THE RELATIONSHIP BETWEEN DISINGENUOUS INFORMATION AND EPISTEMIC VICES

Name: Yuri Tax

Student Number: 3426831

Assignment: MA Thesis – Applied Ethics

Supervisor: Jeroen Rijnders

Second reader: Rob van Gerwen

Date: 17-06-2022

Word count: 15976

Table of Contents

Abstract

There is an ongoing debate, both in the public as well as academia, on the effects of and possible solutions to misinformation and disinformation (henceforth jointly referred to as disingenuous information). Especially within the context of online social media platforms, a responsibility gap is apparent, leaving the question as to who is responsible for addressing the problem of disingenuous information. I argue that disingenuous information leads to an increase in epistemic vices, which I define as character traits that increase the likelihood of holding unjustified beliefs, and thus by extension also an increase in unjustified beliefs held. I do so using knowledge from the field of social epistemology in order to develop an understanding of when a belief is justified. Additionally, I apply technological mediation theory to inspect the inconspicuous aspects of disingenuous information and how it leads to an increase in political cynicism in individuals indiscriminately of whether the disingenuous information is believed. The underappreciated angle of epistemic vices is relevant for two reasons. Firstly, it provides the foundation for the argument I make against the two most prominently suggested solutions to the effects of disingenuous information: information labeling and information literacy. I argue that these proposed solutions place responsibility with the individual, and whilst improving their epistemic abilities, they do not (sufficiently) promote the epistemic virtues of the individual. I argue that both ability and virtue are required for an individual to become more resilient to the effects of disingenuous information. The second reason that the epistemic vices provide valuable information is because I use them to describe the harms disingenuous information causes to democracy. Specifically, I investigate harms to the democratic norms of free discourse, dissent, feedback, and accountability. This investigation allows me to address the research gap of governmental censorship as a possible solution to disingenuous information. I assume that the philosophical debate steers away from investigating governmental censorship of disingenuous information because it poses a potential risk to democracy. I consider the democratic norms to function as a proxy for the potential harm caused by governmental censorship making it possible to compare the harms caused by disingenuous information and those predicted through governmental interference through censorship. I show that disingenuous information harms these same democratic norms, and that therefore the two harms are of similar nature. For this reason, I argue that more weight ought to be put on the likelihoods of the harms occurring, could be considered as a preliminary argument in favor of governmental censorship, but mostly should be seen as an incentive to further investigate this potential solution, which has so far been overlooked.

Introduction

Misinformation and *disinformation* (henceforth jointly referred to as *disingenuous information*) have started to play increasingly prominent roles in (international) political events. Recent examples include: The Mueller investigation, which proved Russian interference in the 2017 US election, the insurrection of the 2020 US election, the various conspiracy theories around the COVID-19 pandemic, and the current information-warfare that fought by Russia to legitimize the invasion of Ukraine. Although disingenuous information is in and of itself nothing new, the quality has increased in its likeness to genuine information, and the quantity has increased dramatically through the decreased barrier of sharing information (online), and with that its global political impact is significant[1].

One of the main sources of disingenuous information are the social media platforms (SMPs)[2], which are of a different nature than traditional news outlets such as newspapers and TV-stations, most notably in the fact that anyone can share information. There is an ongoing debate who ought to be responsible for reducing the effects of disingenuous information The most common view is that the SMPs themselves should be attributed more responsibility[3]. Within this view, one of the most discussed suggestions to reduce the effects disingenuous information is *information labeling*[4], where disingenuous information is labelled as such, thus providing the reader assistance on how to form beliefs based on the information. The main alternative to SMP responsibility is governmental responsibility (which is frequently argued for by the SMPs)[5]. Note that when I consider refer to 'governments' I have in mind specifically the Dutch government, and by extension governments that are similar to the Dutch government in that they are well-functioning liberal democracies. Even when the responsibility is attributed to SMPs governments remain relevant actors in the development of strategies and laws[6], and therefore a combination of the two actors is a common consideration. In terms of governmental responsibility one of the most discussed suggestions is that governments should improve the

---

[1] Jones-Jang, Kim, and Kenski, "Perceptions of Mis- or Disinformation Exposure Predict Political Cynicism: Evidence from a Two-Wave Survey during the 2018 US Midterm Elections.": p.3107.
[2] Jones-Jang, Kim, and Kenski.: p.3105.
[3] Forestal and Singer, "Social Media Ethics and the Politics of Information.": p.33.
[4] Wihbey, Kopec, and Sandler, "Informational Quality Labeling on Social Media: In Defense of a Social Epistemology Strategy.": p.28.
[5] De Blasio and Selva, "Who Is Responsible for Disinformation? European Approaches to Social Platforms' Accountability in the Post-Truth Era.": p.886.
[6] De Blasio and Selva.: p.841.

information literacy or *media literacy* of its citizens[7]. With both views, it is visible that the philosophical discussion steers away from governmental censorship as a viable solution.

I investigate the different mechanisms through which exposure to disinformation reduces epistemic virtues and, in fact, even leads to epistemic vices. Within the debate on disingenuous information this is important for two reasons. Firstly, I will show that the positive correlation between epistemic vices and the exposure to disingenuous information is problematic for the efficacy of both information labelling and information literacy solutions. I will show that even when these solutions incorporate the focus on epistemic virtues, this still leads to opposing forces influencing the epistemic virtues of an individual. Governmental censorship, on the other hand, circumvents this problem. I see this as a reason why governmental censorship of disingenuous information should be reviewed as a potential solution, which has been neglected in the philosophical debate. I assume that it has been neglected because of the predicted risk of harms to democracy through governmental censorship. In the last part of this essay, I will show that the current harms caused by disingenuous information and epistemic vices are of the same nature as those avoided through the precautionary approach. This leads me to suggest that a larger focus should be on the likelihoods of the different risks, in which case resolving the effects of disingenuous information has priority over preventing the potential harm of governmental censorship

The structure of this essay is as follows. In the first chapter I elaborate on different information-types. I then investigate the dichotomy in the solutions proposed to reduce the effects of disingenuous information and acknowledge a preliminary argument against both types of solutions. In the second chapter I investigate various mechanisms through which exposure to disingenuous information increases epistemic vices, and I argue this leads to a vicious cycle of increase in both unjustified beliefs and epistemic vices. I then return to the two main types of solutions and argue that they ultimately attribute the responsibility of combatting disingenuous information to the individual. This, in turn, means that an increase in epistemic vices undermines the solutions of information labeling and information literacy. In the final chapter, I show that disingenuous information poses similar harms to democratic norms as are predicted to occur through governmental censorship. Finally, I argue that when weighing of the risks in both scenarios we ought to focus more on the likelihood of harm taking place, considering the harms are of similar nature.

---

[7] Haigh, Haigh, and Matychak, "Information Literacy vs. Fake News: The Case of Ukraine": p.155; Johnston and Webber, "Information Literacy in Higher Education: A Review and Case Study.": p.335.

Chapter 1

In this chapter I elaborate on the different information types that are relevant for the discussion. Then I explain what the solutions information labeling and information literacy entail and discuss a preliminary argument why they are insufficient.

Classification of information-types

To answer the research question, I first explore the notions of misinformation and disinformation, but also more broadly the concepts of malinformation and propaganda. I base most of my definitions on those presented by Gradoń et al[8]. I will elaborate on the notions of disinformation and malinformation as I consider the definitions given to be insufficient.

Misinformation

 "Misinformation is information that is false, but not distributed with intent to cause harm."[9].

Disinformation

"Disinformation is false information that is deliberately created or disseminated with the express purpose to cause harm. Producers of disinformation typically have political, financial, psychological or social motivations."[10]. I will make two additions to this definition. Firstly, a minor correction to the purpose of disinformation. While harm can be and sometimes is the reason to employ a disinformation campaign, I find this definition lacks nuance in its normativity. I do not entertain a subjectivist or even a strong relativist understanding of morality, still I argue that in the case of international affairs it is difficult to claim that there is always 'one side' that is fundamentally in the wrong. Stating that a group has certain goals and is willing to cause harm to achieve them already adds nuance to the conversation. Having added this nuance, it is unfortunately often the case that harm (specifically harm to democracy) can be a means to the actual goal. Hence, while the authors are too simplistic in stating that harm is the intent of disinformation, it certainly can be an outcome that is used to further some political goal. Lastly, disinformation can be shared by a variety of actors (states, institutions

---

[8] Gradoń et al., "Countering Misinformation: A Multidisciplinary Approach.": p.2.
[9] Gradoń et al.: p.2.
[10] Gradoń et al.: p.2.

and individuals), and each actor may have a different reason to spread disinformation. The goals of disinformation lie on a spectrum, with on the one hand a specific political goal, and on the other arbitrary disruptive behavior (with the sole intent of harm). Both are harmful, but naturally disinformation with political motivation is *prima facie* most worrisome from the perspective of a democratic state.

Propaganda

"Propaganda is true or false information spread to persuade an audience, but often has a political connotation and is connected to information produced by governments."[11]. Considering this definition, disinformation and propaganda overlap in certain instances. It can be valuable to understand that disinformation can be used as a modernized and efficient tool to spread propaganda, as long as it is understood that this is not necessarily the case.

Malinformation

"Malinformation is genuine information that is shared to cause harm. This includes private or revealing information that is spread to harm a person or reputation."[12]. Genuine in this context should be interpreted as true or factually correct. To this definition I add the notion of 'framing': implying wrong or biased conclusions based on genuine information. A common but also a difficult example of this is concluding a causal relationship from a correlation. The reason this example is difficult, is because it raises the question, what if the testifier has simply misinterpreted the nature of the relation (which is unfortunately very common). This example lands somewhere between mis- and malinformation (there is no ill-intent, yet the information is correct). In general, we should reconsider attempting to classify information in such discrete manner, but for the sake of pragmatism I will consider the example a part of malinformation rather the misinformation. The reason being the fact that intent is likely to be a notoriously difficult metric to use in practice, hence putting more weighed on intent rather than factuality is likely to be inconvenient when put to practice.

---

[11] Gradoń et al.: p.2.
[12] Gradoń et al.: p.2.

A preliminary argument against information labeling and information literacy

The proposed remedies for the effects of disingenuous information can be categorized into two categories, the *structural approaches* and the *educational approaches*[13]. The structural approach in general is the notion that SMPs ought to make changes to their platforms to improve the information ecosystem. The most prominent variation of the structural approach is information labeling. The reason information labeling is considered a good solution is the fact that it finds the right balance between inaction and draconic measure[14]. Information labeling is the idea that SMPs ought to label their content on the basis of the quality of the information. A recent example of this is when Facebook flagged posts containing false information about COVID-19[15], this practice seems to become more common, yet it certainly not the standard yet. The idea behind it is that it is an *epistemic intervention*, it provides information about the information[16]. The educational approaches steer towards the governmental promotion of information (or media) literacy of its citizens. This entails improving the ability of an individuals in terms of 'information seeking, sharing, and verifying'[17]. Hence, also this second approach can be considered an epistemic intervention. As with most diverging philosophical ideas these approaches have an ongoing debate against each other. Yet I argue that they have more in common than the dichotomy suggests. Namely, both information labeling and the promotion of information literacy ultimately place the responsibility of reducing the harm of disingenuous information with the individual. In the literature on information literacy this is to some extent understood, i.e., when Khan and Idris state that in their information literacy framework "individuals lie at the center of efforts in dealing with the spread of misinformation."[18], yet more often it still is considered as attributing responsibility to the government. In example, Haigh, Haigh and Matychak focus on the academia and non-profit organizations that promote the media literacy courses and do not mention the relevance of the individual, thereby misattributing where the actual beneficial actions take place in effort to resist the effects of disingenuous information[19]. In the case of structural approaches this misclassification is even more prominent. The practice of

---

[13] Croce and Piazza: p.2; Millar, "Misinformation and the Limits of Individual Responsibility.": p.8-9.
[14] Wihbey, Kopec, and Sandler, "Informational Quality Labeling on Social Media: In Defense of a Social Epistemology Strategy.": p.1.
[15] Wihbey, Kopec, and Sandler.: p.8.
[16] Wihbey, Kopec, and Sandler.: p.17.
[17] Khan and Idris, "Recognise Misinformation and Verify before Sharing: A Reasoned Action and Information Literacy Perspective.": p.1194.
[18] Khan and Idris.: p.1195.
[19] Haigh, Haigh, and Matychak, "Information Literacy vs. Fake News: The Case of Ukraine.": p.7.

information labeling is referred to as 'social media governance'[20], suggesting that the SMPs are governing the effects of disingenuous information. While it is true that this approach requires effort from the SMPs, ultimately the responsibility is still placed with the individual who has to decide what to do with the information and the information about the information. Both approaches in their most prominent variations place the responsibility of combatting disingenuous information with the individual.

Millar, a vocal supporter of the structural approaches, investigates the extent to which individual bear responsibility to combat the negative influence of disingenuous information. His answer uses the *ought implies can* necessity. He concludes that individuals lack 'methods that can reasonably be expected to be used' to combat disingenuous information and the effects thereof, and therefore concludes that individuals have very limited responsibility to do so[21]. Most notably, this statement is with regards to the inability of correcting beliefs. This ability is fundamental to information literacy and Millar argues with the use of empirical research[22], that even when an individual is willing to change their beliefs (and this is not a given) the *doxastic attitude* (epistemic attitude towards a proposition) will not return to the neutral level, present in individuals who were not influenced by disingenuous information[23]. Even if people correct their belief, some aspects of the prior false belief persist. It is apparent that Millar recognizes that the educational approaches place the responsibility at the individual level, and disagrees with this approach, yet does not realize that at least some aspects of the structural approaches do the same. His article concludes that:

> "In particular, we ought to focus on whether we can identify (morally and politically acceptable) modifications to social media platforms that would significantly limit the distribution of misinformation, or that would minimize the impact misinformation has on ordinary users."[24].

This does not suffice as an alternative, rather it is a hint in a general direction he considers more promising, namely the structural approach. The first aspect seems to suggest potentially some form of censorship, although the preconditions of 'moral and political acceptability', may be used to immediately reject this solution. The second part of his conclusion seems to be more

---

[20] Wihbey, Kopec, and Sandler.: p.1.
[21] Millar, "Misinformation and the Limits of Individual Responsibility.": p.8.
[22] Walter et al., "Fact-Checking: A Meta-Analysis of What Works and for Whom.": p.351.
[23] Millar.: p.12.
[24] Millar.: p.9.

suggestive of some form of information labeling. For the only manner in which one can minimize the impact of disingenuous information (on ordinary users) without educating the ordinary users and without censoring it, is to provide information about the information to help the users. Which is the same scenario from which I started the argumentation on information labeling previously. While his arguments against individual responsibility may be (at least in part) self-defeating, they are still, perhaps even more so, relevant arguments to consider.

The second argument Millar provides is in relation to the correlation Meyer, Alfano and de Bruin make between believing in COVID-19 conspiracies and holding certain epistemic vices[25]. The argument he makes is that while this research finds a correlation, this correlation cannot be seen as indicative of a wider trend, for the disingenuous information used in the research was 'particularly implausible', and therefore not representative of disingenuous information that exists on SMPs[26]. To finish the argument, which does not occur in the paper, the reasoning follows that, since the people in the study believed particularly implausible information, it makes sense that they possess epistemic vices, yet this does not imply that individuals believing plausible disingenuous information require those same vices. This seems like a decent critique at first, but while I ultimately agree with Millar's perspective (that the individual should not be handed this responsibility solely) I disagree with this argumentation for two reasons. As I argue in this paper, there are mechanisms through which disingenuous information leads to epistemic vices, also in individuals who do not hold highly implausible beliefs. Furthermore, the fact that one may be able to believe plausible disingenuous information without the possession of epistemic vices, does not mean that they can still increase the probability of it occurring. At most Millar has shown that the empirical evidence that currently exists is not applicable in all types of believe in disingenuous information. This is different from proving that the empirical information does not prove this, it falls outside the scope of where the conclusions are applicable. Hence, information literacy may still be relevant in the case more plausible disingenuous information. Unfortunately, I will provide an alternative argument why also information labeling is likely to be ineffective.

---

[25] Meyer, Alfano, and De Bruin, "Epistemic Vice Predicts Acceptance of Covid-19 Misinformation.": p.3.
[26] Millar.: p.16.

Millar provides initial arguments why the responsibility of reducing the effects of disingenuous information should not lay with individuals, incidentally, arguing to some extent against his own proposed solution. In general, counteracting the effects of disingenuous information is a significant burden to place on individuals. I provide an argument fundamental to the nature of the approaches explaining why may be inefficient and insufficient. As mentioned, both approaches are epistemic interventions, they exist with the intention to improve the epistemic position or epistemic abilities of the individual. Information labeling provides additional information, which can be used by individuals to evaluate whether the information can be trusted. Or more accurately in social epistemological terms which will become clear momentarily, whether *belief* formed based on the online *testimony* would be *justified* or not. Similarly, information literacy aims to improve the epistemic knowledge of the individuals. In social epistemological terms, information literacy aims to improve the knowledge on when and why a belief is or is not justified, so that individuals themselves can reason whether a belief is justified or not. More than placing responsibility with the individual, these approaches improve, but ultimately also rely on their epistemic capabilities and virtues. In the following chapter I will investigate different mechanisms through which disingenuous information reduces epistemic virtues, and even creates epistemic vices. With the increase in epistemic vices, the reliance on the epistemic capabilities of individuals is problematic. Even if an individual has the epistemic capabilities, the epistemic vices may cause the person to not act according to these abilities. After the analyzes of the increase in epistemic vices, I will return to this argument in depth.

Chapter 2

Throughout this chapter I use the fields of social epistemology and technological mediation to argue that disingenuous information causes an increase in epistemic vices. I use the field of social epistemology to define justified and unjustified beliefs. In relation to this understanding, I define epistemic virtues and vices to be traits that respectively increase and decrease the quality of justification an individual has with regards to the beliefs they hold. The field of social epistemology is useful because it describes how knowledge and justified beliefs spread between people (i.e., through testimony) better than 'classical' epistemology in which the knowledge acquiring process is mainly described as an individual process. Technological mediation theory provides insight into the hermeneutic effects of disinformation and how this causes a large group of people to distrust their epistemic peers.

Social epistemology

I position the field of social epistemology in relation to the 'Tripartite Analyses of Knowledge'.

Tripartite Analysis of Knowledge[27]

S knows that *p* IFF

    i.   *p* is true;

    ii.   *S* believes that *p*;

    iii.   *S* is justified in believing that *p*.

While premises one and two are relevant to social epistemology, the focus lies with the third premise of this tripartite. Social epistemology describes different ways in which people obtain knowledge and beliefs with the help, or under influence, of others. Furthermore, it describes various theories on when people are *justified* in forming a belief. I will focus on two different mechanisms that are described within the field of social epistemology. Namely, *testimony* and *peer disagreement*. I will show the relevance of testimony and peer disagreement with regards to SMPs and in turn how the influence of SMPs on belief-forming can be dangerous to

---

[27] Ichikawa, Jonathan Jenkins and Matthias Steup, "The Analysis of Knowledge", *The Stanford Encyclopedia of Philosophy* (Summer 2018 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/sum2018/entries/knowledge-analysis/>.: ch.1.

democracy. However, before focusing on the specific belief-forming instances of testimony and peer disagreement it is necessary to understand when a belief is justified or not.

Justified belief

When it comes to the justification of a belief, there exists the dichotomy between the internalist and the externalist view[28]. The fundamental difference between the two is the question whether justifiability is an internal or external attribute. Internalism in its most basic elements states that the justification arises from some state of affairs internal to the individual whose belief is being scrutinized[29]. Externalism, on the other hand, holds the notion that the justifiability of a belief is based on the validity of the belief in and of itself[30]. I will not delve into the debate between these two opposing views. Instead, I will simply uphold the internalist position because it seems more accurate to me in ascribing a belief to be an internal aspect to an individual and that the externalist definition of justified belief approaches the definition of knowledge and thereby conflates the two. Moreover, the externalist account is generally considered to be more controversial than the internalist approach[31], and since I will not explore this debate in depth, I will choose to align with the least controversial view.

According to the internalist view, "[e]pistemic justification depends entirely on elements that are internal to the believer's conscious states of mind, where these states are at least in principle accessible to conscious reflection."[32]. This quote is intuitive yet requires the exploration of two notions. Firstly, the question arises what the 'internal elements' are? "They are those items, whether experiences, states of affairs, or other beliefs, on which the person's current justification is based."[33]. Usually, it is a combination of various such elements. The second notion that is relevant to discuss is whether the 'conscious states of mind' are 'in principle accessible to conscious reflection' or are actually consciously reflected on. The second variation is more demanding than the first. It requires that people are aware of why they are justified in believing what they belief. This more demanding premise can be considered an epistemic virtue, for if people adhere to this standard, it follows that they are more critical

---

[28] Fumerton, "The Internalism/Externalism Controversy.": p.443.

[29] Fumerton.: p.444.

[30] Fumerton.: p.456.

[31] Fumerton.: p.442.; Feldman, "Bonjour and Sosa on Internalism, Externalism, and Basic Beliefs.": p.713.

[32] Feldman, "Bonjour and Sosa on Internalism, Externalism, and Basic Beliefs.": p.713.

[33] Pappas, "Internalist vs. Externalist Conceptions of Epistemic Justification", *The Stanford Encyclopedia of Philosophy* (Fall 2017 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/fall2017/entries/justep-intext/>.: ch.3.

towards novel beliefs that they come across. I will uphold the demanding notion in my understanding of justifiability.

Testimony

Justified belief based on testimony has similar preconditions as just described, but there are some adjustments that can be made since the source of the information is known, which allows for a more nuanced account of justifiability. Most notable are the global and local reductionist point of view. Both global and local reductionism still require the internalist justification but differ in approach towards the justification of testimony. The global reductionist understanding requires the receiver of the information to estimate the reliability of the testimony itself[34]. Local reductionist, on the other hand, states that a belief based on testimony is justified if the receiver can validate the source it is coming from; an individual is justified in forming a belief if they are justified in believing the source of the belief[35]. As mentioned, both accounts still require that the believe in either the testimony or the testifier are upheld through the internalist elements.

I agree with the global reductionist that this view is preferable since it concerns the actual content of the belief rather than the testifier who functions as a proxy for the justification of believing the information. However, this also leads to the major criticism of global reductionism, which is that it is impossible to expect this to be possible in all (or even most) instances of testimony, since it requires a considerable amount of knowledge about the subject of the belief[36]. I accept both conditions in hierarchical order; the justified belief through global reductionism is preferred and is more justified than belief formed through local reductionism, but since this is not always possible, justifiability through local reductionism is accepted also.

Knowledge or belief derived from SMPs is likely to be based on testimony. A post containing some form of information written by either layperson or expert is read and potentially accepted by the reader. This acceptance should in the vast majority of cases lead to a belief (whether justified or not is yet to be determined) rather than knowledge.

---

[34] Goldman, Alvin and Cailin O'Connor, "Social Epistemology", *The Stanford Encyclopedia of Philosophy* (Winter 2021 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/win2021/entries/epistemology-social/>.: ch.3.1.

[35] Goldman, Alvin and Cailin O'Connor.: ch.3.1.

[36] Fricker, "Against Gullibility.": p.134.

"[W]hereas my testimony cannot give you testimonially grounded knowledge that p without my knowing that p, it can give you testimonially grounded justification for believing p without my having that justification—or any kind of justification—for believing p."[37]

This quote describes that (justified) belief can spread through testimony, whereas this is not possible in the case of knowledge given that the testifier themselves lack knowledge of the information they are sharing. While it seems intuitively true what Audi argues, it is not a given. I propose the following scenario:

Given that P is true. Person A does not believe P, yet pretends to do so to person B. *Assume* that person B is justified in believing person A and person B ends up believing P. Then the tripartite of knowledge would state that person B knows P, while person A does not.

This is very counterintuitive, yet not necessarily impossible. We would assume that the information (attempted disinformation, but incidentally genuine information) spread by person A could not lead to knowledge in person B. Naturally there is still the assumption to consider before this is in fact the case. Local reductionism would require that person B is justified in trusting person A and considering the fact that person A is lying this is *ex post* not the case but given the internalist perspective this does not directly imply that Person B was *ex ante* unjustified. Global reductionism requires being justified in believing P in and of itself (requiring a significant amount of understanding of P). This could be satisfied, but only if the reasons for P given by person A were satisfactory arguments (even though person A is not required to think so), such that person B would have an understanding of P to the extent of being able to independently assess P. This would be an unlikely coincidence or perhaps Person A is in a state of *cognitive dissonance*, where they 'know' P, but don't belief it (thus not adhering to *knowing* as stated in the tripartite of knowledge), giving them the ability to reason for P appropriately whilst not believing it. These cases will certainly be extremely rare, but it shows the difficulty in discussing knowledge and the spreading thereof. In the example Audi gives, he effectively describes the spread of misinformation (although this term is not used). It should be noted that (in line with Audi's reasoning) the belief of disingenuous information is not necessarily equal to an unjustified belief, especially local reductionism leaves room for

---

[37] Audi, "The Place of Testimony in the Fabric of Knowledge and Justification.": p.7.

incorrect justified beliefs. Nor is an incorrect belief necessarily unjustified[38]. However, in Audi's scenario P leading to a justified belief is not an insignificant matter. For considering the previous arguments I made, why it is unlikely for Person B to know P based on Person A's testimony, is also to some extent relevant to Person B being justified in believing P. Regardless of whether P is true (Audi's scenario), Person A would still have to induce the internal elements of Person B such that they are aware why this belief is justified. This means that P must be in line with Person B's internal state of affairs (such as prior beliefs and experiences) and Persons B must be able to reflect on why it is justified to believe P. This will be easier if P is correct (as well as Person A knowing P). Thus, even in the case of creating a belief (rather than knowledge) through testimony, the chances of it being wrong but justified are not as trivial as may be assumed based on Audi's statement. This reasoning shows that it is more likely for a justified belief to also be a correct belief.

Additionally, I present an argument that in the context of testimony on SMPs, there is an incentive to hold incorrect information, which are likely will also likely be an unjustified belief as will become apparent momentarily.

Incentives of holding unjustified beliefs

I have already argued that a justified belief is likely to be a correct belief and that an incorrect belief is likely to be unjustified, but this does not imply that an unjustified belief is also likely to be incorrect (this would be *affirming the consequent*). Further exploring the relationship between incorrect and unjustified beliefs starts with the notion that the emancipation of authorship, caused by the rise of the internet[39], has led to an increase in beliefs shared. Simultaneously, SMPs have created an environment where the number of beliefs that can be consumed is higher than ever before. Firstly, it is important to acknowledge that the sharing of a true story based on correct information requires much more research and potentially expertise, then the sharing of a story based on incorrect information. Furthermore, it is less likely to be novel, and novelty as it turns out is one of the features that is associated with the unparalleled traction of disingenuous information[40] (I will elaborate more on this and the other features momentarily). The assumption that ties these features together as a perverse incentive

---

[38] In fact one of the major arguments in favor of internalism builds on the notion of Descartes' demon to provide an intuitive scenario where a belief is incorrect yet entirely justified.

[39] Miroshnichenko, *Human as Media*: ch.9.

[40] Vosoughi, Roy, and Aral, "The Spread of True and False News Online.": p.1.

to create or share false content is the idea that people have some intrinsic motivation for their content to spread and their opinions to be heard. Theories of human psychology are likely to be of use in providing a theoretical basis to validate this assumption. I.e., Adler's theory on individual psychology states that people generally have two sources of motivation: striving for superiority, power, and social belonging[41]. While this might be somewhat oversimplistic, I do think these are relevant motivations. In line with the last clause of this theory on individual psychology, one study found that people use information-sharing to associate or distance themselves from certain groups[42].
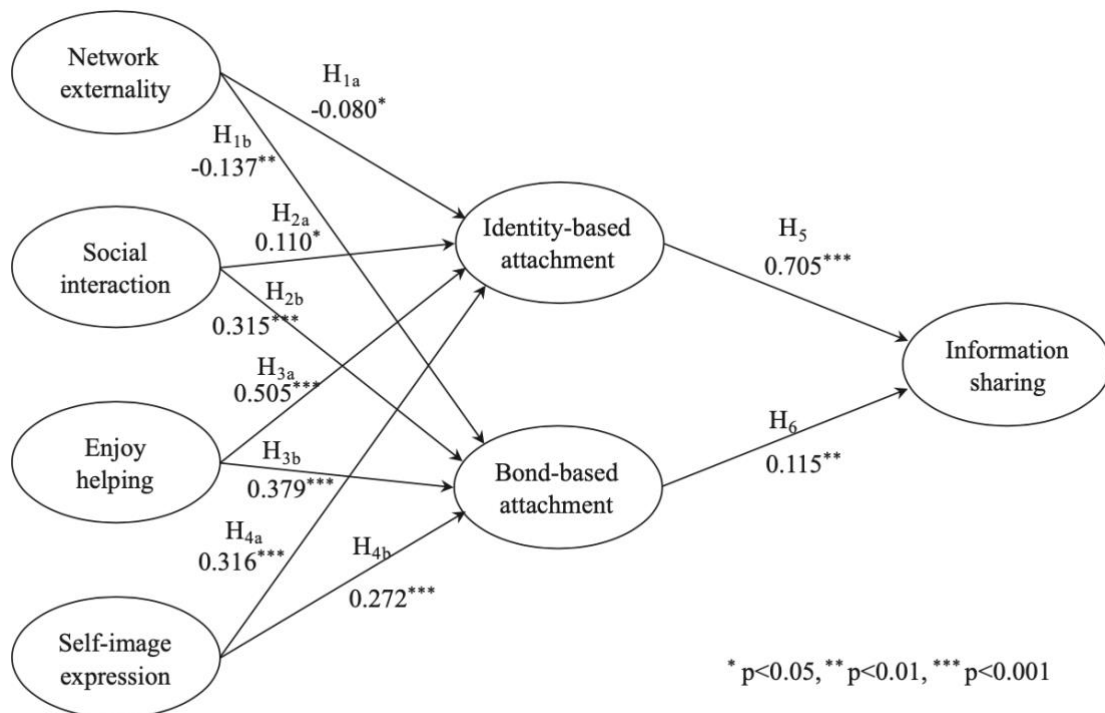

Figure 1. *A model explaining information sharing through attachment theory*.[43]

The study from which Figure 1 is taken explores information sharing in social networking communities. The research identifies the motivation for individuals to share information in an online community. The left-most layer depicts the motivations of information sharing in relation to the types of attachment (middle layer), and the middle layer in turn visualizes significant positive correlations to the actual sharing of information. The dichotomy between identity-based and bond-based attachment in Figure 1, is to be understood as attachment with

---

[41] Adler, *The practice and theory of individual psychology*, as cited by Ferguson, "Adler's Motivational Theory: An Historical Perspective on Belonging and the Fundamental Human Striving.": p.355.
[42] Chung, Nam, and Koo, "Examining Information Sharing in Social Networking Communities: Applying Theories of Social Capital and Attachment.": p.78.
[43] Chung, Nam, and Koo.: p.86.

the group as a whole or with individual relations within the group, respectively. There is a far stronger correlation between identity-based attachment rather than bond-based attachment to describe why people share information within a group. This implies that the motivation to share information is more likely to occur based on the need to attach oneself to a group as a whole, rather than individual relations within that group[44]. It can be understood that since the desire to belong to a group is a relevant factor in information sharing it might be tempting for an individual to share information that is in line with the sentiment of the group, rather than what they can justifiably belief. Thus, forfeiting their justified belief for an unjustified belief. The desire to belong to a group can be an incentive to share incorrect content and become less critical towards the information people share as long as it increases their attachment to a group.

Keeping in mind that novel information and information that induces fear, disgust, and surprise receive more traction, in combination with the notion that people strive for superiority and/ or power shows another incitive why individuals may be inclined to share these types of information at the cost of forfeit their epistemic virtues. The saying 'knowledge is power' would be a desirable attitude in this regard, but it can be understood that simply having a lot of 'followers' (the people the follow one's twitter account) or the amount of 'retweets' (the amount of times people share a post on their own account) are tempting measures for superiority. And the fact that many people read a person's tweets can be understood to give that person a sense of power, which in fact is likely to be true.

I have shown that there is an incentive to hold and share incorrect information on SMPs based on the psychology of human nature as well as attachment theory. This makes it more likely that when the beliefs based on this information is formed, the focus lies not with

---

[44] Looking at the motivation behind the desire to attach oneself to a group, the most prominent correlation is the 'enjoyment of helping others'. Assuming that the spread of disingenuous information is equally present in the research population as it is in general, I argue that this leads to an interesting finding. Namely, it is likely that incorrect information shared is done so with the intent to help others, hence it should be labelled as misinformation rather than disinformation. A correction that needs to be added with this line of reasoning, however, is that this study concerns sharing information within specific networking groups and not on SMPs in general. And considering that both identity-based and bond-based attachment have a positive correlation, the individuals desire to be in that group. Hence, 'the enjoyment to help others' might be a stronger factor in this study than it is on SMPs in non-group settings, thus potentially reducing the validity of the previous conclusion. Nonetheless, this might be a starting point for further research to try to understand the balance between misinformation and disinformation.

discovering the justifiability of the belief, but rather whether the belief improves social standing within a group or with amount of attention their post receives. The individual has (unconsciously) decided that holding the belief is more valuable to them than whether the belief is justified. I suggest that is likely that the demanding final necessity of justifiability, is missing. The individuals have failed to 'consciously reflect on their state of mind'. While the internalist view leaves room for an element of chance between the justification of a belief and the correctness thereof, to be justified does require that the internal elements such as previous experience and held beliefs allows the individual to reason towards believing the testimony (global reductionist) or towards believing the testifier (local reductionist). In the case of online testimony, I have shown that there are incentives to hold incorrect and likely unjustified beliefs, which imply that certain epistemic virtues have been forfeited. I will now show the effects disingenuous information has on the epistemic mechanism of peer disagreement.

Peer disagreement

Peer disagreement raises the question if and if so, how *epistemic peers* in disagreement ought to change their own beliefs in light of information provided by their epistemic peer. This too is relevant to the information sharing on SMPs, for on these platforms it is possible to not only share and consume content, but also to interact with one another. There are various different theories that seek to answer this question. 'Conciliationism' holds the view that some degree of alteration of point of view is always warranted when presented with an opposing view. The theory that more or less on the other side of the spectrum is 'Total Evidence View'. This theory represents the idea that opposing views based on the same evidence do not need to have the same epistemic value, rather it is argued that the argumentation can be the determining factor when weighing contradictory views[45]. I will not take a strong position on the specific approach to peer disagreement. The argument I make holds in either case. I do acknowledge that an altered belief through Total Evidence View is more likely to be *justified* than in the case of Conciliationism, for chances are that the arguments provided will be useful when it comes to reflecting on what the justification of the newly held belief is.

More important than the actual interpretation of peer disagreement is the understanding that we can and ought to share knowledge and go into debate when our understanding of a particular matter differs. The ability of an increase in knowledge through peer disagreement is

---

[45] Kelly, "Peer Disagreement and Higher Order Evidence.": p.185.

inhibited through the spread of disingenuous information. To understand why, it is necessary to classify epistemic debates into two orders. The *first order debate* is the debate on *P*, where *P* can be a truth statement as well as a normative statement. This occurs under certain shared assumptions *C*, which I will call a *justified consensus*. The *second order debate* occurs when *C* does not exist. There are many instances why it is entirely justified to debate about the underlying assumptions of a certain truth-statement. However, disingenuous information by its nature creates an influx in second order debates, which are not necessary since *C* potentially could have existed if the disingenuous information had not influenced at least one of the peers. With more individuals holding unjustified beliefs, the instances of justified consensuses are diminished. Moreover, it is impossible to move onto the first order debate, which is where the epistemic value coincides, if the second order debate is not resolved. Given that one holds an unjustified belief this will not be possible (until that person changes their belief). Consider the example of a debate between two individuals on the sanctions that are justified to impose on Russia considering the invasion of Ukraine. The two individuals can differ in their perspective on which sanctions are fair/ effective and have a (first order) debate on this. However, if one of the individuals holds the unjustified belief that Russia has not in fact invaded Ukraine, then this first order debate cannot be held, for any argument on why a specific sanction is or is not justified, will be discarded by the other through the lack of the justified consensus. Hence, the person holding the justified belief is forced to participate in a second order debate before the first order debate can be held. It is still valuable to hold second order debates for it may yield a justified consensus, but less so than the first order debates. Thus, disingenuous information reduces the positive potential of peer disagreement by increasing unwarranted second order debates, which prohibit the desired first order debate.

It can be understood that epistemic vices that may increase unjustified beliefs would increase this problem. I will now focus on how disingenuous information leads to an increase in epistemic vices.

Epistemic virtues and vices: Incentive to hold unjustified beliefs

As just discussed in the instances of testimony and peer disagreement, the field of social epistemology considers when something is a justified belief. I have argued that there are mechanisms that create incentives towards unjustified beliefs with regards to testimony on SMPs and I have given an argument why unjustified beliefs disrupt the epistemically beneficial

process of peer disagreement. What follows is the exploration on how disingenuous information increases epistemic vices. The field of social epistemology does not explicitly describe the preconditions of justification as set of virtues individuals should possess. Some articles do use this notion, but there is no complete list of vices and virtues within the field of social epistemology. I use the virtues described in the articles and from theories on justified belief, I extrapolate virtues that are relevant for information gathered from SMPs.

The first virtue I address is based on the global and local reductionist perspective. They respectively require that one investigates and scrutinizes the credibility of the testimony or the credibility of the speaker. The virtue that encompasses this is *skepticism*. The way disingenuous information harms this virtue, I have previously addressed: Individuals may become less skeptical towards beliefs that are presented to them by members of the group they want to belong to, or because their goal is not to promote their true belief, but rather maximize the traction their post gets.

Epistemic virtues and vices: Monological Belief Theory and information overload

The prominence of disingenuous information is in part caused by the lack of the epistemic virtues (or the presence of epistemic vices). As mentioned before, there is empirical research that shows that epistemic vices are good predictors of whether people belief in conspiracies[46] (which are of similar nature to disingenuous information; they are incorrect and potentially, though not necessarily, are initiated with malicious intent). This article shows that the epistemic vices: 'indifference and rigidity' are good predictors for the acceptance of conspiracy theories (see Figure 2)[47]. Indifference is to be understood as the 'lack of motivation to find the truth' and rigidity as the 'insensitivity to evidence'[48]. In the tradition of Aristotle, I suppose the virtue to be the center-point of two vices. The opposite side of *indifference* is *obsession* and for *rigidity* it is *naivety*. In the middle lay, respectively, the epistemic virtues: *involvement* and *open-mindedness*. Another article found that "[f]alsehood diffused significantly farther, faster, deeper, and more broadly than the truth"[49]. They note two differences which might explain why humans (and not bots as is sometimes assumed[50]) consume and share false information more intensely than true information. Firstly, false stories are more often novel than true stories

---

[46] Meyer, Alfano, and De Bruin.: p.3.
[47] Meyer, Alfano, and De Bruin.: p.13.
[48] Meyer, Alfano, and De Bruin.: p.6-7.
[49] Vosoughi, Roy, and Aral, "The Spread of True and False News Online.": p.1.
[50] Vosoughi, Roy, and Aral.: p.5.

and secondly, "[w]hereas false stories inspired fear, disgust, and surprise in replies, true stories inspired anticipation, sadness, joy, and trust."[51]. This article leaves it up for debate whether people are unable or indifferent towards differentiating between true and false stories. Thus, it remains unclear whether it is the lack in epistemic abilities or the epistemic vices of an individual that increases the belief in conspiracy theories and the spreading of disingenuous information in this research. As mentioned before, the existence of epistemic vices leads to a reduction in the efficacy of information labeling and information literacy. I argue that exposure to disingenuous information can also lead to an increase in epistemic vices, meaning that inherent to the problem that is sought to be solved, there exist a mechanism that makes to solutions inefficient. Not only is this problem to the solution intrinsic to the problem the solution tries to resolve, this mechanism also leads to a vicious cycle, where epistemic vices lead to a greater believe in disingenuous information, which in turn leads to more epistemic vices.

I will first explain why this vicious cycle is likely to occur when there is already a predisposition to believe disingenuous information. Goertzel developed *the monological belief theory*, which states that believing in one conspiracy will increase the likelihood of believing in other conspiracies, to help explain the first conspiracy[52]. Relating this to the internalist view, this is not necessarily a vice in and of itself, considering that 'prior belief' is one of the internal aspects to which a new belief should adhere. It becomes problematic when an individual becomes overly rigid in maintaining the original belief. Empirical evidence certainly does not reject Goertzel's theory since the believe in a conspiracy theory is the best predictor in believing other conspiracy theories[53] (see Figure 3). Although of course the empirical findings can also be explained solely by the existence of epistemic vices. Nonetheless, the hypothesis is conceivable.

> Consider that belief A is incorrect and belief B is correct and therefore clashes with belief A. It might be tempting to resort to another belief C, which is incorrect but does not clash with belief A.

Keeping in mind the monological belief theory, believing in conspiracy theories or disingenuous information leads to a vicious circle of believing in more disingenuous

[51] Vosoughi, Roy, and Aral.: p.1.
[52] Goertzel, "Belief in Conspiracy Theories.": p.740.
[53] Swami, Chamorro-Premuzic, and Furnham, "Unanswered Questions: A Preliminary Investigation of Personality and Individual Difference Predictors of 9/11 Conspiracist Beliefs.": p.757.

information. The necessity of verifying an incorrect belief can be seen as an incentive to disregard whether novel beliefs are justified. Understanding this phenomenon in terms of epistemic vices would lead to the understanding that the necessity of maintaining the original belief arises from *rigidity* and likely to increase *indifference* towards the justifiability of future beliefs. Hence, in the instance of an initial unjustified and incorrect belief, there is a mechanism that leads to an increase in epistemic vices, to maintain consistency in an initially incorrect belief. Additionally, attachment theory enforces this theory with the notion of group sentiment. If the original belief is not just an individual belief, but also an essential belief of a certain group, this may increase the 'cost' with regards to social belonging of rectifying this belief, thus increasing the chances of rigidity becoming a problem for the reviewing of novel beliefs. Lastly, Millar's argument of the inability to rectify beliefs based on the lasting change of doxastic attitudes is relevant to consider. This psychological accentuates the dangers of the vicious circle as it becomes apparent that it is difficult to bring the circle to an end.
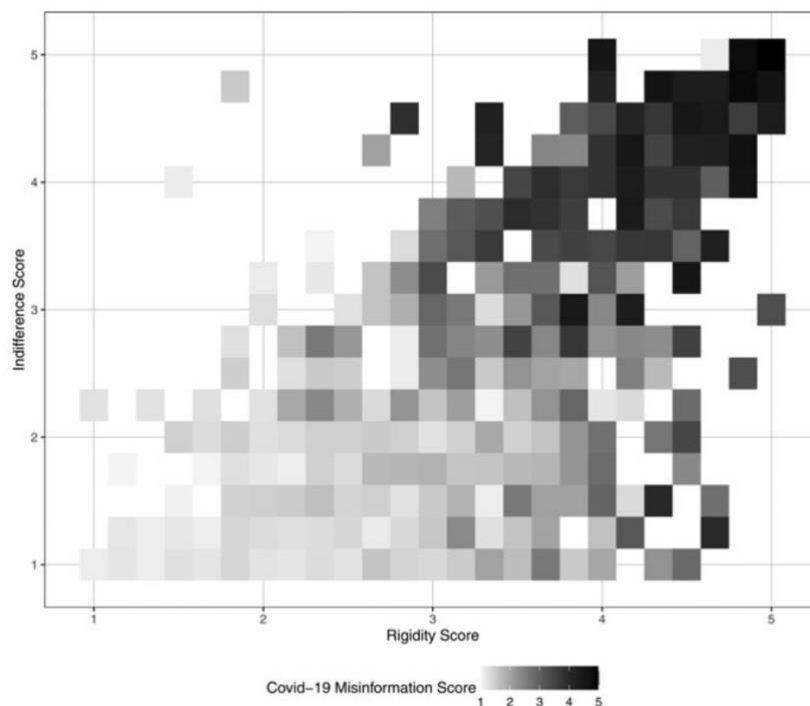

Figure 2, *A heatmap showing the relation between indifference, rigidity and believing Covid-19 misinformation.*[54]

Considering that the previous reasoning required an initial incorrect belief to lead to the vicious circle, this reasoning does not hold in case the individual does not hold such an incorrect initial

---

[54] Meyer, Alfano, and De Bruin.: p.13.

belief. However, there are two mechanisms that may describe why exposure to disingenuous information may influence this group of people also. Firstly, there is the issue of information overload. "[I]nformation overload occurs when information received becomes a hindrance rather than a help when the information is potentially useful"[55]. The natural response to experiencing information overload in the case of Twitter users is to prioritize tweets from a selected subset of sources[56]. While political bubbles (also known as 'filter bubbles' or 'echo chambers') are far less of a phenomenon than is often suggested[57], information overload does lead to this phenomenon. The added nuance here, is that people are more willing to expose themselves to different points of view than is usually assumed, but through information overload they are pushed back in their political corners. Hence it is the information overload (and not simply inherent human bipartisanship) that reduces the epistemic virtue *open-mindedness*. As mentioned before disingenuous information is far easier to create than genuine information, hence the relevance of the information overload argument can be attributed to the presence of disingenuous information. Furthermore, echo chambers reduce the possibility to rectify incorrect or unjustified beliefs, because the chances of coming across the information required to do so in reduced. It also reduces the possibility for peer disagreement to take place, which is another valuable mechanism to rectify incorrect and unjustified beliefs.

The second argument why disingenuous information may increase epistemic vices in individuals who do not already hold a prior unjustified belief can be explained through technological mediation theory.

Epistemic virtues and vices: technological mediation theory

I will focus on what Verbeek calls the *hermeneutic effects* of a technological artifact. Hermeneutic effects are the effects caused by mediation of perception: the manner in which technological artifacts can influence and shape people's perception of the world. Verbeek states that "mediating artifacts help to determine how reality can be present for and interpreted by people. Technologies help to shape what counts as 'real'."[58]. I will show that there is an increase in the vice *political cynicism* through the hermeneutic effects of disinformation (I

[55] Bawden, Holtham, and Courtney, "Perspectives on Information Overload.": p.249.
[56] Gomez-Rodriguez, Gummadi, and Schölkopf, "Quantifying Information Overload in Social Media and Its Impact on Social Contagions.": p.171.
[57] Eady et al., "How Many People Live in Political Bubbles on Social Media? Evidence From Linked Survey and Twitter Data.": p.18.
[58] Verbeek, "Materializing Morality: Design Ethics and Technological Mediation.": p.366.

focus on disinformation and not disingenuous information in general, because the malintent will be important for the argument).

Disinformation is in and of itself not a novelty, rather it is a new phenomenon in the field of SMPs. The *scripts* (mediating effects of a technology) SMPs inscribe onto the users is to publish, share and consume as much content as possible. I will consider the spread of disinformation on SMPs as a technological artifact in and of itself, in order to apply theories of philosophy of technology onto it. Verbeek vouches for what he calls *design ethics*. His argument is that, since technological artifacts can influence both action and perception, and since morality is defined by once actions, it follows that artifacts can influence the morality of individuals[59]. While I support this notion, the positive effects of *design ethics* are still dependent on the morality of the designer. Furthermore, it is important to understand the notion of *multistability*. This notion describes how a single artifact can have multiple stabilities, meaning various ways of functioning depending on how it was designed as well as the way users interact with it. –A bench in a park has the dominant stability of being a place to sit on, but for a homeless person it could also be a place to sleep.– I would like to introduce a new understanding of multistability in which the designer has multiple stabilities in mind when developing the technology. I will make the distinction between the *prima facie* and the *ex post* stability of a technological artifact. The *prima facie* purpose is the stability which is seen at first glance. It is the stability the designers want people to associate with the given artifact. The *prima facie* stability may be the true intended purpose in that case it is equivalent to the dominant stability of the artifact, for there does not necessarily need to be an *ex post* stability of a technology. The *ex post* stability, if present, is an additional (potentially the most important) and intentionally hidden purpose of the artifact.

The distinction of *prima facie* and *ex post* stability is useful when analyzing disinformation, given the fact that both purposes in this artifact affect perception and intentionally influence an individual's values. Disinformation has, as elaborated on previously, a certain political intention. Considering the nature of disinformation, being untrue and manipulative, the political motivation is achieved through unjustly altering an individual's world view or normative stance (on a particular event). Hence, even without Verbeek's theory it would be apparent that this technological artifact mediates perception. The *prima facie* stability of disinformation is to make people believe the content of the message. The effect of

---

[59] Verbeek, "Materializing Morality: Design Ethics and Technological Mediation.": p.362.

this purpose is therefore limited to individuals who ultimately end up believing the message. In this argument I assume the *ex post* stability to be the intent to harm democracy or to be some political motivation which is furthered through harming a democracy. I maintain the idea that harm in and of itself is not necessarily the end goal as some literature suggests, but I consider it plausible as a means to an end. I.e., Russia's disinformation campaign has in part the intention to minimize the efficacy with which other nations impose sanctions. If they manage to create chaos within the foreign states (due to internal democratic disputes) this will certainly reduce the efficacy of response. Hence, the *ex post* stability of disinformation can be to reduce the trust in the democratic system. Under this assumption I will show that the *ex post* stability influences society as a whole. With this stability of harm to democracy in mind, I will now analyze the functionings of both stabilities.

In the case of the first group of people (those who believe the disinformation) this is straightforward, because it is a direct extension of the *prima facie* stability. By believing factually incorrect information they will change their behavior or the feedback they give to their government (this will become significant in chapter three). Furthermore, they will believe information that might be at odds with: a) the 'main-stream media', b) societal norms and therefore c) most politicians and political parties, these individuals themselves end up feeling at odds with society and its democracy. They may feel democratically unrepresented (which could in fact be true) and therefor lose trust in the functioning of democracy. This could lead to *political cynicism*.

More interesting is the mechanism in which the *ex post* stability of this artifact is achieved without necessarily influencing the world view and/ or normative stances of individuals on certain events. Disinformation influences how individuals perceive their epistemic peers. Those on whom the *prima facie* stability of the artifact has failed, will question the ability of the first group of people (those who are affected) to make valid democratic decisions. It should be noted that this change in perception is more fundamental than doubt that arises from politically opposing views. They (justifiably) question the epistemic abilities of their democratic peers. It is a democratic necessity that people with different view-points can voice their opinion. However, should a person whose foundation of reasoning is incorrect (assume we *know* that this is the case) be able to voice their opinion in the same manner? In other words, should an opinion formed on incorrect information have the same democratic influence as one formed on correct information? These types of questions could arise in those affected through the *ex post* stability and they could logically lead to political cynicism.

Interestingly enough, the *ex post* stability is likely to also influence the former group of people, since from their perspective they can hold the exact same reasoning as the uninfluenced group of people.

As I have shown, the *prima facie* stability may influence only a subset of the entire population, nonetheless this effect will allow the *ex post* stability to come into effect, and this stability is likely to influence a larger proportion of the population. Political cynicism is a vice and is strongly correlated with the belief in conspiracy theories[60] (see Figure 3, note that I am concerned with the positive correlation between political cynicism and 'general conspiracist belief' rather than the negative correlation with regards to '9/11 conspiracist belief'). Logically, we can reason that political cynicism There is one vices that reduces feedback very directly, namely political cynicism. Political cynicism is in and of itself harmful to democracy since it is negatively associated with political efficacy and deters political participation[61], but additionally it may also reduce epistemic virtues, most notably, it can reduce open-mindedness. Considering that the political cynicism was caused by the knowledge that some individuals hold unjustified beliefs, one may become less open-minded towards the beliefs of others, arguably even to the extent that this virtue shifts into the vice of rigidity. Similarly, political cynicism may cause indifference. People may be less motivated to analyze information that supports their political view, since the political system seemingly does not differentiate between justified and unjustified beliefs.

What I have shown here is the second mechanism through which exposure to disinformation can lead to a vicious circle of increase in epistemic vices in individuals with no prior incorrect beliefs. It requires identifying the situation in which a designer of a technology intentionally implements multiple stabilities. The *prima facie* stability is the most visible stability, the *ex post* stability, if present, is hidden behind the *prima facie* stability. In the case disinformation the respective stabilities are to persuade the audience of a certain viewpoint and to harm democracy (as a means to some other political end). The *prima facie* stability works in a small group of people but allows for the *ex post* stability to function. Harm to democracy is achieved through disinformation because of the hermeneutic influence of this technological

---

[60] Swami, Chamorro-Premuzic, and Furnham, "Unanswered Questions: A Preliminary Investigation of Personality and Individual Difference Predictors of 9/11 Conspiracist Beliefs.": p.759.
[61] Jones-Jang, Kim, and Kenski, "Perceptions of Mis- or Disinformation Exposure Predict Political Cynicism: Evidence from a Two-Wave Survey during the 2018 US Midterm Elections." p.3119.

artifact. Those influenced by the *prima facie* stability are perceived by the rest of the population as having lesser epistemic abilities, and their worth as democratic peers is questioned. This, so I have argued, can lead to *political cynicism* and the related epistemic vices *rigidity* and less directly also *indifference.*
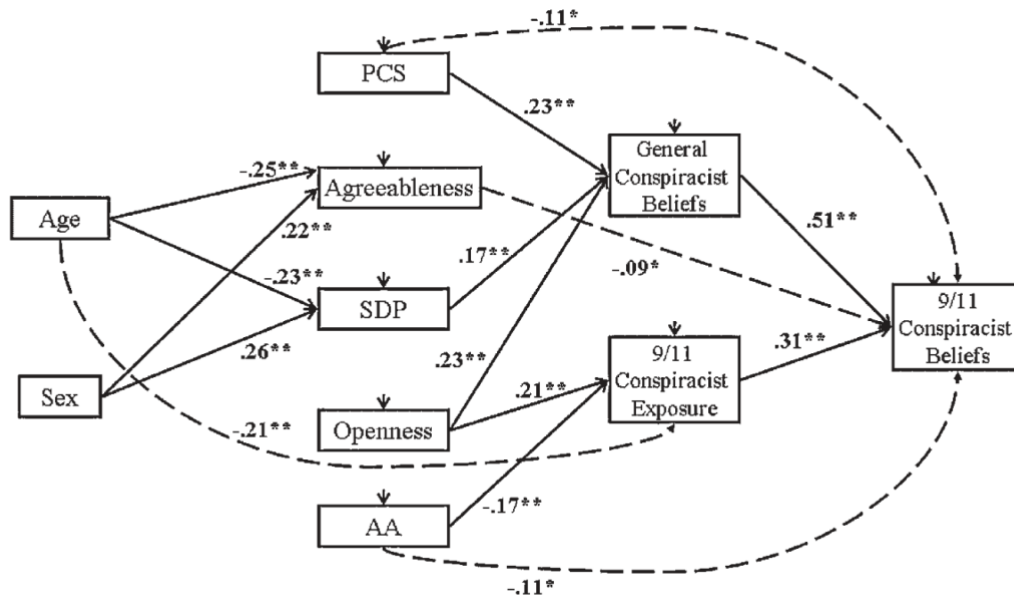
-.11*

PCS

.23**

-.25** Agreeableness General Conspiracist Beliefs

Age .22** .51**

-.23** SDP .17** -.09*

.26** .23** 9/11 Conspiracist Beliefs

Sex 9/11 Conspiracist Exposure .31**

-.21** Openness .21**

AA -.17**

-.11*

Figure 3. *Modified model of predictors of 9/11 conspiracist beliefs.*[62] "Note: *p < .05, **p < .001. Dashed paths added to the hypothesised model. All coefficients are standardised b values. Sex coded 1 = Men, 2 = Women. PCS = Political Cynicism Scale; SDP = Support for Democratic Principles; AA = Attitudes to Authority. Bivariate correlation coefficients reported in the text."[63].[64]

Epistemic virtues and vices: (Political) Interaction

Lastly, there is a mechanism through which SMPs influence epistemic virtues. SMPs mediate the public space in which human interactions take place[65]. Thus, SMPs are able to mediate human interaction and public discourse. An effect caused by this mediation, which is widely known is the notion of filter bubbles or echo chambers. This legitimate fear has been widely reiterated in an unnuanced manner. A novel empirical research states that they "do not find

---

[62] Swami, Chamorro-Premuzic, and Furnham.: p.158.
[63] Swami, Chamorro-Premuzic, and Furnham.: p.158.
[64] Further research into the predictor 'Openness' would be relevant. 'Openness' has a large intuitive correlation to the virtue 'open-mindedness' I argue in favor of. This research contradicts that 'open-mindedness' should be considered an epistemic virtue. It would be interesting to what extent 'openness' hints towards the epistemic vice naivety, or whether it indeed should be the case that open-mindedness is not an epistemic virtue, and that it is more virtuous to be somewhat indifferent.
[65] Verbeek, "Politicizing Postphenomenology.": p.149.

evidence supporting a strong characterization of 'echo chambers' in which the majority of people's sources of news are mutually exclusive and from opposite poles"[66]. However, they do find that "online media diet is quite ideologically constrained" in comparison to the media content consumed through TV-networks[67]. Furthermore, as mentioned before, the effects of information overload do increase the existence of the echo chambers.

Even if the effect of echo chambers may not be as prominent an issue as Verbeek suggests it to be, there is a different relevant instance of mediation by SMPs that influences political interaction. In standard testimony (meaning in a face-to-face interaction) a statement is usually an assertion, one which is justifiably held in high regards since the testifier is aware that there are consequences related to the spreading if false information[68]. It is (usually) in the interest of the testifier themselves to not spread false information, because it may deteriorate the bond between them and the receiver of the testimony. This makes believing testimony according to Rini in a standard (in person) scenario an epistemic virtue (it seems that Rini leans somewhat towards the view of Concilitiationism). However, Rini argues that on SMPs testimony is frequently not given as an assertion yet is often unjustly interpreted as such[69]. The nature of the testimony is different for one because the testimony may be in the form of sharing information rather than providing it firsthand. This has the implication that the testifier feels less responsible for the correctness of the information provided, at the same time it turns out that the consumer of the testimony considers the testimony as an assertion of the same degree as standard testimony[70]. She calls this phenomenon *bent testimony* and attributes this problematic inconsistency to the lack of a norm on how to interpret online testimony. The lack of a social norm is a good explanation, and something information literacy might be able to improve on. An additional explanation I propose that SMPs are mediating social norms on testimony, specifically, norms that can be understand as virtuous behavior. There are two epistemic vices that lie at the root of the phenomenon of bent testimony. Firstly, is the vice naivety, which we have witnessed before. The individuals receiving the testimony are not skeptical enough towards the testifier and the testimony. Secondly, there is a lack of responsibility taken by the testifier. It can be seen that the testifier lacks involvement, they do

---

[66] Eady et al., "How Many People Live in Political Bubbles on Social Media? Evidence From Linked Survey and Twitter Data.": p.18.
[67] Eady et al.: p.18.
[68] Rini, "Fake News and Partisan Epistemology.": p.46.
[69] Rini.: p.47
[70] Rini.: p.47.

not take effort to verify the validity of their own testimony, perhaps to the extent that they are indifferent with regards to whether the beliefs they share are justified.

To reiterate, I have shown that there are various incentives for people to hold unjustified beliefs and that these incentives lead to the reduction of *skepticism*. Secondly, I have shown that epistemic vices allow for an increase in unjustified beliefs, which correlate with disingenuous information. Thirdly, I have argued that exposure to disingenuous information can lead to an increase in epistemic vices (or a reduction of epistemic virtues), leading to a vicious cycle of increasing epistemic vices and believe in disingenuous information. This happens in accordance with the monological belief theory, in which people who hold an incorrect belief are more likely to hold other incorrect beliefs to maintain the prior belief. I have argued that this phenomenon stems from rigidity and increases indifference. The second mechanism that shows how exposure to disingenuous information leads to an increase in epistemic vices is the phenomenon of information overload. I argue this is in part caused by disingenuous information since the fastest spreading types of information are more easily generated using disingenuous information rather than genuine information. I have shown that the hermeneutic effects of disinformation cause an increase in political cynicism across a larger population than those who end up holding the unjustified belief. Lastly, I have argued that bent testimony exists on SMPs due to an increase in the epistemic vices naivety and indifference.

I set out to discover the relation between epistemic vices and disingenuous information. I have shown that there are various mechanisms through which exposure to disingenuous information leads to an increase in epistemic vices. Some of these mechanisms reinforce themselves; being exposed to and accepting disingenuous information leads to an increase in epistemic vices, and epistemic vices increase the likelihood of believing disingenuous information.

Returning to the solutions of information labeling and information literacy, these solutions intent to improve the epistemic position and epistemic abilities of individuals, respectively. The purpose of these improvements is that individuals are less vulnerable to the effects of disingenuous information. Unfortunately, there is a difference between ability and virtuous behavior. While *ought implies can*, can does not imply will. It is not the case that the ability to do what ought to be done, implies that this will happen. Improving the epistemic abilities of an

individual is efficient, if and only if, the person also possesses the epistemic virtues necessary to act on those abilities. Separating virtue from ability leads to the following possible combinations: P1: virtues + ability; P2: vice + ability; P3: vice + no ability; and P4: virtues + no ability. This overview clarifies the problem of information labeling and information literacy. I argue that only individuals who possess both virtues and ability (P1) are more resilient to the effects of disingenuous information. Hence, information labeling and information literacy at best improve the effectiveness of P4, individuals who already have the required epistemic virtues, but not yet the required abilities. And even the efficacy towards P4 is not guaranteed considering the negative effects disingenuous information has towards epistemic virtues, meaning that it is possible for P4 to move into the category of P3 and then with the help of information labeling into P2.

A similar argument is more prone to debate in the case of information literacy. For if the education includes promoting epistemic virtues alongside epistemic abilities this would increase the effectiveness of the solution from being relevant only to P4 to all persons. Khan and Idris do mention the relevance of attitude towards verification of information, however, they mention it as a 'background-factor' that is used to predict whether an individual is likely to verify information before sharing[71]. In line with my argument, they find that attitude (which at least represents the virtue involvement) is indeed a significant predictor for the likelihood that an individual will verify information before sharing it[72]. Nonetheless, they define information literacy to imply the skills: information sharing, information seeking, and information verification[73], showing that their focus does not include attitude to the extent that it should for information literacy to be most effective. Furthermore, attitude does not reflect all relevant epistemic virtues. Perhaps it can be considered a proxy for more than just involvement, but the fact that the article does not consider epistemic virtues as such, shows that they do not play the essential role in the idea of information literacy as should be the case. Unfortunately, even if information literacy includes promoting epistemic virtues this only reduces the afore mentioned problem in part. In this case increasing the epistemic abilities is not ineffective, but it is still met with resistance, for now there is a tug-of-war between the mechanisms caused by disingenuous information that reduce epistemic virtues, and the educative programs that them. Hence, even the most ideal variation of does not circumvent this problem.

---

[71] Khan and Idris.: p.1201-1202.
[72] Khan and Idris.: p.1206.
[73] Khan and Idris.: p.1201.

Chapter 3:

I have shown that disingenuous information leads to an increase in epistemic vices, and I have argued that these vices undermine the two most commonly suggested solutions towards the effects of disingenuous information. This indicates that an alternative solution towards the problem of disingenuous information is still desired. I mentioned before that the philosophical debate steers clear of the notion of governmental censorship. I assume that this happens based on intuitive reasons why a government should not bear this responsibility and power. Attributing a government this responsibility involves taking a risk, because governmental censorship may harm the functioning of democracy. This precautionary approach is valid and even desirable, yet I wish to highlight the fact that it requires an accurate overview of the potential harms that governmental censorship may cause versus the harms that are caused or can be caused by disingenuous information and the related increase in epistemic vices. I will show that the nature of the harms through an increase in epistemic vices is similar to those that may be feared for in the case of malicious governmental censorship.

The risk-based argument against governmental censorship

I create an overview with regards the risks of the two scenarios that are at hand. First let it be understood that risk can be interpreted as the multiplication of likelihood and magnitude. I approach the magnitude of the risks by considering the nature of the harms, that is the closest I can come to assessing this element of risk. I show that the natures of the harms are similar and thus argue that the magnitudes of the harms of similar. I acknowledge that the nature of harm is not an ideal measure for the magnitude of the harm. Further empirical research is desired to properly quantify the magnitude of the harm. Likelihood is impossible for me to accurately predict, yet I can differentiate between likelihoods that are certain and uncertain as well as the fact that certain scenarios reduce or increase certain likelihoods, although not to which extent. I consider the risks specifically to the democratic norms described by Anderson, which are of free discourse, feedback, dissent and accountability[74]. There are likely to be additional risks associated with censorship by a government, that fall outside the scope of these norms. Depending on the way it is implemented, governmental censorship could in example

---

[74] Anderson, "The Epistemology of Democracy.": p.8.

harm the privacy of citizens. The assessment of the different risks that follows, focusses solely on the risk to the democratic norms.

$Risk_A$: The risk of harm through disingenuous information. This risk has a likelihood approaching certainty, since most of the harms I shall discuss are already present.

$Risk_B$: The risk of harms through governmental interference. This risk has an undefined likelihood, but of which I *can* say that it is lower than that of $Risk_A$, since it is by nature of not existing still uncertain.

It is important to consider that introducing $Risk_B$ reduces $Risk_A$ and accepting $Risk_A$ reduces $Risk_B$. In other words, the scenarios are as follows:

$Secnario_A$: Reduced $Risk_A$ + introduced $Risk_B$.

$Scenario_B$: unreduced $Risk_A$ + unintroduced $Risk_B$

Expending the two scenarios leads to:

$Scenario_A :=$ $Likelihood_{A\ (reduced)}$ * $Magnitude_A$ + $Likelihood_{B\ (increased,\ but\ uncertain)}$ * $Magnitude_B$. This is the scenario in which governmental censorship is introduced.

$Scenario_B :=$ $Likelihood_{A\ (certain)}$ * $Magnitude_A$ + $Likelihood_{B\ (reduced,\ but\ non\text{-}zero)}$ * $Magnitude_B$. This is the scenario in which governmental censorship is not introduced.

Under the assumption that $Magnitude_A$ and $Magnitude_B$, when approached as the nature of the harm, are comparable, this means we should focus more on the likelihoods of the scenarios. I first show that the nature of harm to democracy of the different risks are indeed similar. Then I make the argument that $Likelihood_B$ in $Scenario_B$ (harm through governmental interference when the responsibility of censorship is not attributed) is still possible, most notably, through purposefully misclassifying dissent as based on disingenuous information. Hence, the likelihood may be reduced compared to $Likelihood_B$ in $Scenario_A$ (harm through governmental interference when attributed the responsibility of censorship) yet is still possible (non-zero). Most importantly, I make the argument that $Likelihood_A$ in $Scenario_B$ (harm through disingenuous information when the government is not attributed responsibility) is certain (it already occurs), yet while $Likelihood_B$ in $Scenario_A$ (harm through governmental interference when attributed the responsibility of censorship) might be higher than $Likelihood_B$ in $Scenario_B$

(harm through governmental censorship when the government is not attributed the responsibility of censorship), it is not a certainty.

Harm to democratic norms

One of the fears that I deem relevant when considering the responsibility of a government to censor disingenuous information, is that it harms the democratic norms of free discourse, dissent, feedback, and accountability. As far as consensuses go, most political philosophers consider political dissent and feedback to be necessary for the functioning of a democracy (i.e., Habermas[75] and Rawls[76]). These norms can justifiably be considered at risk through governmental censorship. Given the increase in epistemic vices through exposure to disingenuous information, I will show that the existence of disingenuous information poses rather similar threats to democracy since it harms the same democratic norms. I have shown that epistemic vices lead to unjustified beliefs. What follows is an account of how unjustified beliefs (and therefore indirectly epistemic vices) disrupt the democratic norms of free discourse, feedback, dissent, and accountability.

Harm to the democratic norm of free discourse

The norm of free discourse is harmed through the mechanisms described in the section on peer disagreement, information overload and (political) interaction. Peer disagreement is an important aspect of free discourse and has epistemic value when first order debates are held. The increase in unjustified beliefs reduces the amount of first order debates and thus reduces the efficacy of peer disagreement as a form of discourse. Furthermore, free discourse requires that individuals come across opposing opinions, otherwise the discourse is intrinsically biased towards supporting prior beliefs held and is thus far from 'free'. Information overload leads to echo chambers and therefore decreases the chances of coming across opposing views, and as argued before information overload is compounded by disingenuous information.

Additionally, there are two mechanisms through which SMPs negatively influence free discourse. While I focus on disingenuous information, I have mentioned earlier that SMPs are fundamental actors to the spreading of disingenuous information, hence I do consider these

---

[75] Habermas, "Civil Disobedience: Litmus Test for the Democratic Constitutional State.": p.99.
[76] Rawls, *A Theory of Justice : Original Edition*.: p.336.

arguments to be relevant. Firstly, the phenomenon of bent testimony is problematic to free discourse. Bent testimony allows for certain instances of testimony to become far more influential than should have been the case, and than would have been the case if the testimony had been a face-to-face interaction. Lastly, as mentioned before, Verbeek argues that SMPs mediate human interaction and therefore public discourse[77]. Public discourse the way Verbeek uses it can be considered to be synonymous to free discourse. The fact that the discourse can be influenced makes it by definition less free, it should be apparent therefore that Verbeek's argument directly relates to this democratic norm.

Lastly, there are ways in which disingenuous information harms this democratic norm that fall outside the scope of this paper, because they do not involve epistemic vices or unjustified beliefs. One way which I suggest might be promising to explore would the to investigate to what extent disingenuous information harms freedom of thought. I understand free discourse as freedom of speech between a group. I propose the claim that freedom of speech presupposes freedom of thought. The argument then rests on proving that disingenuous information harms freedom of thought, which I expect to be provable.

Harms to the democratic norms of feedback, dissent, and accountability

It is important to understand why feedback and dissent are important for democracy. Feedback is important because "[i]f a social arrangement has a systematic and significant impact on some social group, information about that impact needs to be conveyed to decision makers."[78]. Secondly, while Arendt vouches for active citizen participation (through civic councils) on policy making[79], this is often considered implausible, which led to the idea of contestatory democracy as a reaction to this view. The idea of contestatory democracy is that a democracy functions as long as citizens have the ability to contest any political decisions made[80]. Since contesting can occur both through feedback as well as dissent, it becomes apparent why dissent is important. Dewey concurs with this notion although from his perspective dissent should always be possible, not merely *ex post*[81]. Dissent against and the feedback on the impact of a 'social arrangement' are obscured through unjustified beliefs because the actual impact might be wrongly estimated by citizens. Consider the example of the disingenuous information

---

[77] Verbeek, "Politicizing Postphenomenology.": p.149.
[78] Anderson.: p.14.
[79] Arendt , *On Revolution*.: p.277.
[80] Pettit and Rabinowicz, "Deliberative Democracy and the Discursive Dilemma.": p.119.
[81] Dewey, *The Public and Its Problems*.: p.154.

surrounding the COVID-19 vaccination. In this instance the actual potential harm is scientifically determined. However, the feedback provided by individuals who believe in disingenuous information about this topic may differ vastly from the actual risks. For instance, if the unjustified belief is held that the COVID-19 vaccination is a plot to plant microchips in people[82], the feedback will differ from the dissent based on the fear of the scientifically determined potential side-effects of the vaccination. Dissent based on this disingenuous information may therefore be out of proportion. To be more specific, the dissent can be entirely proportionate considering the belief held, but at the same time unjustified (and therefore unproportionate) when the justification of the belief is taken into account. Alternatively, it is plausible that dissent is lacking where it should be present. Furthermore, the feedback received by the government can be considered of lesser value since it is likely to be based on incorrect information (recall the correlation made between unjustified belief and incorrect information).

This phenomenon has an additional layer of complexity to it, however. The counter-argument can be made that the scientific account of harm excludes subjective harms such as psychological harm through 'mandatory' vaccination, or (more justified) the perceived exclusion from social activities. These subjective accounts of harm are relevant and more complex to determine scientifically. Hence, these are pre-eminently instances where feedback from citizens is warranted, and where the contesting of the policy should be recognized. Yet at the same time, through unjustified believe in disingenuous information these harms are unjustly exacerbated. To rephrase this: the subjective harms are objectively increased through unjustified beliefs. This creates the complex situation in which a government must consider what to do with an unjustified belief that has objectively influenced the doxastic attitudes of an individual. With the risk that ignoring the feedback based on an unjustified belief could lead to actual (psychological) harm. Whereas attributing responsibility of censorship to a government has the counter-argument that a government may use this power to oppose or prevent political dissent, the previous stated dilemma, can also be maliciously used to argue why (justified) dissent can be ignored. Namely, by purposefully misclassifying dissent to be based on unjustified beliefs. To reiterate, the dilemma presents the difficulty in how to treat dissent based on unjustified belief and the way this argument can be wrongly appropriated is if a government mislabels dissent as being based on unjustified belief. The mislabeling argument is not an argument in favor of the responsibility of censorship, rather it is a counterargument to the

---

[82] Gerts et al., "'Thought I'd Share First' and Other Conspiracy Theory Tweets from the COVID-19 Infodemic: Exploratory Study.": p.2.

counterargument; obscuring dissent is possible for a malicious government in either scenario. Being attributed the responsibility of censorship, a government can more easily pretend to be legitimate in censoring justified dissent on SMPs (Likelihood$_B$, Scenario$_A$), but at the same time given the current spread of unjustified beliefs, a government can also abuse the argument that dissent based on unjustified beliefs should be ignored (Likelihood$_B$, Scenario$_B$).

What I have shown here, is that firstly, unjustified belief disrupts the functioning of the democratic norms of dissent and feedback. Dissent may become unproportionate and feedback of lesser quality. There is a dilemma that arises from this disruption of dissent, namely, how to approach dissent based on unjustified belief, which shows the difficulty of dealing with this situation from the perspective of the government. Lastly, I have shown that a malicious government can obscure political dissent in similar fashion in the case of being given responsibility of censorship as well as the case of disingenuous information influencing citizens (as is the status quo).

I provide a second argument on how unjustified beliefs cause harm to democracy. I will explore this based on Arendt's understanding of totalitarianism. She states:

> "The ideal subject of totalitarian rule is not the convinced Nazi or the convinced Communist, but people for whom the distinction between fact and fiction (i.e., the reality of experience) and the distinction between true and false (i.e., the standards of thought) no longer exist."[83].

Whereas this quote is written in the context of analyzing two notorious historical totalitarian regimes, who achieve this state of being in individuals through state propaganda, I argue that disingenuous information increases epistemic vices and thereby unjustified beliefs which create this undesirable quality Arendt describes; for to hold an unjustified belief implies being unable to distinguish between fact and fiction and true and false. I have argued that disingenuous information can be created and shared by a variety of actors, more easily in fact than genuine information. Individuals, non-state actors and foreign states can share disingenuous information and therefore are all able to (unintentionally) contribute to this precondition of totalitarian rule. This precondition makes the individuals *naive*, which even without a malicious government is problematic. For a democracy requires the knowledge of its

---

[83] Arendt, *The Origins of Totalitarianism*.: p.474.

citizens to make the right (and legitimate) decisions, unfortunately, this state of affairs fundamentally disrupts the ability of citizens to provide feedback to their government.

A preliminary argument defending the side against governmental censorship can be thought of. Namely, the fact that the state of affairs hinges closer to an environment of totalitarian rule ought surely to imply that we should remove additional power away from the government, rather than give it to them. Indeed, any conclusion drawn from this exploration is a double-edged sword. On the one hand it shows the necessity of intervention, yet on the other it illustrates the vulnerability of the citizens and the inclination towards totalitarian rule. The difference I would like to point out, is the fact that in the totalitarian regimes as discussed by Arendt, the propaganda was spread by a regime itself. To reduce the spread of disingenuous information would require removing power and the ability of censorship away from the government. The status quo in The Netherlands (and other liberal democracies) is vastly different. Currently, citizens are increasingly exposed to disingenuous information and thus molded into the epistemologically unvirtuous people Arendt describes as 'ideal subjects of totalitarian rule', yet the government is still a well-functioning democracy. Regardless of the solutions, it should be apparent that it is a problem when citizens of a liberal democracy can be labeled as 'ideal subjects of totalitarian rule'.

As mentioned, this state of being in citizens disrupts the possibility of feedback. It, however, also hinders the democratic norm of accountability. It is not a shift in the power-relations that disrupts the ability for citizens to hold the government accountable, but rather the possibility arises that the citizens are not aware that the government ought to be held accountable for a certain policy or event. Simultaneously, it is possible that the government is held accountable for things that are not relevant. This relates back to the example given, where dissent may become unproportionate due the false beliefs. This relation is foreseeable since dissent is a mechanism through which accountability can be achieved[84]. Therefore, any harm to dissent is directly a harm to accountability also.

Harm to democracy through epistemic and moral vices

I consider a mechanism through which the increase in epistemic vices causes a direct problem for the functioning of a democracy by returning once more to technological mediation theory. To describe the way technologies can alter or even create political issues, Verbeek relates back

---

[84] Webber, "The Inversion of Accountability.": p.60.

to the mediation of perception. The fact that technology influences what we see and how we interpret what we see, fundamentally influences our world view and therefore also which political issues are prioritized and recognized.

> "In Latour's approach, the epistemological and political status of the "issues" plays a central role. He explains how facts ("matters of fact") are also things that matter ("matters of concern"), blurring the distinction between fact and norm, descriptive and normative."[85].

The first major problem that arises from this understanding is that disingenuous information introduces incorrect 'matter of facts', which influence the 'matters of concern'. This theory highlights and explains from a post-phenomenological perspective what I have previously explained: disingenuous information negatively influences the quality of feedback and reduces the justifiability of dissent. However, combining Latour's approach on epistemology in politics with the epistemic virtues of social epistemology raises an additional question on the effects of disingenuous information. Namely, do epistemic vices also induce normative vices? If 'matters of fact' help shape 'matters of concern', do vices towards 'matters of fact' also shape vices towards 'matters of concern'? In other words, do epistemic vices imply normative vices? It is certainly possible to state that by holding an unjustified belief, an individual may not act in accordance with their own norms. Whether epistemic vices truly imply moral vices is not self-evident and likely depends on which moral theory one considers. If such an implication indeed exists, this would fundamentally harm feedback and dissent (and thereby accountability). It would mean that individuals give feedback that goes against their own values, and the same goes for the policies or governmental actions they do or do not contest.

An in-depth analysis of the relation between epistemology and ethics falls outside the scope of this paper, but I can provide two introductory arguments why this implication may hold for the theories of Virtue Ethics and Consequentialism. I acknowledge that I over-generalize both theories, and that more nuanced interpretations of the theories may yield different conclusions, but the arguments may prove useful as a starting point for future research. In terms of Virtue Ethics, the distinction between normative and epistemic vices is a classification error. This theory states that an action is right, if and only if, it is the action a virtues person would have taken. The virtues a virtuous person must possess are not normative

---

[85] Verbeek, "Politicizing Postphenomenology.": p.150.

virtues, but all virtues. Hence, all vices, also those classified throughout this paper as epistemological vices, reduce the virtues nature of an individual and thus negatively influences the morality of a person. The second ethical theory I consider is Consequentialism. Consequentialism supposes that an action is morally right, if and only if, the consequences of that action are good (usually a utilitarian view is upheld, which implies that the action must bring the most overall happiness or pleasure). This requires both the ability and the intention to consider the consequences of an action. Predicting the consequences of an action based on unjustified belief, is likely to yield less accurate predictions than when predicted on justified belief, since an unjustified belief is more prone to be incorrect also (as I have argued previously). Furthermore, an indifferent attitude towards facts may also reduce the ability to predict consequences and therefore the individual can be said to not adhere to the standards of consequentialism.

Conclusion:

Throughout this paper I have argued that disingenuous information leads to an increase in epistemic vices. I used to social epistemology to define what a justified belief is, and I defined epistemic virtues and vices in relation to this notion of justified belief. There are two reasons why I focused on the relationship between disingenuous information and epistemic vices. Firstly, it provided me with the foundation based on which I developed a novel argument against the two most commonly suggested solutions to disingenuous information: information labeling and information literacy. Secondly, I have used the increase in epistemic vices and the causally related increase in unjustified beliefs to argue that the risks related to disingenuous information are of the same nature as those feared for through governmental censorship of disingenuous information, when considering the democratic norms of free discourse, feedback, dissent, and accountability.

The first argument that explained why disingenuous information leads to an increase in epistemic vices was based on an incentive to hold unjustified beliefs, which I argued also implies a reduction in epistemic virtues. In the first argument that explains the incentives to hold unjustified beliefs, I combined the psychological theory that individuals desire social belonging, power, and superiority and empirical research of attachment theory. I argued that individuals may (unconsciously) reduce their standards towards the justification of a belief (in other words to reduce their epistemic virtues) in order to adhere to the beliefs held by the group. Thus, pursuing the desire for social belonging and conforming to the empirical findings of attachment theory. Alternatively, individuals may uphold an unjustified belief in order to maximize the traction their post receives in order to experience a sense of power or superiority.

Additionally, I argued that The Monological Belief Theory provides the basis for not only an increase in epistemic vices but could even lead to a vicious cycle of epistemic vices and unjustified beliefs reinforcing each other. The Monological Belief Theory states that people may hold future unjustified beliefs in order to maintain their prior unjustified belief. I linked this theory to an empirical study that shows that 'general conspiracist beliefs' are the best predictors for believing in '9/11 conspiracist beliefs'[86]. This argument requires a prior unjustified belief to be present, and therefore functions only for a subset of a population.

---

[86] Bawden, Holtham, and Courtney.: p.249.

The arguments I made using information overload and technological mediation theory do not require this prior unjustified belief to be able to conclude the vicious cycle. I reasoned that information overload, reduces the virtue open-mindedness and increases the occurrence of echo chambers. It also reduces the possibility to rectify unjustified beliefs, because the chances of coming across the information or individuals necessary to do so is reduced.

I developed the *prima facie* and *ex post* stabilities of a technologies in order to argue that disinformation can lead to political cynicism, not only in the group that ends up believing the incorrect information (the *prima facie* stability), but also in individuals who are aware of the *prima facie* stability affecting their epistemic peers and thus question their epistemic abilities (*ex post* stability). Political cynicism is in and of itself harmful to democracy because it reduces democratic participation[87], and thus harms the democratic norms of feedback, dissent, and accountability. I have argued that it additionally can lead to an increase in the epistemic vices indifference and rigidity. Lastly, I acknowledged the effects SMPs have on the nature of testimony. Bent testimony as Rini argues arises from an imbalance in the gravity the testifier and the recipient place on the testimony[88]. I have coupled this phenomenon with the epistemic vices of indifference and naivety in the testifier and recipient respectively. I have shown that both indifference and naivety harm the democratic norms of feedback and dissent and by extension accountability.

The increase in epistemic vices is problematic for the two most commonly proposed solutions of information labeling and information literacy. I have argued that these solutions place the responsibility of combatting disingenuous information and the effects thereof with the individual. Furthermore, these solutions promote the epistemic abilities of individuals, yet mostly ignore the fact that virtues are just as much a requirement for the desired resilience against disingenuous information as abilities are. I strongly suggest that epistemic virtues should be included in the curriculum of information literacy, but even this would only partly solve this problem, for there will remain opposing forces affecting the epistemic virtues of individuals.

---

[87] Jones-Jang, Kim, and Kenski.: p.3119.
[88] Rini.: p.47.

I have argued that governmental censorship has been ignored in the philosophical debate because of an intuitive understanding that this solution contains certain risks to democracy. I have elaborated on these risks and created an overview of the risks disingenuous information and governmental censorship pose to democracy. I approached the magnitude of the risks in terms of the nature of the different harms and showed that the democratic norms that might be at risk through governmental censorship, are also at risk through disingenuous information and the epistemic vices this brings with it. I argued that free discourse is harmed through the negative effects unjustified beliefs have on peer disagreement, as well as through bent testimony and the fact that SMPs mediate public discourse. Feedback, dissent, and accountability are harmed through various mechanisms. Most notably, is the fact that unjustified beliefs negatively influence the accuracy with which feedback is given and the fact that dissent (as a mechanism for accountability) may be unjustified or lacking where it is desired. Considering that the magnitude of the risks is at least to some degree comparable, the reasoning followed that the focus of analyzing the different risks should be with the likelihood of the harms occurring. I have argued that the harms caused by disingenuous information are already occurring and therefore the likelihood is a certainty, the harms caused by governmental censorship, on the other hand, are still potential harms. Furthermore, I have provided an argument that even when the government is not attributed the responsibility of censorship, a malicious government can achieve a similar outcome of ignoring political dissent by using disingenuous information as a scapegoat to misclassify feedback and dissent to be based on unjustified beliefs.

Throughout this paper I have addressed various points where future research is required. One of the main arguments of this paper is in fact the claim that further research is required with regards to the potential solution of governmental censorship of disingenuous information. This argument required an approximation of the magnitudes of the harms, which was suboptimal. Further research into the magnitudes of the harms is warranted. Furthermore, I focused on the democratic harms of free discourse, feedback, dissent, and accountability. While especially the norms of feedback and dissent are widely agreed upon, they do not cover the complete range of harms that might be caused by governmental interference. More importantly, I have not researched whether governmental censorship is an effective solution. I have argued that it is more promising than information labeling and information literacy in one particular aspect,

namely, in that it circumvents the problem of epistemic vices, but further research into the effectiveness of this solution is necessary.

Additionally, I recommend further research into the relation between epistemic and normative virtues. I have provided a preliminary argument in the cases of Virtue Ethics and Consequentialism, however, I highly oversimplified both theories and more nuanced interpretations may yield different conclusions. Moreover, there are other theories to consider (most notably Deontology) and further research in the relationship between epistemology and ethics in a more abstract manner will be important to better understand the impact of an increase in epistemic vices.

Bibliography

Anderson, Elizabeth. "The Epistemology of Democracy." *Episteme* 3, no. 1–2 (2006): 8–22. https://doi.org/10.3366/epi.2006.3.1-2.8.

Arendt , Hannah. *On Revolution*. New York: Viking Press, 1963.

Arendt, Hannah. *The Origins of Totalitarianism*. Cleveland: World Pub. Co., 1962.

Audi, Robert. "The Place of Testimony in the Fabric of Knowledge and Justification." In *Rational Belief*, 15:217–36. Oxford University Press, 2015. https://doi.org/10.1093/acprof:oso/9780190221843.003.0012.

Bawden, David, Clive Holtham, and Nigel Courtney. "Perspectives on Information Overload." *Aslib Proceedings* 51, no. 8 (1999): 249–55. https://doi.org/10.1108/EUM0000000006984.

Blasio, Emiliana De, and Donatella Selva. "Who Is Responsible for Disinformation? European Approaches to Social Platforms' Accountability in the Post-Truth Era." *American Behavioral Scientist* 65, no. 6 (2021): 825–46. https://doi.org/10.1177/0002764221989784.

Chung, Namho, Kichan Nam, and Chulmo Koo. "Examining Information Sharing in Social Networking Communities: Applying Theories of Social Capital and Attachment." *Telematics and Informatics* 33, no. 1 (2016): 77–91. https://doi.org/10.1016/j.tele.2015.05.005.

Croce, Michel, and Tommaso Piazza. "Consuming Fake News: Can We Do Any Better?" *Social Epistemology* 00, no. 00 (2021): 1–10. https://doi.org/10.1080/02691728.2021.1949643.

Dewey, John. *The Public and Its Problems*. New York: H. Holt and Company, 1927.

Eady, Gregory, Jonathan Nagler, Andy Guess, Jan Zilinsky, and Joshua A. Tucker. "How Many People Live in Political Bubbles on Social Media? Evidence From Linked Survey and Twitter Data." *SAGE Open* 9, no. 1 (January 1, 2019). https://doi.org/10.1177/2158244019832705.

Feldman, Richard. "Bonjour and Sosa on Internalism, Externalism, and Basic Beliefs." Edited by Laurence BonJour and Ernest Sosa. *Philosophical Studies: An International Journal for Philosophy in the Analytic Tradition* 131, no. 3 (May 28, 2022): 713–28.

http://www.jstor.org.proxy.library.uu.nl/stable/25471832.

Ferguson, Eva Dreikurs. "Adler's Motivational Theory: An Historical Perspective on Belonging and the Fundamental Human Striving." *The Journal of Individual Psychology* 76, no. 1 (2020): 51–58. https://doi.org/10.1353/jip.2020.0016.

Forestal, Jennifer, and Abraham Singer. "Social Media Ethics and the Politics of Information." *Business Ethics Journal Review* 8, no. 6 (August 25, 2020): 31–37. https://doi.org/10.12747/bejr2020.08.06.

Fricker, Elizabeth. "Against Gullibility." In *Knowing from Words*, edited by A Chakrabarti and B K Matilal. Kluwer Academic Publishers, 1994.

Fumerton, Richard. "The Internalism/Externalism Controversy." *Philosophical Perspectives* 2 (May 28, 1988): 443. https://doi.org/10.2307/2214084.

Gerts, Dax, Courtney D. Shelley, Nidhi Parikh, Travis Pitts, Chrysm Watson Ross, Geoffrey Fairchild, Nidia Yadria Vaquera Chavez, and Ashlynn R. Daughton. "'Thought I'd Share First' and Other Conspiracy Theory Tweets from the COVID-19 Infodemic: Exploratory Study." *JMIR Public Health and Surveillance* 7, no. 4 (2021): 1–17. https://doi.org/10.2196/26527.

Goertzel, Ted. "Belief in Conspiracy Theories." *Political Psychology* 15, no. 4 (May 15, 1994): 731–42. https://doi.org/10.2307/3791630.

Gomez-Rodriguez, Manuel, Krishna P. Gummadi, and Bernhard Schölkopf. "Quantifying Information Overload in Social Media and Its Impact on Social Contagions." *Proceedings of the 8th International Conference on Weblogs and Social Media, ICWSM 2014*, no. September (2014): 170–79.

Gradoń, Kacper T., Janusz A. Hołyst, Wesley R. Moy, Julian Sienkiewicz, and Krzysztof Suchecki. "Countering Misinformation: A Multidisciplinary Approach." *Big Data and Society* 8, no. 1 (2021). https://doi.org/10.1177/20539517211013848.

Habermas, Jürgen. "Civil Disobedience: Litmus Test for the Democratic Constitutional State." *Berkeley Journal of Sociology* 30 (1985): 95–116.

Haigh, Maria, Thomas Haigh, and Tetiana Matychak. "Information Literacy vs. Fake News: The Case of Ukraine." *Open Information Science* 3, no. 1 (2019): 154–65. https://doi.org/10.1515/opis-2019-0011.

Johnston, Bill, and Sheila Webber. "Information Literacy in Higher Education: A Review and Case Study." *Studies in Higher Education* 28, no. 3 (2003): 335–52. https://doi.org/10.1080/03075070309295.

Jones-Jang, S. Mo, Dam Hee Kim, and Kate Kenski. "Perceptions of Mis- or Disinformation Exposure Predict Political Cynicism: Evidence from a Two-Wave Survey during the 2018 US Midterm Elections." *New Media and Society* 23, no. 10 (2021): 3105–25. https://doi.org/10.1177/1461444820943878.

Kelly, T. "Peer Disagreement and Higher Order Evidence." *Social Epistemology: Essential Readings*, no. 2011 (2010): 183–217. /citations?view_op=view_citation&continue=/scholar%3Fhl%3Dnl%26start%3D60%26as_sdt%3D0,5%26scilib%3D1&citilm=1&citation_for_view=t7brD90AAAAJ:3BvdIg-l-ZAC&hl=nl&oi=p.

Khan, M. Laeeq, and Ika Karlina Idris. "Recognise Misinformation and Verify before Sharing: A Reasoned Action and Information Literacy Perspective." *Behaviour and Information Technology* 38, no. 12 (2019): 1194–1212. https://doi.org/10.1080/0144929X.2019.1578828.

Meyer, Marco, Mark Alfano, and Boudewijn De Bruin. "Epistemic Vice Predicts Acceptance of Covid-19 Misinformation." *Episteme*, 2021, 1–22. https://doi.org/10.1017/epi.2021.18.

Millar, Boyd. "Misinformation and the Limits of Individual Responsibility." *Social Epistemology Review and Reply Collective* 10, no. 12 (2021): 8–21. http://social-epistemology.com.https//wp.me/p1Bfg0-6kD.810.

Pettit, Philip, and Wlodek Rabinowicz. "Deliberative Democracy and the Discursive Dilemma." *Philosophical Issues* 11 (May 17, 2001): 268–99. http://www.jstor.org/stable/3050604.

Rawls, John. *A Theory of Justice : Original Edition*. Vol. Original e. Cambridge, Mass: Harvard University Press, 1971. http://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=282760&site=ehost-live.

Rini, Regina. "Fake News and Partisan Epistemology." *Kennedy Institute of Ethics Journal* 27, no. 2 (2017): E-43-E-64. https://doi.org/10.1353/ken.2017.0025.

Swami, Viren, Tomas Chamorro-Premuzic, and Adrian Furnham. "Unanswered Questions: A Preliminary Investigation of Personality and Individual Difference Predictors of 9/11 Conspiracist Beliefs." *Applied Cognitive Psychology* 24, no. 6 (September 2010): 749–61. https://doi.org/10.1002/acp.1583.

Verbeek, Peter-Paul. "Politicizing Postphenomenology." In *Techné: Research in Philosophy and Technology*, edited by Glen Miller and Ashley Shew, 33:141–55. Philosophy of Engineering and Technology. Cham: Springer International Publishing, 2020. https://doi.org/10.1007/978-3-030-35967-6_9.

Verbeek, Peter Paul. "Materializing Morality: Design Ethics and Technological Mediation." *Science Technology and Human Values* 31, no. 3 (2006): 361–80. https://doi.org/10.1177/0162243905285847.

Vosoughi, Soroush, Deb Roy, and Sinan Aral. "The Spread of True and False News Online" 1151, no. March (2018): 1146–51. https://news.1242.com/article/148290.

Walter, Nathan, Jonathan Cohen, R. Lance Holbert, and Yasmin Morag. "Fact-Checking: A Meta-Analysis of What Works and for Whom." *Political Communication* 37, no. 3 (2020): 350–75. https://doi.org/10.1080/10584609.2019.1668894.

Webber, Frances. "The Inversion of Accountability." *Race and Class* 58, no. 2 (2016): 55–63. https://doi.org/10.1177/0306396816657725.

Wihbey, John P, Matthew Kopec, and Ronald Sandler. "Informational Quality Labeling on Social Media: In Defense of a Social Epistemology Strategy," 2021. https://www.reddithelp.com/hc/en-us/articles/360043069012.