

Doxastic Addiction And Effective Interventions Carrie Figdor

(For J. Lackey & A. McGlynn (Eds.) *Oxford Handbook of Social Epistemology* (Oxford: OUP, forthcoming).

Abstract: We are consumers of drugs and news, and sometimes call ourselves addicts or junkies of one or both. I propose to take the concept of news – more generally, doxastic – addiction seriously. I define doxastic addiction and relate this type of addiction to echo chambers and religious belief. I show how this analysis directs attention to appropriate interventions to help doxastic addicts, and how it offers a new type of justification for limits on free speech.

[Epigraph]

But while much has been said about how people descend into this world [of QAnon conspiracies], little is known about how they get out. Those who leave are often filled with shame. Sometimes their addiction was so severe that they have become estranged from family and friends.”

“One Woman’s Journey Out of QAnon.”

By Sabrina Tavernise. The New York Times Jan. 29, 2021¹

Introduction.

Drug analogies abound in relation to news. We are standardly described as, and consider ourselves, consumers of drugs and news. We may be described, or describe ourselves, as drug or news junkies when consumption becomes excessive. And in recent years it has become clear that consumption of either drugs or news can be excessive in ways that tear familial and social relationships apart and abet violence. Both are social problems, not just individual ones.²

¹https://www.nytimes.com/2021/01/29/us/leaving-qanon-conspiracy.html?action=click&algo=bandit-all-surfaces-geo-alpha-02&block=more_in_recirc&fallback=false&imp_id=947292864&impression_id=08e81171-6342-11eb-9412-2d44e8d982dc&index=0&pgtype=Article®ion=footer&req_id=59339716&surface=more-in-us-news&variant=1_bandit-all-surfaces-geo-alpha-02

² Another example: “We are facing a mass addiction with the effective purveying of disinformation on social media. I don’t have one iota of sympathy for someone like [Marjorie Taylor Greene], but the algorithms, we are understanding more than ever we could have, truly are addictive. And whatever it is in our brains for people to go down those rabbit holes, and begin to inhabit this alternative reality, they are, in effect, made to believe.” Hillary Clinton, in “QAnon Believers are Obsessed With Hillary Clinton. She Has Thoughts.” Interview with Michele Goldberg, The New York Times, Feb. 6, 2021.

I think we should take the everyday analogy of disordered drug and news consumption seriously. While everyday usage can often be loose and metaphorical, I will argue that in at least some cases the term “addict” (or “junkie”) should be understood literally in relation to news, and to testimony generally. Doxastic addiction, I will argue, is an epistemic disorder -- a different type of disorder of belief, but just as much as disorder, as disorders of belief that are associated with (and sometimes used to explain) psychoses. Recognition of this form of doxastic disorder points the way to more effective interventions for helping doxastic addicts and more effective responses to those who exhibit epistemic vices but are not doxastic addicts. It also provides a new rationale for restrictions on speech compatible with minimal free speech regulation.

In what follows, I will first introduce the complexities of defining more well-known addictions and how genuine addiction can be tied to belief. I then articulate what characterizes doxastic addiction, linking this concept to recent work on trust in the epistemology of testimony and the nature of echo chambers. My goal is to sketch a plausible model in which certain extreme cases of imperviousness to evidence should be conceptualized as an epistemic form of addiction. This model explains why interventions to aim to get people out of echo chambers are more likely to be successful if they focus on social relationships rather than on an individual’s willpower. It also suggests a new sort of speech-act harm that motivates new restrictions on free speech that are still within the bounds of a broad liberal free speech regime.

1. What is addiction?

If one holds that consumption of a material substance, such as heroin or alcohol, is a necessary condition of real addictions, doxastic addiction can only ever be metaphorical. But this is implausible as a necessary condition. For example, gambling addiction is considered a *bona fide*

addiction despite the lack of an ingested substance. We may think of drug addictions as paradigm cases, but complexity in defining even drug addiction points to a view in which there is no single etiology of genuine addiction. In addition, variation in the neural, behavioral, and cognitive factors in addiction make it impossible to provide a set of necessary and sufficient conditions to define it even in the case of material substances. For example, not all individuals who have neurophysiological markers of addiction are impaired in their decision-making, while some normal control subjects have addiction-like problems with decision-making (Bechara 2005). Criteria for “real” addictions that carve out all and only even the paradigm cases don’t exist.

What comes closest to being a necessary condition is a psychological criterion according to which frequent use crosses over into addiction when using ceases to be under the control of the user. Typically this loss of control is operationalized in terms of the drug addict’s loss of an ability to choose to use a drug or to refrain from using in the light of long-term outcomes. The psychological and neurological mechanisms behind the loss of control are still disputed and are no doubt multiple. For example, it is well-known that addicts respond rationally to incentives to stop using. Many are able to quit on their own for their own reasons, while others quit when faced with clear, strong incentives, such as the threat of losing one’s job without passing random and frequent drug tests (Pickard 2020). This evidence is usually taken to support the moral model of addiction, in which addiction is or involves a failure of individual willpower. The addict could choose to quit given sufficient incentives to do so; the moral part is that she remains responsible for continuing to use. The alternative medical (or brain disease) model characterizes addiction as a brain disease in which changes in brain chemistry result in cravings or compulsions that practically no amount of willpower can overcome (Satel and Lilienfield 2017; Holton and Berridge 2013). This model gains support from the fact that extraordinary and painful efforts to stop using can fail or end up

in relapse. Only a minority of addicts are unable to get over their addictions, but these few dominate the literature (and public perception). Both broad models share the presupposition that addiction involves a loss of ability to control use.

Levy (2014) offers a middle view that explains the loss of control in terms of oscillating judgments or beliefs, where the oscillation is in turn explained in terms of a dysfunctional valuation system linked to mesolimbic system dopaminergic activity. Substance addiction is a disorder of belief in which agents lose control over their drug-taking by losing control over their beliefs regarding whether to consume or not to consume – in terms of utility maximization, beliefs whether they are better off consuming or not consuming.³ The disorder consists in the oscillation of going from one belief to the other, resulting in disordered autonomy. This version adds nuance to the psychological criterion's core idea of loss of control. First, it identifies the loss as a problem of controlling one's beliefs about using. Second, it acknowledges that the loss of control (and autonomy) can come in degrees. However, the existence of a penumbra between "in control" and "not in control" is compatible with many clear cases where the loss of control is significant enough to count as addiction.

Consistent with Levy's approach, but at a finer level of cognitive and neural detail, is Bechara's (op.cit.) comprehensive neurocognitive model of addiction. This influential framework integrates disordered psychological (decision-making and reward systems) factors with disordered

³ This is a descendent of rational choice models of addiction (Becker and Murphy 1988; Ainslie 2001) in which the addict's preference curves shift: despite avowals to not use again, the future consequences of continued use are sharply (hyperbolically) discounted, and taking the drug now becomes the best all things considered option. Others put more emphasis on volitional failure due to desires that are "very hard to resist" (Holton and Berridge 2013) – although even they agree that, while complete irresistibility can't be ruled out, it is hard to know what it might mean. Another cognitive element in addiction is metacognition (e.g., in alcoholism, beliefs about the need to control one's alcohol-related thoughts) (Hamonniere and Varescon 2018); unfortunately, this recent work (as well as further work on models of addiction) cannot be explored here.

neurological (neuroanatomical and neurophysiological) factors to explain the loss of control. This model associates addiction with disordered neural systems of cognitive control and affective response. The neural changes that can come about with drug-taking exacerbate pre-existing individual weaknesses in cognitive control mechanisms (in particular the ability to make decisions in the light of long-term outcomes) and hijack efforts to exercise willpower to control drug-taking.

Note that a developed hybrid account of this general sort will not end up reducing the psychological mechanisms of addiction to neural mechanisms even as we learn more about the neurophysiology of addiction. First, the psychological criterion as applied to cases is not individualistic. The loss of control is invariably understood in terms of an inability to manage the risk of actual or foreseeably bad interpersonal and social outcomes of one's choices regarding use. We are reluctant to consider someone an addict if their choices don't result in harm to anyone. Indeed, addiction would not be a public health problem if bad social consequences were not the rule. (Losing one's job can lead to many such problems.) In other words, the psychological criterion is *used* in ways that erase the line between what addiction is and why it is problematic: that it is problematic characterizes how we diagnose addiction even if the link to social harm is not constitutive. This point will become important below, when discussing the difference between doxastic addiction and committed religious faith.

Second, reliable evidence for loss of cognitive control is when the addict herself repeatedly expresses the desire to stop using (or the belief that she would be better off not using) and behaves initially with this intention, but does not stop. However, it is not essential to addiction that genuine addicts must go through a Sisyphean struggle to quit. As noted, the vast majority of addicts quit without one. In other words, the disorder of belief is not specifically a matter of oscillation. It is equally a loss of control, and a disorder of belief, if an addict is rigidly fixed in believing she ought

to use and their use is consistent with this stuck belief. A “happy addict” (Frankfurt 1971) is no more in control of use than the stereotypical “unhappy addict” who oscillates between wanting and not wanting to use (or, in Levy’s terms, believing she should or else should not use) and overtly struggles with her use. The hypothetical happy addict differs from the unhappy addict only in that her belief that she is better off consuming (in Frankfurt’s terms, her 2nd order desire to use) does not oscillate. Loss of cognitive control occurs at both extremes of oscillation and rigidity, even if reliable evidence of loss is oscillation.

These points regarding ruinous outcomes and evidence of loss of control are not independent. We can imagine someone who happily consumes cocaine frequently yet never exhibits any struggle with using. There is no evidence of oscillation of belief – am I better off using, or not using? – in her behavior. Even her verbal behavior does not exhibit inward oscillation. We can further imagine her using has no harmful effects on her interpersonal and social relationships. She is, and remains, rich and healthy. Would she be an addict? No struggle, no harm?

A weak view of the psychological criterion holds that in this case there is no evidence of addiction, and leave it at that. It is possible that she could not stop were she (counterfactually) to try to do so, but we can’t know. A strong view holds that any failure of control must have poor interpersonal and social consequences, and so would rule that she is definitely not an addict even though it is possible that she could not stop were she (counterfactually) to try to do so. Neither untutored nor informed intuitions provide a clear verdict on which view to adopt.⁴ But the strong

⁴ For example, Bechara (op.cit.: 1462) notes that evidence of the characteristic decision-making deficits in addiction becomes evident only when individuals persist in using in the face of (observable) rising adverse social, physical, and psychological consequences of continued use. Thus, coffee “addicts” do not have decision-making impairments “unless their choices bring increasing social, physical, or psychological harms” – but, he admits, maybe they do have the decision-making deficits but we lack evidence of them.

view is responsive to the actual way the criterion is applied. From that perspective, we would leave this person alone, whether we categorize her as an addict or not. At most, her addiction is undetectable and does not require treatment. The price of this view, which I will adopt, is that it may miss a few hypothetical cases of genuine addiction. But this is a minimal cost if our goal is a usable criterion that broadly captures actual cases of addiction and actual resource allocation policies for treatment.

2. What characterizes doxastic addiction?

The psychological criterion serves as a necessary condition for all forms of addiction. The forms differ in the target of the disorder of belief. Ingesting a material substance is not necessary, even if drugs are the paradigm target. Our news junkie metaphor suggests excessive news consumption can have some similarities with real addictions. I've argued that some of these cases are real addictions with a different target.

In doxastic addiction, the target is 1st-order belief: the addict is no longer in control of her believing. For many genuine doxastic addicts, like many genuine drug addicts, this loss of control is severe, if not complete. Complete loss of control of believing is the extreme case. And just as in drug addiction, individual differences will matter for just how severe the loss of control is and how vulnerable the individual is to becoming addicted in the first place.

Where drug and doxastic addiction do seem to differ is in the standard evidence of addiction. In drug cases reliable evidence is oscillation in drug-using behavior, from which we infer to oscillation in belief about whether to use or not to use. Evidence of doxastic addiction is more likely to be at the pole of rigidity – a demonstrated inability to stop believing – rather than the pole of oscillation. But the latter does exist: it is familiarly known as a crisis of faith, associated

with religious belief. The loose way we use the label “news junkie” in everyday life picks out people who are merely heavy consumers of news, and those who are genuine, albeit doxastic, junkies. Our everyday observations of heavy consumption won’t distinguish these, and our everyday responses, such as exhortations to stop consuming, will be unfruitful for those in the latter category. The Plato-inspired conception of justification or warrant as what (metaphorically) “ties down” a belief, as in the *Meno*, presumably does not include those cases where the belief is pathologically tied down.

Elaborating the concept of doxastic addiction requires bringing to the fore a key feature of the disorder of belief that has been backgrounded up to now. This is the role of evidence in addiction (not evidence *of* addiction). With drug addiction, addicts oscillate between believing they are better off using and believing they are better off not using because they are unable to reliably factor into their decision-making the available evidence of poor long-term consequences. The future cost of using is heavily discounted relative to the current benefits of using. The issue of control is whether the 1st-order behavior – using – is under the control of 2nd-order beliefs that are responsive to relevant and available evidence, and the disorder involves the fluctuating responsiveness of 2nd-order beliefs to this evidence. Responsiveness includes internal factors such as improperly factoring the evidence into one’s decision-making – it need not be a matter of ignoring or rejecting evidence. In the general case, however, the issue is whether the 1st order behavior – using or believing – is under control of evidence-responsive 2nd-order beliefs, and the loss of control involves extreme unresponsiveness to this evidence in the form of oscillation or rigidity.

In doxastic addiction, the core type of unresponsiveness involves an inability to properly factor in evidence that a trusted source of testimony is unreliable. That is, the disorder of belief

stems from a disorder of trust. The addict is unable to stop trusting the trusted testifier despite available evidence that provides good reason to think they should not be trusted. She cannot stop holding the 1st order beliefs because she cannot stop trusting the source of her beliefs despite evidence that should undermine this trust. An example is someone who continues to believe the 2012 Sandy Hook massacre of primary school children and their teachers was staged by crisis actors, as testified by Infowars host Alex Jones, despite the provision of death certificates among other forms of evidence that it did occur. Another is someone who continues to believe that the presidential electoral results in the state of Georgia in 2020 were fraudulent, despite a full hand recount of the ballots that resulted in then-candidate Joe Biden getting even more votes than he had in the original count.⁵ Doxastic addicts are unable to stop holding these 1st-order beliefs because they are unable to stop trusting their doxastic pusher (in this case, Alex Jones). Evidence of an inability to stop believing sincerely in the face of relevant and available evidence is defeasible evidence of doxastic addiction.⁶

This model can be fleshed out in familiar terms from the epistemology of testimony, in particular the role of trust in testimonial knowledge. (I will focus on belief, setting aside the question of what is required for knowledge.) Many agree that trust is epistemically, and not merely psychologically, essential for acquiring belief via testimony (Hinchman 2018, Faulkner 2012, Greco 2020, Dormandy 2020; for an opposing view, see Lackey 2008).⁷ Even if one thinks trust

⁵ I do not rule out forms of doxastic addiction based in other types of belief or knowledge, e.g. perceptual knowledge or introspection, but I'm not going to consider them here.

⁶ I mention "sincere" because I exclude from discussion those who never stop espousing certain beliefs, whatever the evidence, because it is in their interest to do so (e.g. for political purposes). This is like someone who only pretends to inject a drug. Such insincerity is usually exposed when people are required to (legally) testify under oath.

⁷ Carter (this volume) helpfully canvasses a wide variety of views; the point I make can be reformulated into other terms if those are preferred. It is also compatible with reductionist and non-reductionist views of testimony. For a reductionist, the disorder involves not taking into account

has no epistemic role, the addiction would remain doxastic because the target of the disorder of belief is belief. However, accounts of the epistemic role of trust in testimony are helpful because they detail a plausible mechanism for understanding the disorder. An illustrative example is Hinchman's (op.cit.) account, in which an illocutionary act of *telling* a hearer H that P essentially involves the speaker S inviting H to trust S and H's recognition that S intends H to recognize this invitation. *Telling* that P is distinct from *asserting* that P to H (or to someone in H's vicinity, and H overhears that P). H can refuse the invitation to trust – that is, refuse to take S's word for it – and no belief that P will be acquired by H from S.

For my purposes, the helpful aspect of Hinchman's account is that the trust element is elaborated in terms of our *capacities for reasonable trust*: the presumption is that H's trust in S is reasonable, but this presumption is undermined if S is untrustworthy (on the subject) or there is good evidence of S's untrustworthiness (on the subject) that H ought to possess, whether H is aware of that evidence or not. Relevant evidence regarding S's trustworthiness is not taken appropriately into account. Implicit in this account of the capacity for reasonable trust is the assumption that our trust in testifiers is largely under our control: being able to reasonably trust is part of being in cognitive control. As Hinchman (op. cit.: 584) puts it, a failure of this capacity for reasonable trust is a failure of "cognitive self-governance". And this capacity is what doxastic addicts have lost. They fail to reasonably integrate evidence that the trusted testifier is not reliable. They may ignore or reject the evidence. But they may simply weigh it inappropriately, as is standard in accounts of drug addiction. If the expected future consequences of not believing might result in ostracism from one's community, evidence of unreliability of a trusted testifier may be

the reasons (evidence) in addition to trust that are needed for testimonial knowledge. For the non-reductionist, testimonial knowledge doesn't require more than trust, so the disorder is limited to the disorder of trust.

heavily discounted. The psychological factors contributing to an inability to stop trusting (and thus to stop 1st-order believing) are likely multiple and complicated.

Note that not every failure of reasonable trust counts as doxastic addiction. As with drugs, an addiction diagnosis depends on the severity of the failure of control and on whether there are poor long-term consequences of the failure (such as disruption of social relationships). The time course also matters. All normal cognitive agents fail to reasonably trust and fail to be responsive to evidence on occasion. Standing departures from ideal epistemic agency are moralized in terms of character traits categorized as epistemic “vices” (e.g. Cassam 2018). Mere (e.g.) closed-mindedness is a departure from the epistemic ideal, not a disorder, just as someone who drinks more than moderately is not an alcoholic. Vice epistemology presupposes an individual who is largely in control of who she trusts and thus what she believes, even if she is (e.g.) closed-minded about it. The drug addiction literature implies that evidence of this difference may be found in relation to actual incentives, not by entertaining hypothetical scenarios. It predicts that the (e.g.) closed-minded, but not the doxastic addicts, would change their vicious ways if they faced clear and strong incentives to do so. The epistemically vicious (but not doxastic addicts) can be relied upon to act in their own self-interest as assessed using discount factors of future outcomes that lie within normal ranges. In actuality, the epistemically vicious almost never face such incentives: we largely accept them as they are while still blaming them for their vices. Unlike addicts, we treat them as fully autonomous agents.

Recognizing doxastic addiction exposes the limits of this moral model of epistemic failure. There is no sharp line between the usual sorts of departures from ideal epistemic agency that are discussed in mainstream epistemological literature, whether those are dogmatically held religious beliefs, ideological beliefs that register membership in a community (e.g. Stanley 2015) or belief-

related dispositions categorized as epistemic vices. But there is also no sharp line between individuals who drink occasionally, regularly, frequently, heavily, or unremittingly, and alcoholics. Epistemologists should take seriously the idea that a failure of sensitivity to evidence of trustworthiness of one's sources of testimony can be so extreme as to fundamentally derail cognitive control and be an addiction.

These theoretical considerations can be made more concrete by considering Nguyen's (2020) analysis of echo chambers through the lens of doxastic addiction. Nguyen argues that individuals (or institutions) create and maintain the metaphorical walls of an echo chamber by manipulating people's trust via epistemic discrediting of non-members, amplification of insiders' epistemic credentials, and a core set of beliefs that includes beliefs that support the disparity in trust. For example, evidential pre-emption by source discrediting (Begby 2020) can involve inoculating hearers against outside evidence by saying (in somewhat standardized form) "My opponents will tell you that Q, but I say that P".

In these accounts, the rigidity of belief is conceptualized in terms of metaphorical walls that separate those inside the chamber from those outside it. These walls are created by trust manipulation. However, the question in doxastic addiction is whether the trust in the source is reasonable – whether the ability to factor in evidence of untrustworthiness is severely impaired. That means that even if all the people in echo chambers have had their trust manipulated, they are not all automatically doxastic addicts.⁸ To the contrary, they are very likely to differ in their ability to factor in evidence of untrustworthiness. For example, many people who believe Sandy Hook

⁸I assume one can become doxastically addicted via indoctrination or belief insertion, just as one can become drug addicted by involuntary exposure (e.g., neonatal drug dependence). As with drugs, the addiction is independent of the method by which it came about, including whether one voluntarily took the initial steps on the path that turned out to lead to addiction.

was a bunch of crisis actors do eventually stop believing this; a hard core of people do not.⁹ This is exactly what we should expect – individual variability in addiction is the norm, whether the target is drugs or beliefs. Nevertheless, echo chambers are dens of (at least some) doxastic addicts just as opium dens are dens of opium addicts. The echo chamber is metaphorical, but the addiction of some of those in it is not.

The distinction between doxastic addiction and echo chamber membership is reinforced by the fact that echo chambers are impossible to create or maintain without the hearer's contribution. Doxastic pushers, such as Alex Jones, offer their epistemic wares to everyone. It is not up to them whether any individual hearer gets addicted to those wares. We are all subject to attempted manipulations of trust every day with phishing emails, exposure to fake news, and social media algorithms that feed us streams of reinforcement derived from our online behaviors. We may even be aware of our vulnerability to losing cognitive control and force ourselves to access a variety of sources. But just as not everyone who drinks becomes an alcoholic, not everyone who exclusively watches Fox News or listens to Alex Jones becomes a doxastic addict. The vast majority of people don't, including many of those who continue to stick to the same beliefs for a while in the face of apparent debunking. Why some people succumb and others do not is a matter of individual variation, the explanation of which we do not yet know.

What does seem clear is the presence of an affective element in addictions that can make it harder to stop using or believing, and to which some people are more sensitive than others.

⁹This is shown in the recent *This American Life* podcast *Beware the Jabberwock* (<https://www.thisamericanlife.org/670/beware-the-jabberwock>). Part One is an interview with Lennie Pozner (father of Sandy Hook victim Noah Pozner) and the results of his campaign to fight back against the conspiracy theories circulating about the massacre. Many of the hard-core believers in the crisis actor conspiracy eventually were satisfied by mounting evidence – skeptical and perhaps stubborn turns of mind do not a doxastic addict make. But a few never gave it up.

Craving a drug and craving an identity-constituting communal belief may be affectively very similar. Not belonging *feels* bad – uncomfortable, stressful – whereas belief affirmation is a way of affirming ourselves and of avoiding this potential negative affect. If particular trusted testifiers are associated with the positive affect of belonging, they can come to serve as external cues that predict the reward of affirmation. We may even purposefully insulate ourselves from sources that we fear might loosen our commitment – for a variety of reasons, including affective ones, we may positively value an addiction. So part of the explanation of individual vulnerability to doxastic addiction may be the strength of the positive affect associated with forms of social affirmation or the strength of the negative affect where that affirmation is withheld.

Even more speculatively, doxastic craving may activate the same dopaminergic reward circuits identified in substance addictions. Some have conceptualized substance addiction in terms of maladaptive learning as a result of studies linking oxytocin to inhibition of learning and memory (Lee et al. op.cit.; Bohus et al. 1978; but see Engelmann et al. 1996). The neurohormone oxytocin, which mediates complex social cognition (including trust) and social behavior (including bonding) may be helpful in treating substance addictions (Lee et al. 2016; Baumgartner et al. 2008; Neumann 2008; Kirsch et al. 2005). This research suggests that doxastic and substance addiction may have common underlying neurophysiological factors. We may also find addiction-predicting differences in psychological biases regarding trust and social psychological factors that are invoked to explain how people respond differently to, say, information about climate change.

Finally, there are doxastic conditions that we do not want to count as addictions but seem to satisfy the psychological criterion – in particular, deeply committed religious faith. In my account, the vast majority of religious faithful are not doxastic addicts, because the behavior associated with their faith is not socially ruinous. To the contrary, it is often socially approved. In

fact, we are probably more tolerant of abnormal “religious” behavior than of drug-taking behavior – a strict religious fundamentalist who engages in corporal punishment of wife and children may be tolerated far more than a non-believer who engages in the same brutality. It is when the consequences of religious faith pass a point of social tolerance – for example, when it leads to sectarian violence or the murder of unbelievers – that we label it “radical” or “fanatical”. These attitudes towards doxastic disorders are like those we have towards heavy drug use: in both cases some of the behaviors cross the fuzzy line into addiction, typically when social harm becomes evident. In short, the difference between someone who is diagnosed as a doxastic addict and someone who is considered a firmly committed religious believer does not lie in the person, but in the social context of approval or disapproval of the actual behavior resulting from what they believe. This difference does not depend on answering the question of whether either would give up a relevant belief in a counterfactual situation. They may both be equally fixed in their belief for all the evidence we have of the matter.

Current social epistemological interest in understanding echo chambers is in fact significantly motivated by some of the sorts of ruinous interpersonal and social consequences long associated with drug addiction. Family and social ties may be severed by doxastic addicts or by family members and former friends and colleagues. While these consequences rarely involve violence beyond the damage to close interpersonal ties, it is highly likely that at least some of those involved in the Jan. 6, 2021 storming of the U.S. Capitol were doxastic addicts (e.g. some believers in QAnon). So while doxastic addiction may often have non-violent and socially diffuse poor consequences, these effects can consolidate and lead to political violence and social destabilization at a larger scale. Doxastic addiction may turn less often into a social problem than drug addiction, but it has the potential for much greater social harm when it does.

3. Treating Doxastic Addiction in a Free Speech Environment

Despite the above evidence of doxastic addiction as a genuine addiction, a skeptic might insist that what I call doxastic addiction only overlaps in terms of some of the same or analogous features with real addictions. This objection fails unless the skeptic can provide plausible criteria for “real” addiction that rules out the doxastic form – not an easy task. As I see it, the danger of such skepticism is that it can inhibit access to treatment, rehabilitation, and support services for doxastic addicts. For example, it is possible that oxytocin therapy would help doxastic addicts by reducing the rewarding effect of belief affirmation by a trusted source of testimony or loosening the grip of the trust accorded to this source. Failing to help doxastic addicts due to ungrounded skepticism would be an ethics violation rooted in epistemology.

Alternatively, Nguyen suggests that people who end up in echo chambers can escape through what he calls a “Cartesian reboot” – essentially, starting from scratch in one’s relationships of trust. But from the doxastic addiction perspective, this is a recommendation for echo chamber denizens to go cold turkey vis-à-vis the trusted testifier. As with substance addicts, some doxastic addicts will be able to detach their trust by willpower alone. But reliance on individual willpower alone often ends in relapse in the cases where the loss of control is most severe. In the same vein, Cassam (op.cit.) adopts an individualistic “self-improvement” approach to ameliorating epistemic vice. But as noted above vice epistemologists should take a page from the addiction literature instead. Rather than moralizing admonishments and philosophical arguments, providing clear and strong incentives to stop being (e.g.) arrogant or closed-minded are much more likely to work.

Instead, the doxastic addiction concept shows that the “social” in social epistemology is not limited to reliance on others for testimonial knowledge. It includes the social networks that

support or undermine our capacities for cognitive control and cognitive autonomy. Effective interventions in doxastic addictions will pay attention to the social contexts of news consumption along with individual differences in vulnerability to trust manipulation. Drug addiction research shows that social factors, including social pressure, ease of access to the substance, and contexts of like-minded users combine with psychological and neural vulnerabilities. These factors are also combined in doxastic addiction. For example, the ability of a trusted testifier to maintain the trust relationship with a doxastic addict is impaired when his testimony is no longer easily available. There is a reason why cult leaders seek to isolate their followers from outside influences. Oxytocin therapy may help loosen the grip of a disorder of trust, but social contexts provide the motivation for the loosening and the enabling conditions for its efficacy.

However, a key difference between drug and doxastic addiction is the fact that in a liberal society the treatment of doxastic addiction bumps up against liberal principles of free speech. In the light of this political and social context, a contrast with suggested methods of dealing with cult membership is instructive for developing effective treatment of doxastic addiction.¹⁰ Meserve (1978) argues that the best response to cults is a sunshine law in which the finances of cults are made publicly available. The hope is that this information about where donations go may help lessen the impulse to join the cult. This remedy, like sunshine laws and freedom of speech rules generally, presuppose cognitive autonomy. But doxastic addicts, like drug addicts, have disordered autonomy, not full autonomy. The truth cannot set free someone who is unable to choose who they

¹⁰ Begby and Nguyen both comment that an echo chamber is strikingly like a cult. The doxastic addiction construct illuminates echo chambers and cults alike. Cults typically feature a central charismatic figure (Meserve 1978) – in my terms, these would be the trusted testifiers to which a doxastic addict’s trust is severely unreasonably affixed. To the extent that cult leaders manipulate the beliefs of inductees and members, echo chamber denizens may be considered cult members, though the sorts of 1st-order beliefs characteristic of each counsel differentiating them.

listen to. This loss of cognitive control should be regarded as a fundamental harm to individuals in a liberal society: it negates the very point of a liberal free speech regime.

This suggests that countering doxastic addiction begins with distinguishing speech that constitutes doxastic pushing from speech that is constitutionally protected. Doxastic pushers create metaphorical echo chambers by trying to create real doxastic addicts. Some listeners do in fact become doxastic addicts. Lies, fake news, propaganda, and other forms of disinformation are protected speech, but doxastic pushing cross-cuts these categories. It is a type of speech act (not a category of speech) that aims to destroy others' cognitive autonomy by undermining their cognitive control. It is not mere persuasion. It aims to restrict the thought of others by restricting who they trust for testimony. We have legitimate reason in a liberal society to restrict doxastic pushing, whatever the content of the 1st-order beliefs that are pushed. Again, the severity of the loss of control and actual social harm will distinguish those who believe committedly and firmly and those who are unable to stop believing even in the face of evidence that their trusted source is not trustworthy. Much speech aims at persuasion, but doxastic pushing doesn't aim at persuasion. It aims at hijacking a subject's cognitive control, with a potential downstream effect of getting certain beliefs held. It's likely that Alex Jones could care less exactly what conspiracy theory he pushes, as long as it makes him money.

Doxastic pushing can also be distinguished from other ways in which belief is inculcated in individuals. Testimony doesn't manipulate trust even if it depends on trust (though obviously such manipulation is possible because it depends on trust) – Hinchman's account is an account of testimony, not doxastic pushing. Teaching and the holding of other true beliefs channel or constrain belief acquisition in certain directions, but they do so compatibly with the individual's maintaining cognitive control. Teaching does not aim at restricting others' thoughts but instead to

gear others towards truth and, often, encourage further thought. True beliefs act as rational constraints on the acquisition of further beliefs, not as constraints on the basic capacity for cognitive control. In contrast, doxastic addiction is not compatible with cognitive control.

The harm of doxastic pushing lies in the fact that when it succeeds it preempts the autonomous deliberation that grounds liberal democracy. Nothing distinguishes liberal democracy from totalitarianism quite as much as their relations to thought control. Speech that aims to restrict the thought of others through manipulating trust, as in doxastic addiction, aims at a form of thought control in which the believer has lost the ability to stop believing. There may be other forms of thought control, but this one undermines the basic cognitive mechanisms by which we learn by testimony. The aim of doxastic pushing is usually not successful: the vast majority of people who have their trust manipulated do not get addicted. (The vast majority of us drink, but relatively few of us end up as alcoholics.) Debate over free speech in the current media environment is a matter of weighing news providers' right to free speech against the right to cognitive autonomy of all news consumers. But a right to free speech is not a right to engage in doxastic pushing. When someone becomes doxastically addicted, we are dealing with an epistemic health and safety issue on a par with substance addiction.

An obvious rejoinder is that it is not clear when speech-based trust manipulation has crossed over into doxastic pushing. We recognize obvious cases when speech is very likely to cause harm (e.g., yelling "Fire!" in a crowded theater). In some cases determining when harm is actual is straightforward. But it is not always clear when a speaker is using speech to create in another person a disorder of trust, and when a hearer's cognitive autonomy has been impaired to the point of doxastic addiction. Because the act and the harm are both inferred from behavior, it will always be harder to identify to the extent where restricting speech is clearly justified. This

problem does not just affect doxastic pushing; it makes the category of impermissible harmful speech as a whole difficult to define (e.g. Cudd 2019).

But if speech can do to vulnerable people what drugs can do, we are justified in finding ways to restrict it for the reasons and in analogous ways to how we restrict access to drugs. The risk of addiction in some cannot justify a ban on speech-based trust manipulation. We also cannot intervene for an individual's own good. But we have a multi-tier regulatory regime for drugs. Some substances are controlled, and there are different levels of control. Other substances are not controlled, but must follow truth in advertising laws. There are also civil remedies for those whose lives have been harmed or lost as a result of drug addiction. This nuance in drug regulation and legal avenues in response to drug addiction suggests a similar approach to the regulation of doxastic pushing. It can guide a regulatory response somewhere between total ban and total freedom and create a new type of civil offense linked to doxastic addiction.

Timmer (2019) notes that Federal Communications Commission (FCC) actions might be taken to limit fake news that does not violate free speech rights, under rules that allow it to admonish, sanction, fine, or suspend or revoke the licenses of broadcasters that deliberately distort the news or broadcast hoaxes. Even with these possible restrictions, contaminating the marketplace of ideas with fake news, deep fakes, lies, and social media algorithms is generally tolerated in a free society. But doxastic pushing is not distorting news, broadcasting hoaxes, or peddling conspiracy theories. Trust manipulation cannot even remotely be construed as an unfortunate side effect of the job of an independent press. The important point, however, is that the justification for regulation is clear if we recognize doxastic pushing as a harm to the cognitive autonomy of individuals that is presupposed by liberal free speech.

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