Responses to Scarcity*, OXFORD RES. ENCYCLOPEDIAS, PSYCH. (2018).

power of new and traditional media companies. First, new media companies seem more likely than traditional companies to have skewing power, based on all three core factors but especially on their relatively non-transparent filtering. For this reason, I repeatedly use the new media companies Meta and Alphabet as examples throughout this section. Second, even new media companies are not wholly unconstrained in exercising skewing power: any exercises would need to be relatively subtle. Depending on how many media consumers are affected, though, even subtle interventions could be consequential.

A. The Epistemic Funnel Itself

A filterer's best chance of changing a target's beliefs through skewing is to be the target's *only* filterer on a certain topic—like Bolivar's aunt in the example above. Such an exclusive filter would determine the entirety of the target's evidence pool on the topic. If the filterer wanted to induce a belief in *p*, it could create an actual epistemic bubble, altogether excluding voices and evidence against *p*. The less evidence one has in favor of a belief, the less likely one is to adopt it.

Of course, truly exclusive epistemic funnels will be very rare in today's world. But the *higher* the percentage of a target's information on a topic that they get from a given filterer, the better that filterer's chance of acquiring skewing power. Factors that will affect this percentage include loyalty to the filterer (imagine someone who believes that Fox News is the only trustworthy news source) and a general lack of motivation to seek out information on the topic elsewhere (imagine someone who is politically apathetic and sees political news only while on Instagram looking for recipes). The filterer that controls at least a sizable majority of a target's evidence pool will in many cases be able to overwhelm them with evidence supporting a particular belief and trigger in them cognitive biases in favor of that belief and against its alternative.[67]

B. Susceptibility of the Target

All forms of power are a function of, among other things, the susceptibility of the target to the power. For example, coercive tactics will be least effective against targets with the material or psychological resources necessary to resist them. A bully will have less power over a strong, popular, or just resilient victim. Likewise, whether A has skewing power over B will depend in good part on B himself—i.e., on the responsiveness of B's belief formation to A's skewing of his evidence pool. B's susceptibility will likely vary based on the topic.

First there is B's general responsiveness, or his tendency to change his beliefs in response to any skew in his evidence pool. Less general responsiveness can be, but is not necessarily, an epistemic virtue. It will be epistemically for the better when, for example, it is because B is good at coming up with his own counterarguments. But it may be epistemically suspect when B is generally skeptical of everything he hears or highly stubborn in sticking to his own initial gut reactions.

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67. *See* discussion *supra* Section II.A.

But B's more particularized responsiveness to the actual skew applied will vary based on his context. As mentioned above, an epistemic funnel is usually not fully closed; some additional sources of information can get in. While one might get most of their information about current events from a particular media company, additional information will occasionally come up during conversation around the family dinner table or at the office water cooler. The power furnished by an epistemic funnel depends in part on whether those additional sources provide competing viewpoints. If a person is embedded in a larger epistemic bubble, or even just an ideologically segregated community,[68] then they may be especially susceptible to a filterer who simply exacerbates that existing skew.

Similarly, B may have a particularized responsiveness to the filterer itself. If B trusts the filterer for some non-epistemic reason—such as cultural affinity[69]— then B will be more susceptible to its skewing. Google, in particular, may have an edge in skewing because people generally trust it.[70] Perhaps this trust in Google grows out of the reliability of its search results on simple matters of fact. If one types into Google's search bar "when did the French Revolution begin," one gets an immediate and accurate response. A similar reliability on matters of opinion is far from established (nor could it be). Yet studies suggest that people tend to trust search engines like Google on matters of opinion, too.[71]

C. Constraints on the Filterer

A *constraint* on skewing power is something that hinders the power's exercise. What I will call a *complete constraint* is one that fully prevents the filterer from skewing their filtering, perhaps by making it cost prohibitive. Consider a teacher whose job and reputation depends on her compliance with CBS in the information that she presents to children. If a complete constraint is in place, then there can be no power; even if the agent's filtering does somehow change beliefs, those beliefs will have been formed consistent with CBS and will be epistemically

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68. *See, e.g.*, Jacob R. Brown & Ryan D. Enos, *The Measurement of Partisan Sorting for 180 Million Voters*, 5 NATURE HUM. BEHAV. 998 (2021) (finding a substantial amount of American geographic segregation based on partisan affiliation); *see generally* BILL BISHOP, THE BIG SORT: WHY THE CLUSTERING OF LIKE-MINDED AMERICA IS TEARING US APART (2009) (documenting partisan clustering across the United States); MILL, *supra* note 15, at 103.

69. Dan M. Kahan, *Cultural Cognition as a Conception of the Cultural Theory of Risk*, *in* HANDBOOK OF RISK THEORY 725, 748–49 (Sabine Roeser et al. eds., 2012) (explaining that people tend to count speakers as "experts" when they take positions consistent with their own cultural predispositions).

70. Casey Newton, *The Verge Tech Survey* 2020, THE VERGE (Mar. 2, 2020), https://www.theverge.com/2020/3/2/21144680/verge-tech-survey-2020-trust-privacy-security-facebook-amazon-google-apple [https://perma.cc/C7BT-HRDD]. By contrast, a Pew Research Center survey in 2019 found that 59% of American adults distrusted the company then known as Facebook, Inc. John Gramlich, *10 Facts About Americans and Facebook*, PEW RSCH. CTR. (June 1, 2021), https://www.pewresearch.org/fact-tank/2021/06/01/facts-about-americans-and-facebook/ [https://perma.cc/N6UC-53NY].

71. Robert Epstein, *Manipulating Minds*, *in* DIGITAL DOMINANCE: THE POWER OF GOOGLE, AMAZON, FACEBOOK, AND APPLE 304 (Martin Moore & Damian Tambini eds., 2018) ("People . . . mistakenly believe that computer algorithms are inherently more objective than people are.").

justified. By contrast, an *incomplete constraint* will simply make the exercise of the power more costly (but still feasible), or else limit it in specific ways. For instance, the teacher might, for deviating from CBS, face many complaining parents instead of dismissal and disgrace. Incomplete constraints are relevant in assessing the risk that filtering power will be exercised.

Note that a constraint is different from a consistent track record or disposition. If a filterer has *so far* complied with CBS—but nothing prevents her from changing course in the future—then no constraint exists. Even if one has good reason to think that the filterer will continue to comply with CBS—say, because its leaders are strongly committed to public education or journalistic impartiality—this does not on its own count as a constraint.

One might think that contemporary media behemoths like Facebook or Fox News are constrained in their filtering by two forces. The first is economic. While these corporations are not directly accountable to voters, they *are* accountable to the market. While they do not sell their services directly to users, they do sell users' attention to advertisers, and if their users flee then advertising revenue plummets. So they are unlikely to engage in nakedly biased filtering, because this could push users away. Such a constraint might not even depend on users noticing any skewing; if some public commentators were made aware of the skew, they could alert users.

The second potential constraint is political. The biggest companies, such as Meta and Alphabet, face persistent threats of adverse government action. Their CEOs are regularly hauled before Congress to be interrogated about violations of consumer welfare.[72] Congressional bills that have so far not passed propose to repeal or limit Section 230 of the Communications Decency Act, which currently gives internet speech platforms immunity against lawsuit for any illegal content posted by their users.[73] Antitrust lawsuits have been filed within the last two years against both Facebook and Google.[74] If these companies engaged in blatantly ideological or self-interested filtering, overtly and at a large scale, then they might face repercussions.

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72.   *See, e.g.*, Gerrit De Vynck et al., *Big Tech CEOs Face Lawmakers in House Hearing on Social Media's Role in Extremism, Misinformation*, WASH. POST (Apr. 9, 2021), https://www.washingtonpost.com/technology/2021/03/25/facebook-google-twitter-house-hearing-live-updates/ [https://perma.cc/6ZXU-E35J].

73.   *See, e.g.*, Meghan Anand et al., *All the Ways Congress Wants to Change Section 230*, SLATE (March 23, 2021), https://slate.com/technology/2021/03/section-230-reform-legislative-tracker.html [https://perma.cc/2J8D-ZDT2].

74.   *See* Eileen Guo, *Facebook Is Now Officially Too Powerful, Says the US Government*, MIT TECH. REV. (Dec. 9, 2020), https://www.technologyreview.com/2020/12/09/1013641/facebook-should-be-broken-up-says-us-government/ [https://perma.cc/7TFM-WZ9U] (detailing the federal government's antitrust lawsuit against Facebook); *Justice Department Sues Monopolist Google for Violating Antitrust Laws*, U.S. DEPT. OF JUSTICE (Oct. 20, 2020), https://www.justice.gov/opa/pr/justice-department-sues-monopolist-google-violating-antitrust-laws [https://perma.cc/C4ZN-R9EU] (announcing the antitrust lawsuit against Google).

These are surely partial constraints. But they may not be enough to keep filtering companies from engaging in *subtler* or *occasional* infringements on CBS that can nonetheless change beliefs and subvert the agency of users.

Consider first the market constraints. It seems unlikely that big companies face much pressure from consumers to follow CBS. When algorithms do the filtering, users may not even recognize skews.[75] Even if consumers do notice, this is unlikely to motivate them to switch filterers, for several reasons. First, they may (likely) lack commitment to CBS. While some studies show that participants *report* preferring to consume either impartial or diverse news, their actions *reveal* a preference for news that confirms their own beliefs.[76] Second, in the case of social media platforms or search engines, consumers may not be willing to give up on the efficiency and networking benefits that these companies offer.[77] A study published in 2018 found that on average Facebook users would not agree to leave the platform for any payment less than $1,000.[78] Moreover, given socially induced cognitive scarcity, consumers may not be willing to just add more filterers to their media repertoires.

Political constraints also seem unlikely to altogether block exercises of skewing power. Few if any political actors are sincerely committed to CBS. Occasionally concern is voiced about epistemic bubbles. But partisans generally want to censor speech that they dislike and clear the path for speech that they like, and different factions have different pet issues that they want the big tech companies to address in their filtering. This may explain, too, why governmental movements against these companies have been so slow. Congress only recently, in light of the revelations of the Facebook whistleblower Frances Haugen, seems to be grasping the significance of Facebook's algorithmic influence.[79] Members of Congress have frequently discussed repealing Section 230, but it has not yet

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75. *See* Epstein, *supra* note 71, at 303 (in a study in which some participants were given biased search engine results, only a "small group" noticed the bias).

76. *See* Guy Faulconbridge, *This Is What People Want from Their News, According to the Reuters Institute*, WORLD ECON. F. (June 30, 2021), https://www.weforum.org/agenda/2021/06/people-want-their-news-to-be-impartial-reuters-institute-says/ [https://perma.cc/699Y-HUBM] (reporting that large majorities of people across the globe thought that news outlets should present a range of different views, or else try to be neutral); Nic Newman, *Impartiality Is Still Key for News Audiences. Here's How to Rethink It for the Digital Age.*, REUTERS INST. (Oct. 19, 2021), https://reutersinstitute.politics.ox.ac.uk/risj-review/how-to-rethink-impartiality-digital-age [https://perma.cc/NG5G-S82Q]. *But see* Silvia Knobloch-Westerwick & Jingbo Meng, *Looking the Other Way: Selective Exposure to Attitude-Consistent and Counterattitudinal Political Information*, 36 COMMC'N RES. 426 (2009) (finding that people tend to gravitate toward news that is consistent with their political attitudes).

77. Most people prefer using the social networking platforms that many of their friends and associates also use. *See* Feng Zhu & Marco Iansiti, *Why Some Platforms Thrive and Others Don't*, HARV. BUS. REV., Jan.–Feb. 2019, at 118.

78. Jay R. Corrigan et al., *How Much is Social Media Worth? Estimating the Value of Facebook by Paying Users to Stop Using It*, 13 PLOS ONE 7, 7 (2018).

79. *See* Bobby Allyn, *Here Are Four Key Points from the Facebook Whistleblower's Testimony on Capitol Hill*, NPR (Oct. 5, 2021), https://www.npr.org/2021/10/05/1043377310/facebook-whistleblower-frances-haugen-congress [https://perma.cc/X6DD-7H2R].

happened.[80] The Department of Justice filed an antitrust suit against Google only last fall, even though Google has owned YouTube since 2006 and dominated the search engine market for just as long.[81] Finally, in the absence of major changes to First Amendment doctrine, there will be a limit to the sorts of specific tweaks to these companies' filtering activities that government actors could require.

Moreover, media companies already *do* engage, with impunity, in skewing to boost their image and profits. Starting in the late 2010s, Facebook changed its algorithms to prioritize user interaction rather than the time users spend on the platform, in order to discourage users from migrating their interpersonal messaging to applications like Snapchat.[82] It has also been revealed that Facebook, seemingly for political or public relations reasons, exempts from its ordinary removal policies accounts flagged as VIPs, which include many incumbent politicians.[83] Similarly, Facebook in India is reported to have applied its removal policies differently to different Indian political groups in order to avoid political backlash.[84] Google, too, may alter its search rankings in order to avoid scandals.[85] It certainly alters rankings in order to promote its own products, like Google's Local Review or Pixel phone, over those of competitors, like Yelp or iPhone.[86] Google also suppresses negative search results for itself, but not Bing or Yahoo, its main search engine competitors.[87]

D. Transparency of Filtering

Transparency is not an independent factor, but it is deeply entwined with all three factors above. The less transparent a filterer is in its filtering, (a) the more likely its consumers are to fall into an epistemic funnel controlled by it, (b) the

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80. *Justice Department Sues Monopolist Google for Violating Antitrust Laws*, U.S. DEPT. OF JUSTICE (Oct. 20, 2020), https://www.justice.gov/opa/pr/justice-department-sues-monopolist-google-violating-antitrust-laws [https://perma.cc/83GY-9YXU] (announcing the antitrust lawsuit against Google).

81. I do not mean to suggest, however, that repealing 230 would necessarily be a solution to the issues that I am raising here. *See, e.g.*, Farhad Manjoo, *Facebook Is Bad. Fixing It Rashly Could Make It Much Worse*, N.Y. TIMES (Oct. 27, 2021), https://www.nytimes.com/2021/10/27/opinion/facebook-regulation-section-230.html [https://perma.cc/8NLJ-7VBJ].

82. Will Oremus et al., *How Facebook Shapes Your Feed*, WASH. POST (Oct. 26, 2021), https://www.washingtonpost.com/technology/interactive/2021/how-facebook-algorithm-works/ [https://perma.cc/ZTN4-K5LA].

83. *See* Jeff Horwitz, *Facebook Says Its Rules Apply to All. Company Documents Reveal a Secret Elite That's Exempt.*, WALL ST. J. (Sept. 13, 2021), https://www.wsj.com/articles/facebook-files-xcheck-zuckerberg-elite-rules-11631541353 [https://perma.cc/S8MS-3NHU].

84. *See* Sheera Frenkel & Davey Alba, *In India, Facebook Grapples with an Amplified Version of Its Problems*, N.Y. TIMES (Oct. 23, 2021), https://www.nytimes.com/2021/10/23/technology/facebook-india-misinformation.html [https://perma.cc/LM9Q-9DCH].

85. *See* Erik Ortiz, *Google Changes Algorithm, Scrubs Neo-Nazi Site Disputing Holocaust in Top Search*, NBC NEWS (Dec. 27, 2016), https://www.nbcnews.com/tech/internet/google-changes-algorithm-scrubs-neo-nazi-site-disputing-holocaust-top-n700506 [https://perma.cc/MQV7-HDRS]. This raises the question of whether the company more regularly alters search results based on public outcry in less sympathetic cases.

86. *See* WU, *supra* note 1, at 125; *see also The Power of Google: Serving Consumers or Threatening Competition? Before the Subcomm. on Antitrust, Competition Pol'y & Consumer Rts. of the S. Comm. on the Judiciary*, 112th Cong. 249 (2011).

87. Epstein, *supra* note 71, at 307.

more susceptible its audience is, and (c) the less effective the constraints on it are. If skewing goes undetected, then audiences will be less inclined to seek out other filterers or to be skeptical of the sources presented to them. This means that the opaquer filterers are more likely to have skewing power.

Below I explain what makes a filterer—and especially new media filterers like Facebook and Google—less transparent. I identify five factors affecting transparency: a lack of direct publicity, a lack of known authorship, meta-filtering, personalization, and/or ownership concentration. Only the first and last of these factors apply to both traditional and new media.

First and most obviously, companies make deliberate decisions about how much information about their filtering to release to the public. For traditional media, information about editorial decisions is rarely released. Similarly, the code new media uses for its algorithmic filtering is rarely accessible to the public. The details of Google's algorithms—especially its Search algorithm—are a closely guarded proprietary secret.[88] Essentially the same goes for Facebook, though the latter has revealed somewhat more details about its filtering priorities.[89] About 53% of American adults also say that they understand "not very well" or "not at all" how the speech that ends up in their Facebook newsfeed gets there.[90] If any subtle biases in filtering exist, this makes them harder to detect.

Second, those who make the filtering decisions for a media company will only sometimes be known to the public. In the case of traditional media, the public tend to know or have ready access to the identities of editors, authors, anchors, hosts, etc. From these identities, it is often easy to infer the possible biases of the filtering. By contrast, the crafters of filtering algorithms are for the most part unknown to the public.

Third, filtering can be especially obscure when it involves meta-filtering: one filterer filtering the outputs of *other* filterers. For a user surveying the results of such meta-filtering, sometimes the identity of the original filterers will not be evident without close attention or work (like clicking on a shared article headline). Even when the original filterers are evident, the user may be less familiar with any biases in those filterers because they have only seen cherry-picked items from them. Or the original filterers may not be noticed or even remembered. Studies show that, while people remember seeing particular news stories on a particular social media platform, they often do not recall the original source.[91]

88. Jayson DeMers, *How Much Do We Really Know About Google's Ranking Algorithm?*, MEDIUM (May 28, 2020), https://medium.com/swlh/how-much-do-we-really-know-about-googles-ranking-algorithm-ef031586681b [https://perma.cc/U7SZ-R6GB].

89. *See* Keach Hagey & Jeff Horwitz, *Facebook Tried to Make Its Platform a Healthier Place*, WALL ST. J. (Sept. 15, 2021), https://www.wsj.com/articles/facebook-algorithm-change-zuckerberg-11631654215 [https://perma.cc/58WC-N7EQ].

90. Aaron Smith, *Many Facebook Users Don't Understand How the Site's News Feed Works*, PEW RSCH. CTR. (Sept. 5, 2018), https://www.pewresearch.org/fact-tank/2018/09/05/many-facebook-users-dont-understand-how-the-sites-news-feed-works/ [https://perma.cc/58WC-N7EQ].

91. Joseph Lichterman, *People Who Get News From Social or Search Usually Don't Remember the News Organization that Published It, Survey Finds*, NIEMANLAB (July 19, 2017), https://www.

Fourth, filtering will often be less transparent when it is personalized—that is, when each audience member receives a differently filtered set of speech. Whereas the science research journal *Nature* publishes one set of articles in each issue, Facebook generates millions of individual "newsfeeds," each for its own user. If a media company produces just one unified filtering product, any subtle biases in that product will usually be picked up by at least a few consumers and then publicized. But if the company's filtering product is fractured into millions of pieces, and the company has millions of separate opportunities to skew the filtering, it makes it harder for trends to be noticed across the population.

Finally, any skews in filtering are particularly hard to detect when a single company's epistemic funnel spans multiple media services. Most Americans do not understand the extent to which media ownership in the United States is concentrated. For instance, a majority do not know that the same company that owns Google (Alphabet) also owns YouTube.[92] And a majority do not know that the same company that owns Facebook (Meta) owns Instagram, too.[93] (Ownership concentration extends beyond the platform companies, of course.[94]) The implication is that many people may not realize that they are in epistemic funnels because they do not know that their information comes from a single filterer (or at least is ultimately controlled by a single filterer). Indeed, that the information *appears* to come from multiple filterers may erroneously suggest convergence among diverse parties and wrongly alleviate concerns about bias.

CONCLUSION

This essay has defined a form of power—skewing power—that a media company could have over certain media consumers who use the company as a primary information source on a given topic. If it wanted, a company with this sort of power could feed these consumers beliefs by skewing the information to which they are exposed. Or it could, at least, skew these consumers' information pools in a way that prevents them from forming epistemically justified beliefs. It might even—given the discussion of transparency in Section IV—be able to do this without being discovered.

Even the risk that such power exists and could be exercised is disconcerting. It is worrying for each of the individuals who might be subject to the power, who are in danger of being used as the instruments of others. Yet the larger threat is that a company has skewing power over a great mass of individuals. Such

niemanlab.org/2017/07/people-who-get-news-from-social-or-search-usually-dont-remember-the-news-org-that-published-it-survey-finds/ [https://perma.cc/9RUY-BHAK].

92. *The Verge Tech Survey 2020* (Mar. 2, 2020), https://www.theverge.com/2020/3/2/21144680/verge-tech-survey-2020-trust-privacy-security-facebook-amazon-google-apple [https://perma.cc/C7BT-HRDD].

93. Matt G. Southern, *Most People Still, in 2020, Aren't Aware Facebook Owns Instagram*, SEARCH ENGINE J. (Mar. 2, 2020), https://www.searchenginejournal.com/most-people-still-in-2020-arent-aware-facebook-owns-instagram/352758/ [https://perma.cc/WT5J-CEK8].

94. *See* Sarah Ellison & Matthew Karnitschnig, *Murdoch Wins His Bid for Dow Jones*, WALL ST. J. (Aug. 1, 2007), https://www.wsj.com/articles/SB118589043953483378 [https://perma.cc/KR3S-ZLUM].

aggregate power might threaten democracy itself if its wielder could change votes. If the company had power over enough pivotal voters to sway an election, it might hijack the popular agency of the democratic process itself.

While it may seem far-fetched that any contemporary company would exercise power like this, even if they had it, the leaders of these companies may not remain the same forever, and these companies may themselves be replaced by other, similarly (or more) powerful companies. Elon Musk's takeover of the social media platform Twitter has only made more vivid how quickly the leadership and direction of a critically important communications platform can change.[95]

The purpose of this essay has been to characterize a potential problem rather than to solve it, but Section IV offered some clues for where to direct efforts. First, and most obviously, we should work to reduce the occurrence of epistemic funnels. One hope for this, at least in the social media realm, are proposals to encourage competition for filtering in areas where it is stagnant, such as on social media platforms. For instance, Francis Fukuyama with Stanford's Cyber Policy Center has proposed stimulating a market for "middleware" firms that would provide filtering services for content on social media platforms, and forcing platforms to give these firms access.[96] Second, we should engage in digital literacy and other educational campaigns to reduce the susceptibility of media consumers to skewing. Educated people can protect *themselves* from skewing power. Third, we should encourage or mandate increased transparency in algorithmic filtering.

95. *See* Shira Ovide, *Why Everyone Wants to Buy Twitter*, N.Y. TIMES (Apr. 20, 2022), https://www.nytimes.com/2022/04/20/technology/elon-musk-twitter-potential.html [https://perma.cc/S9KG-URE5]. Musk has suggested some changes for Twitter—such as a general policy against removing users or content—that are at least in the spirit of CBS. *See* Ewan Palmer, *How Elon Musk Will Change Twitter, According to Those Close to Him*, NEWSWEEK (Apr. 26, 2022), https://www.newsweek.com/elon-musk-twitter-takeover-changes-ross-gerber-1700939 [https://perma.cc/5MJB-R5JL]. However, such changes would not remove any skewing power possessed by Twitter executives unless the company was constrained to maintain them.

96. Fukuyama et al., *supra* note 3; FRANCIS FUKUYAMA ET AL., REPORT OF THE WORKING GROUP ON PLATFORM SCALE (2021), https://fsi-live.s3.us-west-1.amazonaws.com/s3fs-public/platform_scale_whitepaper_-cpc-pacs.pdf [https://perma.cc/9HTS-5LQM].