



**Università
di Genova**

**When Citizens Don't Know Whom to Believe:
Failures in the Testimonial Exchange of Political Information and Its Implications for
Epistemic Democracy**

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by

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Abstract

This cumulative dissertation comprises four articles addressing questions related to the so-called ‘epistemic crisis of democracy’, in particular regarding widespread contestation of expertise and denial of scientific consensus. These phenomena are worrisome for (deliberative) epistemic democrats, as they can undermine the epistemic merits of democracy. These worries are typically only understood in veristic consequentialist terms, or as *instrumental* concerns for democracy, leading to suboptimal outcomes. But this picture, I argue, is incomplete. This dissertation utilizes tools from the social epistemology of testimony to analyse the epistemic crisis from a novel perspective and locates issues that have so far remained underexplored. The following research question guides this inquiry: How does the contemporary (online) epistemic environment affect testimonial exchange of political information, and what are the implications of these changes for epistemic democracy? Article 1-3 provide a deeper understanding of the epistemic challenges citizens face when gathering political information. Article 1, ‘Public Credibility Dysfunction and Unreliable, Unsafe Political Beliefs’, discusses how our (online) epistemic environment thwarts citizens ability to make apt credibility appraisals. It further argues that the widespread failure of credibility monitoring and policing, what I call ‘public credibility dysfunction’, not only explains widespread ignorance and increasing false beliefs, but also affects the epistemic status of our true beliefs. Article 2 and 3 illustrate how public credibility dysfunction frustrates public uptake of expert-testimony. Article 2, ‘Echo Chambers, Epistemic Injustice and Anti-Intellectualism’, discusses conceptual links between testimonial injustice and echo chambers, and how the latter can cause dismissal of expert-testimony on politically sensitive topics (e.g. vaccination). Article 3, ‘Testimonial Injustice Without Social Injustice: Rejection of Expert-Testimony as Morally Significant Epistemic Negligence’, builds on these insights and provides a broader account of testimonial injustice, that acknowledges how (epistemically) privileged groups (i.e. experts) can be treated unjustly in testimonial exchange. Article 4 ‘Procedural Epistemic Democracy and Virtue-based Citizen Competence’, argues that procedural views are not irrelevant for discussions of challenges to epistemic democracy. It provides a broader understanding of citizen competence that includes *virtue-based* epistemic responsibilities, and argues that procedural accounts of epistemic democracy can generate such responsibilities by employing a procedural account of social epistemology.

Preface

My interest in the epistemic crisis of democracy originated from concerns regarding the state of contemporary public discourse. So short after political events like the U.S. presidential election of Donald Trump and the outcome of the Brexit referendum, my confidence in the capacity of democratic citizens to make good political decisions had withered. Setting aside my personal stances on these political decisions, I was mostly disappointed in the reasoning (or lack thereof) that proponents of these outcomes offered as explanation for their voting behaviour. Risking sounding elitist, I was baffled by the amount of people who seemed ignorant or uninformed about prominent political issues. More specifically, it was striking how many people seemed to be suspect of experts' opinion or believed things that went directly against the scientific consensus. Moreover, those who seemed to be obviously wrong, whose logic was flawed and whose views appeared to be epistemically questionable, were often times the loudest. Frustration over the fact that some people seemed so oblivious of certain facts of the world, was soon accompanied by an astonishment of a different kind; political discussions appeared increasingly hostile and disrespectful.

It dawned on me that this lack of civility in political discussions (or interactions with other-minded in general) was not disconnected from the previously mentioned problem of ignorance and false beliefs that initially sparked my interest. There was something deeper causing (or accelerating) both of these aspects of political discourse. Admittedly, I myself did not participate much in political deliberation on social media, or with those who did not align with my political beliefs for that matter. This was not because I did not believe in the value of exchanging public reasons for conflicting political directions, but because I often felt that it did not matter what I said: people who believed such-and-such wouldn't listen anyway, there was no point in talking to them. Obviously, this thought of mine expressed a similar sentiment as I assigned to these 'other-minded'. There was a mutual distrust, and this seemed to me a vital aspect in understanding the steadfastness and polarization of political convictions. There wasn't much genuine interacting between opposite sides in prominent political discussions: even when people were 'talking', they were mostly talking past each other, not really taking in or appropriately responding to the other person. This led me to consider the importance of testimonial exchange and testimonial trust in deliberative democracy, and how this might affect both instrumental as well as procedural accounts of democratic legitimacy.

I started this dissertation in November 2019, shortly before the Covid-19 pandemic emerged and took over our lives. With the constant flow of conflicting information on the

nature and impact of the disease, and hearing contrasting views on the costs, importance and safety of government responses to the pandemic, the topic of misinformation became more relevant than ever. You may be surprised to find that in the thesis, I do not discuss Covid-related misinformation (besides an example in a footnote, I don't mention the pandemic at all). This is deliberately so. I was convinced that focussing on an ongoing and rapidly developing pandemic would obscure the theoretical points I aimed to bring to light.

The pandemic has, on the looks of it, eased. However, the world has by no means become a more stable place. Misinformation and heated debates are still very much a part of everyday political life. This dissertation mainly provides a novel analysis of the situation, and pin points some problems that as of yet have received little attention. But this research shouldn't be taken as another reason to be sceptical of the possibility to remedy the situation. Rather, it should be taken as a plea to focus our attention on mechanisms that underlie our shared epistemic spaces as well as our own epistemic conduct – and to inspire new ways of tackling the epistemic crisis. I am still hopeful that the problems I highlight in this dissertation will not remain as prominent as they are now.

I hope you enjoy reading this thesis, and that it might prompt reflection on your own political participation – it certainly did for me.

Sincerely,

Carline Julie Francis Klijnman

Coventry, February 2023

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During the PhD I had the opportunity to conduct 3 research visits, two at the University of Warwick and one at University College Dublin. On all these occasions, I was lucky enough to find myself in lovely, welcoming departments where I was treated like one of their own students. In total, I spend 10 months of the PhD at the University of Warwick. For offering me various ways of being more involved in departmental activities and opportunities, and for supporting me in undertaking these activities, I want to thank Kirk Surgener, Patrick Tomlin, David Bather Woods, Andrew Cooper, Karen Simecek, Sara Hattersly, Oliver Turner and Sarah Taylor. I've also found tremendous support in fellow PGRs at Warwick. In particular I want to thank Giulia, Oscar, Dino, Chenwei, Simon, Johan and Ben, for making me feel included in the department.

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Despite the pandemic, I've managed to present at several events where I've gained useful feedback and met some lovely scholars. For the many helpful questions, remarks and wonderful discussions on work in progress, I'd like to thank the audiences at the 2022 René Descartes Lectures 'Taking Responsibility' at Tilburg University, 2022 MANCEPT Workshop in Political Theory panel: Misinformation, Expertise and Challenges to Democracy at Manchester University, 2022 Truth and Politics: A Political Epistemology Conference at Bamberg University, 2022 Brave New World Postgraduate Conference at University of Manchester, 2022 PERITIA International Conference 'The Ethics of Trust and Expertise' at the American University of Armenia, 2022 Royal Institute of Philosophy Graduate Conference at University of Essex, 2022 PERITIA/ CEPL workshop 'Ethics and Epistemology of Ignorance' at University College Dublin, 2021 Amsterdam Graduate Conference in Political Theory at University of Amsterdam, 2021 MANCEPT Workshop panel: Epistemic Responsibilities of Democratic Citizen, 2021 ECPR General Conference Panel: New Boundaries of Epistemic Concerns in Deliberative Democracy: What are the Challenges?, 2021 Knowledge, Citizenship, Democracy Conference at the Center for Philosophy, Politics and Economics, Groningen, 2021 PERITIA International Conference 'Trust and Expertise in a Changing Media Landscape' at University of Berlin, 2021 Geneva Graduate Conference in Political Philosophy, 2020 Birmingham-Nottingham-Warwick Joint Graduate Conference, 2020 Pavia Graduate Conference in Political Philosophy, 2020 Australasian Postgraduate Philosophy Conference, 2020 European Congress of Analytic Philosophy at Utrecht University, 2020 Virtual Summer School on Political Epistemology by Keele University and Jagiellonian University Krakow, 2020 'Deceit and Self-Deception' Internal Workshop at University of Genoa, 2020 Warwick Graduate Conference in Political and Legal Theory, and the 2020 Geneva Graduate Conference in Political Philosophy.

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Table of Contents

| | |
|---|-----------|
| Abstract | ii |
| Preface | iv |
| Acknowledgements | vi |
| List of Tables and Figures | xi |
| Introduction | 1 |
| 0.1. Synopsis | 1 |
| 0.2. Academic and Societal Relevance: An Epistemic Crisis of Democracy | 3 |
| 0.3. Theoretical Background..... | 7 |
| 0.3.1. The Social Epistemology of Testimony | 7 |
| 0.3.2. Epistemic Democracy | 11 |
| 0.4. Aims and Outline | 15 |
| 0.4.1. Research Questions | 15 |
| 0.4.2. Summaries Articles | 17 |
| 0.4.3. Some Helpful Definitions | 20 |
| 0.5. Conclusion | 21 |
| 0.5.1. Summary Contributions | 21 |
| 0.5.2. Directions for Further Research..... | 23 |
| 0.6. References..... | 25 |
| 1. Article 1) Public Credibility Dysfunction and Unreliable, Unsafe Political Beliefs | 30 |
| Abstract..... | 30 |
| 1.1. Introduction..... | 30 |
| 1.2. The Practice of Testimonial Exchange in Democracy | 33 |
| 1.3. How Public Credibility Dysfunction Undermines the Epistemic Status of True Political Beliefs | 36 |
| 1.3.1. Reliability..... | 38 |
| 1.3.2. Safety | 42 |
| 1.4. How Social Media Distorts Norms of Testimonial Exchange | 51 |
| 1.4.1. Self-selective Informational Structures: Epistemic Bubbles and Echo Chambers..... | 52 |
| 1.4.2. Bent Testimony on Social Media..... | 55 |
| 1.5. Conclusion | 58 |
| 1.6. References..... | 59 |
| 2. Article 2) Echo Chambers, Epistemic Injustice and Anti-Intellectualism | 63 |
| Abstract..... | 63 |
| 2.1. Introduction..... | 63 |

| | |
|--|------------|
| 2.2. Echo chambers, Structural Ignorance and Epistemic Injustice | 65 |
| 2.3. Testimonial Injustice from Identity Prejudice..... | 68 |
| 2.4. The Harms of Testimonial Injustice..... | 71 |
| 2.5. Can Advantaged Speakers Receive Epistemic Injustice? | 73 |
| 2.6. References..... | 76 |
| 3. Article 3) Testimonial Injustice Without Social Injustice: Rejection of Expert-Testimony as Morally Significant Epistemic Negligence | 79 |
| Abstract..... | 79 |
| 3.1. Introduction..... | 80 |
| 3.2. Theoretical Framework: Testimonial Injustice | 82 |
| 3.3. A Broader Account of Testimonial Injustice | 86 |
| 3.3.1. Testimonial Injustice Without Social Injustice | 86 |
| 3.3.2. What Is the Locus of the Injustice?..... | 91 |
| 3.3.3. Who Can Be a Victim of Testimonial Injustice? | 100 |
| 3.4. Rejection of Expert Testimony in Vaccine Hesitancy: Testimonial Injustice? | 103 |
| 3.4.1 Prejudicial Credibility Deficit..... | 104 |
| 3.4.2. Epistemic and Moral Harms | 114 |
| 3.5. Concluding Remarks..... | 116 |
| 3.6. References..... | 118 |
| 4. Article 4) Procedural Epistemic Democracy and Virtue-based Citizen Competence | 123 |
| Abstract..... | 123 |
| 4.1. Introduction..... | 123 |
| 4.2. Belief-based and Virtue-based Political Epistemic Responsibilities | 128 |
| 4.2.1. Epistemic Virtues and Vices in Democracy..... | 133 |
| 4.2.2. Avoiding Criticisms of Elitism | 137 |
| 4.3. Proceduralism Generating Political Epistemic Responsibilities | 139 |
| 4.3.1. Virtue-based Political Epistemic Responsibilities Based on Procedural, Moral Values .. | 140 |
| 4.3.2. Epistemic Normativity from a Pure Proceduralist View..... | 143 |
| 4.4. Concluding Remarks..... | 149 |
| 4.5. References..... | 153 |

List of Tables and Figures

| | |
|--|-----|
| Table 1 Epistemic Environmental Effects on Modal Condition | 49 |
| Table 2 Three Categories of Testimonial Injustice | 90 |
| Table 3 Boulton's Taxonomy of Political Epistemic Responsibilities | 126 |

Introduction

0.1. Synopsis

This cumulative dissertation comprises four articles that contribute to conceptual and normative philosophical research at the intersection between epistemology and political theory, i.e. political epistemology. One contributing factor to recent increase of research into this field is the state of contemporary public discourse. Current political debate appears heated, hostile, and is increasingly characterized by polarization over values, facts, and the grounds for knowledge. The spread of misinformation, disinformation, fake news and propaganda pollute the epistemic environment in which citizens attempt to gather political information. As it becomes more difficult to distinguish fact from fiction, citizens are struggling to determine which information sources to trust, and which to be cautious or sceptic of. Scientific consensus and expert testimony no longer carry the epistemic weight in public debate that they once did, as public trust in both the abilities and motivations of experts appears eroded. These problems are associated with what is often referred to as the ‘epistemic crisis of democracy’, reviving well-known concerns of voter ignorance and doubts regarding the epistemic merits of democracy. These concerns are amplified by the fact that much of our public sphere now exists online, where there is little epistemic oversight.

Recognizing that most of our politically relevant beliefs are testimonial based, and that testimony makes up a large part of the practice of political deliberation, this dissertation aims to answer the following research question: How does the contemporary (online) epistemic environment affect testimonial exchange of political information, and what are the implications of these changes for epistemic democracy?

Article 1 ‘Public Credibility Dysfunction and Unreliable, Unsafe Political Beliefs’ explores how what I term ‘public credibility dysfunction’ in the contemporary (online) epistemic environment fosters failures of testimonial exchange, and calls attention to epistemic

concerns not previously discussed in literature on the epistemic crisis. Article 2 ‘Echo Chambers, Epistemic Injustice and Anti-Intellectualism’ discusses the conceptual link between echo chambers and testimonial injustice, and shows how prejudiced credibility deficits can cause rejection of expert testimony in these problematic epistemic spaces. Article 2 has previously been published in the *Social Epistemology Review and Reply Collective* (2021, Volume 10, No. 6). The version in this dissertation is practically identical to the published version, only headings, referencing style and formatting are adjusted for reasons of consistency. Article 3 ‘Testimonial Injustice Without Social Injustice: Rejection of Expert-Testimony as Morally Significant Epistemic Negligence’ builds on article 2. It offers a broader account of testimonial injustice than typically acknowledged in the literature, and illustrates how this account captures certain cases of scientific consensus denial as testimonial injustice. Article 3 is currently under review at an international, peer reviewed journal. Article 4 ‘Procedural Epistemic Democracy and Virtue-based Citizen Competence’ offers a broader conception of citizen competence that includes virtue-based epistemic responsibilities, and argues that procedural accounts of epistemic democracy are capable of generating epistemic responsibilities for democratic citizens. Article 1 and 4 are currently being prepared for submission to peer reviewed journals.

In this synopsis I have provided a broad overview of the themes and format of this dissertation. The remainder of this introduction is structured as follows: Section 2 discusses in more detail the motivation behind this dissertation (i.e. its academic and societal relevance), namely; the so-called ‘epistemic crisis of democracy’. It explains how epistemic challenges in democracy are usually framed in the literature, and considers alternative venues for inquiry that have so far remained unexplored. Section 3 provides a short exposition of the two main theoretical backgrounds against which this dissertation positions itself (the social epistemology of testimony and theories of epistemic democracy), and explains how the conjunction between

these two research fields promises ample opportunity for generating innovative research insights. Section 4 formulates the research question and sub-questions that guide this dissertation, and summarizes the research articles. Some clarificatory remarks are included regarding the scope of these research questions. Section 5 consists of a conclusion that summarizes the main finding of this dissertation and provides suggestions for further research.

0.2. Academic and Societal Relevance: An Epistemic Crisis of Democracy

Recent scholarship in political epistemology has seen increasing concerns regarding a so-called ‘epistemic crisis of democracy’ (Hannon and Edenberg 2021:1). Democratic societies are necessarily pluralistic, and disagreement over values and preferred political outcomes are potentially fruitful input for deliberation. However, nowadays public discourse has become riddled with disagreement over facts. Moreover, people even seem to disagree over the epistemic standards we employ (Lynch, 2018). Scholars and political commentators have written extensively about the epistemic challenges generated by phenomena such as widespread misinformation, disinformation, belief polarization, fake news, conspiracy theories, propaganda, motivated reasoning and other cognitive defects. Especially worrisome appears the contestation of scientific consensus and the loss of epistemic authority of experts in public discourse (Moore 2017, Nichols 2017). Testimony of those who were once regarded by most as bearers of truth, is now received with suspicion and hostility by a significant portion of the citizenry. Many citizens are sceptical of the possibility to obtain information that is not corrupted by any political agenda (Zackariasson, 2018), as the truth-value of claims are seemingly evaluated based on gut feeling and group identities rather than objective evidence (McComisky, 2017).¹

¹ These epistemic challenges are sometimes grouped together under the notion of ‘post-truth’. I prefer not to use this term, as it seems to me that disputes over facts are significant exactly because people take their own judgements to be correct, i.e. true. Their beliefs regarding the truth of climate change, vaccine safety, the origin

Undoubtedly, (relatively recent) developments in communication technology have exacerbated the ability and readiness of citizens to question expert-testimony. Especially the introduction of the internet, social media platforms and later the smartphone, have drastically changed the way in which citizens receive, share and consume information. The incredible quantity and pace in which online content is being produced and distributed, enabled by these communication technologies, is a double-edged sword. On the one hand, it has made politically relevant information easily and instantly accessible to most citizens. This enables citizens to educate themselves on numerous issues. Yet despite having access to all this information, a significant segment of the population holds unwarranted or false beliefs on various politically significant topics (examples that take central stage in this dissertation are climate change deniers and vaccine hesitants). How is this possible?

The ability to instantly share information and interact with almost everyone online sounds like fantastic potential for enriching democratic debate. Indeed, modern communication technologies facilitate discussion [amongst different-minded citizens]. However, at the same time they pose significant threats to the public's grasp on objectively established facts (Kitcher 2006:1210). The internet has widened the audience of credible, educational content. Unfortunately, the same goes for non-credible sources, as the internet also enables the dissemination of false or misleading information. Contrary to traditional media, (most) contributions on the internet are not subjected to a vetting and editing process to prevent someone from (mistakenly) spreading false claims. Everyone can post blogs, commentaries or video's discussing current day political issues without any interference by epistemic gatekeepers - including on complex scientific topics. For some (if not most) of the information sources online, it is not transparent who created the content, what their credentials and

of Covid-19, all constitute (potential) reasons for how they behave and participate in politics. Given the risks involved in acting on faulty information in these cases, forming beliefs in this regard without sufficient epistemic reasons seems worrisome and irresponsible.

motivations are, or whether they are at all in a position to know the truth-values of the claims they make. For those who mainly consult the internet to educate themselves (and this is the majority), it is becoming increasingly difficult to distinguish fact from fabrication. Paradoxically then, the internet is both a place that enables access to reliable information, and an environment wherein epistemically questionable content thrives.

The resulting proliferation of epistemic deficits and challenges is disadvantageous for the performance of democracy. For one, citizens require credible information to make informed voting decisions. Second, citizens need access to credible information and news to adequately hold their government accountable. Unsurprisingly, concerns regarding the aforementioned epistemic challenges and contemporary political discourse have rekindled debates on the epistemic capacities of democratic citizens, putting pressure on the desirability of democracy. These worries are largely outcome-based, that is, they concern the extent to which a decrease of the epistemic quality of citizens' political beliefs negatively affects the quality of outcome of democratic decision-making. Given how policy making and political decision-making in modern democracies involves complex scientific issues, the contestation of expert knowledge and denial of scientific consensus are high on the list of concerns.

Note that I do not mean to imply that citizens should always believe experts and take their words for it –I acknowledge a healthy epistemic democracy leaves room for citizen's contestation, active scrutiny and critique of experts (Moore 2014:73). However, the epistemic challenges and forms of contestation I am referring to are radically at odds with exercising critical judgements in evaluating expert claims.

I acknowledge that a misinformed citizenry has problematic consequences. If people go to the ballot box and vote for policies on the basis of ignorance or false beliefs about the implications of these policies, they can cause serious harms to themselves and others. These potential consequences are morally significant and rightfully a cause for concern. However,

when it comes to the democratic decision-making process, I argue that what is democratically problematic about contestation of expert knowledge and denial of scientific consensus is not simply the political outcomes they generate. Rather, I believe the epistemic challenges of democracy signify deeper, underlying issues about how we evaluate each other's potential for valuably contributing to political deliberation. This suggests that features of the democratic procedure itself, rather than the outcome, are affected by the challenging epistemic environment – indicating potential procedural concerns for democracy.

I base this inkling on the notion that public discourse is, largely, a shared epistemic practice wherein citizens exchange and evaluate politically relevant testimony. The practice of testimony only functions well if speakers are given apt credibility appraisals, that is, if hearers can correctly determine which testifiers are trustworthy, and which are not. If hearers incorrectly give a testifier less (or more) credit than they deserve, they run the risk of believing an unreliable source.

One way to characterize what goes wrong (epistemically) when citizens attempt to gather information online, is exactly that citizens often fail to recognize the credible from the non-credible sources. In poor cases, they are unable to determine who they should trust. In worse cases, they end up trusting the wrong (i.e. unreliable) sources and consequently come to hold false or unwarranted beliefs. As Gloria Origgi puts it, the tremendous amount of information circulating on the internet has fostered some sort of “epistemic anarchism”, in which the claims of experts and laypersons are taken to hold equivalent epistemic weight (Origgi 2020:79). Of course, experts are not necessarily always right, and those without expertise are not necessarily always wrong. However, the fact that someone is an expert in a certain domain, makes their testimony on issues in that domain more reliable (all other things equal) than that of a layperson. This should be given some epistemic weight. In short, many of the epistemic challenges in contemporary online epistemic environments affect citizens' ability

to discriminate between credible and no-credible source, potentially causing them to end up with epistemically flawed political beliefs - including unwarranted beliefs regarding the truth-value of scientific consensus.

These erroneous credibility appraisals are the focus of this dissertation. I aim to provide a deeper understanding of the mechanisms that underly these erroneous credibility appraisals, as well as what this might imply for the epistemic status of our political beliefs (article 1-3). Additionally, I inquire how democracy can generate epistemic responsibilities for individual democratic citizens to prevent erroneous credibility appraisals (article 4). Recognizing the crucial role of testimonial exchange in the social practice of democratic decision-making, the four articles that comprise this dissertation all lie on the intersection between epistemic democracy and the social epistemology of testimony. I will briefly sketch the theoretical backgrounds that informed these papers, and afterwards explain why merging these two research fields harbours ample potential for generating innovative insights regarding the epistemic crisis of democracy.

0.3. Theoretical Background

0.3.1. The Social Epistemology of Testimony

Political deliberation is a shared epistemic practice. As Matthew Festenstein rightfully points out, the role of testimony and (epistemic) trust in democratic deliberation has long remained underexplored, but is a crucial part of social political inquiry (Festenstein 2009). This is in part because, as famously emphasized by John Hardwig (1985), most of our beliefs depend on the say-so of others. Without it, we would be deprived of knowledge regarding facts and events from which we are historically or geographically removed (e.g., I know the Berlin Wall came down in 1989, even if I was not there to witness it), nor would we be able to make much sense of issues that fall within domains of which we have no expertise (e.g. I know eating large

amounts of sugar is not good for my health, even if I lack the expertise to provide a detailed biological explanation). Because we cannot possibly possess the direct experience or expertise to verify the truth of all our beliefs, most of our beliefs are (to some extent) based on other people's testimony - by extension, the same goes for our politically relevant beliefs (or political beliefs for short). Especially in current day society, characterized by hyper specialization and an extensive distribution of epistemic labour, we increasingly rely on the testimony of others to inform ourselves on complex, politically relevant matters. i.e. most of our political beliefs are testimonial-based.

For clarity, let me emphasize here that when I speak of 'political beliefs', I mean beliefs regarding empirical, contingent facts that happen to be politically relevant because of its relation to policy making (e.g. beliefs regarding the proportion of greenhouse gas emissions between different industries or what the ingredients in MMR vaccines are, are politically relevant in as far as they provide information on which to base political judgements regarding environmental regulations and vaccine practices).

I employ Duncan Pritchard's interpretation of a testimonial-based belief as "any belief which one reasonably and directly forms in response to what one reasonably takes to be testimony and which is essentially caused and sustained by testimony" (Pritchard 2004: 326). This is a very broad definition, and some clarifications regarding its use in this dissertation are in order. First, I employ a broad interpretation of testimony, that includes not only verbal conversational exchanges, but includes other modes of 'telling' that aim to convey information. Letters, radio programmes, television broadcasts, blogs and other online content can all constitute testimony.

Second, I should clarify what kind of content of testimony falls inside the scope of my analysis. Expert advice or recommendations could reasonably be considered testimony, but since these are typically ought-statements, analysing it as grounds for testimonial based

knowledge becomes a bit trickier. In this dissertation, when I discuss expert testimony, I am not referring to expert judgment regarding the right course of action. Instead, I limit my analysis to what is arguably the simplest form of testimony, namely propositional content or knowledge claims regarding empirical, contingent facts. Expert advice then is relevant to the extent that hearers form beliefs about partial or implicit truth claims in that recommendation. E.g., imagine a paediatrician who recommends parents to vaccinate their child, and who further states that MMR vaccines are medically safe and denies any causal link between MMR vaccines and autism. What I am interested in is less so in whether the parents end up vaccinating their child, but more so in whether they believe the paediatrician's factual testimony regarding the latter two empirical statements. Of course, these empirical beliefs will influence whether or not the parents vaccinate their children, but I don't exclude the possibility that one might not vaccinate for other reasons, such as religious or even political ones. The choices people make in regards to vaccinations impact public health concerns, so I do want to emphasize that there is a moral concern involved with consequential behaviour as well. This is arguably what gives extra weight to the importance of forming epistemically sound beliefs about this topic, and what sparked my interest in such examples. Nevertheless, my theoretical focus is not on complacency with expert advice, or belief in what people ought to do, but rather on proper treatment of expert testimony regarding empirical facts.

Note also that this excludes knowledge claims about 'political truth' or the right course of action. For one, the possibility of political truth is highly contested, and even if one accepts that there might be a right political outcome, many political theorists agree that this is epistemically inaccessible to us. Moreover, such matters would fall inside a knowledge domain for which testimony is widely regarded as a theoretically problematic or insufficient source of knowledge (akin to the moral and aesthetic domain). In short, the epistemic challenges I am

highlighting in this thesis do not concern disagreements over political judgements, but rather disagreements about the empirical facts that underly citizens' political judgements.

Third, by testimonial-based beliefs I refer to those beliefs that are *primarily* based on testimony.² Beliefs are testimonial-based only if the hearer's belief is formed "*on the basis of the content of a speaker's testimony*" (Lackey 2010:73, italics in original). This excludes beliefs that are initially required through testimony but later verified through other sources of knowledge e.g. perception. I include in this category also beliefs that are based on inferences from testimony (for example: I tell you that p, and you already know that if p, then q. Even though I do not explicitly mention that q, in as far as your belief in q is based on my testimony that p, your belief in q is testimonial-based). Fourth, I should note the difference between testimonial belief and rational acceptance of testimony. When [immediate] action is required, acting on the propositional content of someone's testimony can signal mere acceptance (for example when the speaker has no alternatives available) rather than actual belief (Audi 2013:527). In this dissertation, I am concerned with cases of genuine belief based on testimony. Fifth, this dissertation is mainly concerned with cases of testimonial *transmission* of (true) beliefs and knowledge (as well as transmission of false beliefs), as opposed to testimony *generating* (true) beliefs or knowledge.³ Accordingly, when I talk about successful testimonial exchange, I assume the speaker to possess the knowledge in question. I also assume this to be the case in the instances of failure of testimonial exchange from experts to laypersons I discuss in this dissertation.

² For example, if I tell you that I have a sore throat, and you come to believe this upon hearing that my voice is raspy, your belief is not testimonial based but perceptual based. However, if I tell you that my throat is sore via text message, and you believe my word for it, your belief would be testimonial based – even though you might at a later stage gain additional perceptual evidence when we speak in person.

³ Traditionally, testimony is treated as a means to transmit knowledge (as opposed to generating knowledge). The so-called Transition Thesis (TT) hold two conditions: 1) TT Necessary: in order for the hearer (H) to come to know p on the basis of the speaker's (S) testimony regarding p, it is necessary that S knows p. 2) TT Sufficient: if S knows p, and H comes to believe p on the basis of S's testimony regarding p, that is sufficient for H to know p. Both of these conditions have been proven wrong (see Greco 2012, Lackey 2006). Nevertheless, in this dissertation, when I talk about successfully obtaining knowledge from testimony, I am referring to the standard case of S knows p and H comes to believe p based on S's testimony regarding p.

The epistemic practice of testimony is a crucial element of the epistemic division of labour in democracy, and an important part of the deliberative process. This dependence on other's say so in our (political) information gathering practices underscores the social characterization of knowledge acquisition. Correspondingly, testimonial trust plays a big role in determining which information we deem credible. The fact that we have so many information sources readily available to us makes the trust we place on other's testimony even more significant to our filtering mechanisms (Origi 2020). This is why the decline in trust in experts is so worrisome. In democratic terms, we might state that even if we think expertise should have equal political influence, differences in epistemic influence in the division of epistemic labour is only beneficial for public deliberation (Moore 2014). Through the theoretical lens of the social epistemology of testimony, this dissertation offers new ways of characterizing the epistemic challenges citizens face when gathering politically relevant information (online) and the problem of citizens not being able to distinguish credible from non-credible sources. This approach offers new perspectives on why this would be problematic for epistemic democracy, a theoretical framework I discuss in more detail below.

0.3.2. Epistemic Democracy

Epistemic democrats hold that democratic decision-making procedures are valuable due to their epistemic merit, or knowledge-producing capacities. Classic arguments in defence of this claim provide an *aggregative* interpretation of these epistemic merits, meaning that they deem democracy valuable in as far as the *voting process* tends to correctly determine the epistemically best outcome. The most well-known arguments of such kind employ the Condorcet Jury Theorem; a mathematical formula according to which an increase of participants to majority rule increases the likelihood that the correct outcome will be selected - provided all participants have a chance of $p > 0.5$ that they are correct (See e.g. Spiekermann and Goodin 2018). However, the last few decades have also seen an epistemic turn in the

deliberative tradition of democratic theory (Landmore 2017). This dissertation positions itself in the latter tradition. Contrary to aggregative democrats, deliberative democrats explicitly include public deliberation in their definition of the democratic decision-making process.⁴ Deliberation can be minimally defined as “*mutual communication that involves weighing and reflecting on preferences, values, and interests regarding matters of common concern*” (Bächtiger et.al 2018:3, italics from original). Note that I understand public deliberation in its broadest sense, including not solely (formal) deliberation in government chambers and reports from governmental and journalistic outlets, but also political discussions on talk shows, radio programmes, amongst friends and colleagues, through online blogs and social media, in popular newspapers and magazines, protests banners, etc. According to deliberative democrats, the function of public deliberation is to provide a justification of political decision-making outcomes (Gutmann and Thompson 2004:3, Bohman and Rehg 1997). Epistemic democrats may rephrase this in terms of a need for *epistemic* justification of the political power that is exercised (Lillehammer 2021:458). Following John Rawls, deliberative democrats were initially prone to maintain a position of what Joseph Raz famously called epistemic abstinence (Raz 1990), due to pluralism or the ‘fact of disagreement’ (Landmore 2017). However, deliberative democrats have become increasingly more explicit about the epistemic character and epistemic benefits of deliberation. After all, it seems that exchanging public reasons in the first place suggests that we are engaging in some form of collective epistemic inquiry (Marti 2006, Estlund and Landmore 2018:113). Aikin and Talisse (2019) capture this sentiment accurately when they state that the cognitive goal of deliberation is to come to rational political decisions. As they phrase it: “*Just as we individually aspire to believe in accordance with our best reasons, we collectively aspire to live together according to our best reasons*” (Aikin and

⁴ Note that including deliberation in the definition of democratic decision-making should not be read as it *replacing* the voting process. Aggregation of votes is still a part of the democratic decision-making on the deliberative account. The point is that aggregative democrats do not take proper deliberation to be relevant or necessary for establishing democratic legitimacy, where deliberative accounts do.

Talisse 2019: 35, italics from original). It bears emphasizing that the process of deliberation is continuous, in the sense that past decisions always remain open to evaluation, challenges and possibly revisions (Gutmann and Thompson 2004:6). Deliberation [regarding a specific social problem] doesn't necessarily stop after a decision is being taken. Political outcomes are in that respect always provisional. This continuous character implies that through public deliberation citizens can provide feedback [on political outcomes and their consequences] and demand accountability from legislators regarding previous decisions (Dewey 1981, Anderson 2006). By pooling and sharing information, arguments and political positions, participants come to reflect on and better understand their already held convictions, consider new ones and, where required, adjust their political beliefs according to the presented evidence and arguments. It is this social epistemic practice of inquiry, according to deliberative epistemic democrats, that enriches the epistemic quality of the political decision-making process. Moreover, epistemic deliberative democrats hold that democratic legitimacy is contingent on this epistemic justification.

So far, I've discussed epistemic democracy in general. Like democratic theories in general, we can distinguish between outcome-based (instrumental) and value-based (procedural) interpretations of epistemic democracy. Instrumentalist epistemic democrats maintain that democratic decision-making is (at least in part) valuable in as far as it tracks a *process-independent (epistemically) good outcome* (most notably defined by Joshua Cohen: 1986). The epistemic value of democracy on this account should thus be understood as 'truth-tracking' or in *veristic* terms. Note that instrumentalists are not necessarily committed to the claim that democracy *always* leads to good / the right outcomes. It is best conceived of as an *imperfect* decision-making procedure, with epistemic democrats claiming it is the best imperfect decision-making procedure available (List & Goodin 2001).

More controversially, Fabienne Peter (2009) has proposed a pure procedural account of epistemic democracy, which she terms *pure epistemic proceduralism*.⁵ On this account, political decisions are legitimate if they follow from deliberation under conditions of political equality as well as *epistemic fairness* (Peter 2008, Peter 2009). Furthermore, Peter suggests that the epistemic merits of democracy can be understood not only in veristic terms, but rather in *procedural* epistemic terms. (e.g. the epistemic value of *mutual accountability*, see Peter 2013).

Most epistemic democrats tend to be instrumentalists, and assume that pure procedural views cannot contribute much to discussions on epistemic normativity in democracy. Correspondingly, most of the literature raising concerns regarding contemporary epistemic challenges to democracy discuss the impact of these challenges on the epistemic outcomes, or in terms of veristic epistemic consequences (e.g. Brown, 2018). They look mostly at issues of citizens' ignorance, the spread of false beliefs and misinformation, and how this might affect the epistemic quality of the outcome of democratic-decision making (echoing concerns that traditional critics of democracy have raised against the involvement of non-informed individuals in politics - e.g. Brennan 2016, Somin 2013).

On the instrumental account, failure of testimonial exchange of knowledge (in particular in the case of expert-testimony) is problematic in as far as it spreads false beliefs and preserves ignorance amongst the electorate. These consequences are worrisome as they can undermine the truth-tracking potential of the democratic process. When experts systematically struggle to convey information regarding their fields of expertise, especially when this relates

⁵ We can also speak of hybrid accounts that contain both instrumental and procedural concerns (e.g. David Estlund's (2008) epistemic proceduralism, which Peter (2008) more specifically terms 'rational epistemic proceduralism'). However, since their treatment of the epistemic merit of democracy is purely instrumental, given my theoretical focus on epistemic democracy, I group such accounts here as instrumental.

to complex societal issues like vaccine practices or climate change, the loss of knowledge can become rather significant and impactful.

Combining the fields of epistemology of testimony and epistemic democracy seems fruitful because it opens up conceptual spaces previously unexplored in the literature on the epistemic crisis. First, it allows us to understand the epistemic crisis in democracy as a dysfunction in the practice of receiving testimony, whereby citizens seem to make many erroneous credibility appraisals of politically relevant information sources. Framing the epistemic challenges along these lines invites other ways to evaluate epistemic losses in the contemporary epistemic domain.

Second, notwithstanding the moral and epistemic significance of these consequences, something about this standard perspective on the epistemic loss and risks in contemporary political discourse strikes me as missing or ignoring an important part of the picture. By looking at the testimonial exchange in political deliberation, I aim to prompt thinking about the practice of giving and evaluating testimony as something that is subject to *procedural* epistemic standards. So understood, widespread challenges to testimonial exchange of knowledge might not just be instrumentally worrisome, but can also be seen as an indicator that citizens are not relating to each other as they should in fair democratic deliberation. I.e. it also invites questions on potential effects of the epistemic crisis on procedural democratic legitimacy.

0.4. Aims and Outline

0.4.1. Research Questions

This dissertation aims to provide a deeper understanding of the epistemic crisis of democracy, in particular contestation of expert-testimony, through the lens of the social epistemology of testimony. It poses some questions related to epistemic democracy and testimonial injustice that have so far received little attention. This direction of inquiry is captured in the following research question: How does the contemporary (online) epistemic

environment affect testimonial exchange of political information, and what are the implications of these changes for epistemic democracy? The following sub-questions are addressed in the separate articles, in this order:

1. What fundamental epistemic mechanism is failing in the epistemic crisis of democracy, and what kind of epistemic challenges does this pose to our political beliefs?
2. How do echo chambers foster rejections of expert-testimony, and can this be understood as testimonial injustice?
3. What structural features undermine credibility appraisals of experts, and can rejection of expert-testimony be understood as a testimonial injustice even if experts are an epistemically powerful group?
4. How does the epistemic crisis of democracy affect procedural democratic legitimacy, and what kind of individual epistemic responsibilities does this generate for democratic citizens?

Before summarizing the articles, let me mention some caveats regarding the aims of this dissertation: I should emphasize that this dissertation aims to provide *conceptual* and *normative* philosophical analyses. Through a novel perspective, it aims to deepen our understanding of several concepts and their implications. The dissertation does not include proposals for policy or institutional changes to rectify the problems it discusses – though it should be seen as a guide for locating problems to focus on (relating to credibility appraisal of political information sources).

This dissertation is an analytical philosophical research, applying insights from various philosophical disciplines. It utilizes tools from the epistemology of testimony to formulate questions that challenge some of the tendencies in the literature of epistemic democracy and

testimonial injustice, and draws conclusions based on reasoned argumentation. I should stress that the epistemological research in this dissertation should be understood as *applied epistemology*. In the same way that applied ethical research does not aim to settle debates in theoretical normative ethics, I do *not* take specific stances on high-theoretical epistemological issues (e.g. I do not defend a specific account of justification of testimonial based beliefs, nor do I entertain the possibility of radical scepticism regarding testimonial knowledge). I borrow relevant insights from such debates where appropriate, but solving high-theoretical disputes of this nature falls outside the scope of this thesis.

0.4.2. Summaries Articles

The first three articles of this dissertation are aimed at providing a deeper understanding of the epistemic challenges citizens are faced with when gathering political information (online). They are written with risks to epistemic democracy simpliciter in mind, and the issues raised are relevant both for instrumental as well as procedural interpretations of democratic legitimacy. The fourth paper explicitly frames the epistemic challenges discussed in the first three articles as concerns for a pure procedural account of epistemic democracy (notwithstanding that the issues pose problems for instrumental accounts as well).

Article 1, ‘Public Credibility Dysfunction and Unreliable, Unsafe Political Beliefs’, inquires where things go wrong for citizens when it comes to gathering information, and what kind of epistemic losses result from these challenges. It explains in more detail the role of testimony and the social character of (political) knowledge gathering. The paper borrows Sanford Goldberg’s (2011) distinction between two types of epistemic dependence (direct and diffuse), and in particular the concept of distributed credibility monitoring and policing, which can be understood as a mechanism by which individual epistemic actors depend on their wider epistemic community in making credibility appraisals. I introduce the term public credibility dysfunction to refer to a state in which that mechanism fails to the point where individual

members can no longer rely on their epistemic community in forming credibility appraisals. Public credibility dysfunction partially explains citizens political ignorance and the perceived increase of false beliefs. However, as I argue, the problem goes further and deeper than this: public credibility dysfunction undermines our ability to form *reliable* and *safe* true beliefs. In other words, for those who are neither ignorant nor misinformed about politically relevant issues, some epistemic loss still occurs due to public credibility dysfunction. I further illustrate how the way in which we communicate on social media contributes to this problematic epistemic environment.

Article 2 and 3 can be read as examples of how citizens come to make erroneous credibility appraisals due to public credibility dysfunction. Article 2, ‘Echo Chambers, Epistemic Injustice and Anti-Intellectualism’ looks more specifically at the conceptual link between echo chambers and Miranda Fricker’s (2007) conception of testimonial injustice. Testimonial injustice is typically understood as an instance whereby a hearer receives a credibility deficit based on an identity prejudice in the hearer. Amandine Catala (2021) has argued that in echo chambers, testimonial injustice can also result from epistemic prejudice – she mentions climate change deniers and anti-vaccination echo chambers as example. I argue that also vaccine denialism in these echo chambers can be caused by identity prejudice (against the social type of ‘being an expert’). I suggest that perhaps the prejudice against health-care experts, and experts more generally, is not just confined to the context of echo chambers. I further allude to the fact that this could have consequences for procedural democratic legitimacy. The former thought is further explored in article 3, the latter in article 4.

Article 3, ‘Testimonial Injustice Without Social Injustice: Rejection of Expert-Testimony as Morally Significant Epistemic Negligence’, aims to identify any structural features that undermine the credibility of expert-testimony, and offers a more comprehensive discussion on how we can conceive of rejection of expert-testimony as testimonial injustice. I

argue that Fricker's dichotomy of systematic testimonial injustice (based on prejudices rooted in social injustice) and incidental testimonial injustice (based on localized prejudice) ignores identity prejudices that are not merely local, yet neither rooted in social injustice. Accordingly, I propose a third category to capture such in-between cases, which I term *patterned testimonial injustice*. Moreover, I offer a broader interpretation of testimonial injustice, as an instance whereby a speaker is unfairly deprived of testimonial trust; i.e. they receive a credibility deficit due to the hearer's epistemic negligence of failing to correct for prejudicial distortions of perceptions of the speaker, in a context wherein the hearer has an ethical obligation to match their credibility appraisal to the available evidence. On my account, undeserved or prejudiced credibility deficits to expert-testimony can rightfully be called a testimonial injustice.

One could interpret the discussions of testimonial injustice in Article 2 and 3 as one explanatory factor regarding why expert-testimony is not given apt testimonial trust. On one reading, widespread testimonial injustice is *instrumentally* problematic for epistemic democracy, as it leads to epistemic losses in the form of ignorance, increasing false beliefs and (as shown in article 1) affecting the epistemic status of true beliefs. However, widespread testimonial injustice (in political debate) also entails procedural concerns for democratic legitimacy. After all, failings of testimonial exchange carry not merely epistemic losses, but affect the standing of participants in their capacity as hearers and speakers. Besides concerns regarding the content of knowledge that fails to be transmitted or fails to receive uptake, skewed testimonial practices unfairly affect who is heard and who is epistemically excluded (Sanders 1997, Young 2002, Dieleman 2015). That is, testimonial injustice can have an impact on (epistemic) democratic legitimacy.

Article 4, 'Procedural Epistemic Democracy and Virtue-based Citizen Competence' discusses what this might entail for individual epistemic responsibilities of democratic citizens. In doing so, I provide an argument in favour of expanding the dominant interpretation of

‘citizen competence’ by including what I term *virtue-based epistemic responsibilities* (VPERs) (as opposed to merely *belief-based epistemic responsibilities*). To illustrate how instrumentalist concerns can support VPERs, I discuss the example of a VPER of testimonial injustice. I further argue that such epistemic responsibilities are not merely generated by instrumental accounts of epistemic democracy, but can also be grounded in procedural accounts of epistemic democracy – provided they employ a procedural account of social epistemology.

0.4.3. Some Helpful Definitions

Throughout this thesis, the terms epistemic community, epistemic environment and epistemic group are often used interchangeably. For clarity, I will briefly discuss how I use these terms and explain the slight conceptual differences between them.

I use the term epistemic *community* in the broad sense in which it is commonly used in epistemology, namely to refer to a network of epistemic agents who are somehow engaged in a shared epistemic enquiry or are in any case dependent on each other in acquiring knowledge and other epistemic goods.

Note that this is different from how the term is often used in in political science, and specifically international policy making, wherein the term ‘epistemic community’ often refers to a definition introduced by Peter M. Haas, who states that: “An epistemic community is a network of professionals with recognized expertise and competence in a particular domain and an authoritative claim to policy-relevant knowledge within that domain or issue-area” (Haas 2009:3). Especially given the focus on expert testimony throughout this thesis, it is important to clarify that I don’t use this definition, and that when I speak of epistemic communities, I am not necessarily talking about expert-groups (unless I specify that I discuss the scientific or academic community, it can be assumed that a large part of the epistemic community consists of lay-persons).

The epistemic *environment* is the context in which the epistemic community operates, and constitutes “the totality of resources and circumstances relevant to assessing epistemically

interesting statuses” (Blake-Turner 2020: 9). This includes the availability and accessibility of experts, of conceptual and hermeneutical resources, the presence and functioning of epistemic institutions, infrastructure, common norms and practices and even epistemic traits of the community’s members. These epistemic structures and resources, as well as the distribution of and trust in those epistemic resources, determine how well individual members of the epistemic communities can perform, epistemically speaking (Levy 2023). Note that the composition of an epistemic community, i.e. the number and kind of epistemic agents it consists of, is part of what makes up the epistemic environment.

When I use the term epistemic *group*, I refer to a group of like-minded people, who share some fundamental beliefs regarding some topic (e.g., anti-vaxxers are an epistemic group in regards to their outlook on vaccine practices). As an epistemic group typically also functions as a (smaller) network of epistemic agents, it can also be seen as an epistemic (sub-) community. Given how epistemic groups, epistemic communities, epistemic environments are intertwined and influence each other, in practice, these terms are often used interchangeably.

0.5. Conclusion

0.5.1. Summary Contributions

This dissertation explores some unconventional research directions regarding the ‘epistemic crisis of democracy’, and the contestation of expert-testimony in particular. Utilizing tools from the epistemology of testimony, I have provided an alternative understanding of the epistemic challenges and failures of contemporary (online) epistemic environment in which citizens gather political information, captured by the term *public credibility dysfunction*. Where the literature on the epistemic crisis of democracy tends to focus mainly on epistemic consequences in the form of false beliefs and ignorance, I have shown that

public credibility dysfunction also affects the *safety* and *reliability* of our true beliefs – indicating that the epistemic crisis runs deeper than veristic consequences show.

I have argued for a broader understanding of the concept of testimonial injustice than is typically acknowledged in the literature, and explained how several instances of rejection of expert-testimony could be conceived of testimonial injustice on this account. Additionally, I have challenged certain tendencies in the literature on epistemic democracy regarding the legitimacy-grounds for epistemic concerns. I have offered an alternative understanding of citizen competence, that includes concerns for virtue-based epistemic responsibilities for democratic citizens. Furthermore, contra what is assumed in the literature, I have argued that procedural accounts of democratic legitimacy can generate epistemic responsibilities for democratic citizens. Correspondingly, I have illustrated how testimonial injustice poses a challenge to epistemic democracy both on the instrumental as well as procedural account.

The tendency to evaluate epistemic (social) practices according to the outcomes it produces can obscure deeper, underlying problems. As I hope to have shown in this dissertation, this outcome-oriented focus narrows our understanding of challenges to the epistemic process of knowledge gathering, but furthermore, it incorrectly suggests that all epistemic challenges to democracy can be captured by a consequentialist, veristic framework of social epistemology. Changes to our epistemic environment inevitably entail changes to our testimonial practices, i.e., it alters our standing towards each other as speakers and hearers. This, I claim, is the nexus of contemporary challenges to epistemic democracy. Not in virtue of its effects on the epistemic quality of democratic outcomes, but in virtue of the way it distorts our perception regarding the potential of others to contribute valuably to the shared epistemic enquiry that is political decision-making.

0.5.2. Directions for Further Research

An interesting further direction of research that this dissertation alludes to is an inquiry into the significance of knowledge for epistemic democracy. In article 1, I have argued that public credibility dysfunction can affect the reliability and safety of our true political beliefs. As I mentioned, this is worrisome for theoretical accounts of knowledge that require either safety or reliability as a necessary condition for knowledge. A further claim one could derive from this is to state that public credibility dysfunction undermines the *knowledge producing capacity* of democracy. To what extent is this problematic for epistemic democracy? Could this potentially undermine democratic legitimacy? Perhaps this worry is overstated. After all, most theories of epistemic democracy emphasize the role of *justified belief* in democratic decision-making rather than knowledge per se. Even if so, we are not out of the woods yet; some epistemologists understand reliability not as an alternative condition for knowledge, but rather as *part of* justification. Hence, we have reason of concern for the safety, reliability and (on some accounts) justification of our political beliefs. These risks undermine the extent to which people can acquire *political knowledge*. One might ask why this would be a problem for instrumental democrats. After all, as long as citizens hold true beliefs, and make decisions based on those true beliefs, this would most likely lead to good outcomes – regardless of whether those true beliefs are safe, reliable or even justified. However, for any plausible account of *epistemic* democracy, whether procedural, instrumental or hybrid, the epistemic merits of democracy we value entails more than the ‘truth’-value of political beliefs. Surely, political beliefs that are *merely* true cannot be a sufficient basis for an epistemic justification of democratic decision-making. That being said, there is a difference between democracies holding epistemic merit and them being *knowledge producing*. It remains unclear what the place of *knowledge* is in epistemic democracy, without the notion of knowledge being reduced to issues of truth or justification. Depending on how we understand the significance of

knowledge in epistemic democracy, some conceptions of knowledge might be deemed more fitting for epistemic democracy than others. Furthermore, on accounts of epistemic democracy that explicitly refer to *knowledge*-producing capacities of democracy as part of what makes democratic decision-making valuable, public credibility dysfunction poses a clearer threat to democratic legitimacy.

In article 2 and 3, where I discuss issues of testimonial injustice, I focus mainly on the epistemic conduct of the hearer and how they receive the testimony. Correspondingly, when in article 4 I talk about epistemic responsibilities for democratic citizens, I am focussing on individual epistemic conduct and suggest responsibilities of testimonial justice for the hearer. Note that ‘epistemic responsibilities for democratic citizens’ is here understood as requirements for a well-functioning epistemic democracy. When I suggest testimonial justice as a potential epistemic responsibility for individual citizens, I do not mean to claim that citizens bear sole responsibility for being testimonial just – nor do I claim that testimonial injustice can only manifest as an individual vice (e.g. Elizabeth Anderson (2012) proposes an understanding of testimonial injustice as an institutional vice). I am not giving an account of how the responsibility for ‘making’ testimonial just individual citizens should be divided. However, this would be a logical next step in a complete account of how we can respond to the problem of testimonial failures in democracy. One innovative, plausible account to tackle this question might be found in another nook of the epistemology of testimony. In article 1, footnote 6, I briefly mention the notion of the ‘credit view’ of knowledge, according to which one can only be said to ‘know p’ if they can be attributed some credit for truly believing that p. I further mentioned how Jennifer Lackey (2007) and Sanford Goldberg (2011) have remarked that, given the social character of testimony, this credit does not solely belong to those who gain the knowledge through testimonial exchange. It seems that in many instances also the speaker, as well other members from the wider epistemic environment, can be credited for the hearer

obtaining the testimonial knowledge. Side-stepping the theoretical question on whether or not the credit view as a notion of knowledge is correct, I suggest that the debate on who has credit for knowledge in testimonial exchange can aid in locating responsible agents (or institutions, or collectives) in instances where testimonial exchange of knowledge fails.

In conclusion, this dissertation has illustrated how tools from the epistemology of testimony can contribute much to the field of epistemic democracy. The intersection between these philosophical subfields promises plenty more fruitful directions or research.

0.6. References

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1. Article 1) Public Credibility Dysfunction and Unreliable, Unsafe Political Beliefs

Abstract

Recognizing the prominent role of testimony in our political belief formation, this paper analyses the current ‘epistemic crisis [in democracy]’ through the lens of the epistemology of testimony. Building on Sandy Goldberg’s (2011) concept of *distributed credibility monitoring* (via which hearers depend on their wider epistemic community in making credibility appraisals), I introduce the term *public credibility dysfunction* to refer to a state in which that mechanism fails to the point where hearers are severely frustrated in forming apt credibility appraisals. This phenomenon partially explains citizens’ ignorance and increasing false beliefs. Moreover, so I argue, it undermines the *safety* and *reliability* of our true beliefs. On several accounts of knowledge, this implies that public credibility dysfunction undermines our political knowledge gathering potential. I further illustrate how communication structures on social media contribute to public credibility dysfunction.

1.1. Introduction

Over the last few years, increasing scholarly attention has been given to issues of misinformation and disinformation, fake news, contestation of expertise and denial of scientific consensus. Such phenomena are also of significant interest to democratic theorists, and proponents of epistemic democracy in particular, given that the latter hold that a democratic decision-making process is valuable (partially) due to its epistemic merit. Hence why the problematic epistemic phenomena listed above are sometimes referred to as part of an ‘epistemic crisis of democracy’. It is widely acknowledged that these problems can at least in part be attributed to several features of the contemporary (online) epistemic environment and

specifically – as more recently argued – social media. Information overload, online anonymity and the personalization of search results make it more challenging for citizens to gather reliable political information. Resulting negative epistemic consequences that take central stage in the [democratic theory] literature are voter ignorance and the increase of false political beliefs. When I refer to political beliefs in this paper, I do not mean normative judgements of political outcomes. Rather, I am referring to politically relevant beliefs regarding empirical facts (e.g. whether climate change is real, of whether there exists a causal connection between MMR vaccines and autism). The fact that a significant portion of the population does not trust expert-testimony on these topics is, to say the least, concerning. This paper argues that these epistemic concerns deepen when we consider how (credibility-)norms of testimonial exchange for political beliefs get distorted in the online epistemic environment. As I aim to show, there is actually more at stake than people remaining or becoming misinformed on pressing political issues. In fact, even our *true* political beliefs are epistemically affected by the contemporary (online) epistemic environment.

Like most of our beliefs, political beliefs are to a large extent testimonial based. Accordingly, most of the epistemic losses that we see in contemporary democracy boil down to failures of testimonial exchange of knowledge, either due to lack of uptake of credible testimony, or erroneous uptake of non-credible testimony. In this paper, I therefore want to offer an analysis of the epistemic crisis of democracy using a theoretical framework of the social epistemology of testimony. As I argue, this approach allows us to consider a problematic epistemic consequence that has not received much attention in the literature on epistemic democracy. Within the contemporary epistemic environment, our testimonial-based political beliefs, even if true, have become *increasingly unreliable*. Furthermore, unreliable practices of testimony indicate *a loss of belief safety*.

To show how, I will first say more about the role of testimony in our formation of political beliefs. I use Sanford Goldberg's (2011) notion of *diffuse epistemic dependence* to explain how the epistemic quality of our testimonial-based beliefs depend (at least in part) on features of the epistemic community we find ourselves in - underscoring the social character of our knowledge gathering practices. This happens mostly through what Goldberg calls *distributed credibility monitoring*, that is: the mechanism whereby we take cues from our epistemic community in determining which (type of) testifiers are (typically) reliable. I introduce the term *public credibility dysfunction* to refer to a state in which the distributed credibility monitoring fails to the point where members of the epistemic community can no longer make reliable evaluations regarding the trustworthiness of politically relevant testimony.

Second, I argue that public credibility dysfunction is problematic not only because it causes false beliefs and preserves ignorance, but furthermore, because it affects the epistemic status of our true political beliefs. If features in our epistemic environment hinder our ability to make apt credibility appraisals (i.e., it makes it harder to distinguish reliable from unreliable testimony), this undermines the reliability as well as the safety (i.e. modal condition) of our true testimonial-based political beliefs.

Third, given the fact that social media plays a significant role in citizen's information gathering online, I discuss how distributed credibility monitoring is hindered by such online platforms. I argue that there are certain features inherent in communication practices on social media that distort norms of testimonial exchange, and thereby contribute to public credibility dysfunction. Most notably the self-selective network-functioning leading to epistemic bubbles and echo chambers (Pariser 2011, Nguyen 2020), the gamification of communication (Nguyen 2021, Alfano and Sullivan 2021), and the ambiguousness of testimonial intent (Rini 2017),

make it difficult to evaluate someone's testimonial track record. This thwarts public credibility monitoring and contributes further to public credibility dysfunction.

By introducing the notion of public credibility dysfunction, this paper aids our understanding of some prominent epistemic challenges in contemporary political discourse, and offers a partial explanation of widespread ignorance and false beliefs. Furthermore, it suggests a subsequent latent problem that receives little attention in the literature, which is the *undermining of reliability and safety of our true political beliefs*. On some accounts, this amounts to undermining our ability to have politically relevant *knowledge*.

1.2. The Practice of Testimonial Exchange in Democracy

Most democratic theorists agree that democracy performs better when citizens are well informed. To the extent that it determines how knowledge is produced and disseminated, the epistemic merit of democracy depends on an extensive and sophisticated division of cognitive labour (Bohman 1999, Christiano 2012). Especially in modern democracies, wherein many of the political questions involve intricate technological and scientific issues, and the division of epistemic labour is increasingly characterized by hyper specialization, we increasingly rely on the say-so of others to inform ourselves on complex, politically relevant matters. Our political beliefs are thus, to a large extent, *testimonial-based beliefs*, and any political knowledge we might have is typically *testimonial-based knowledge*.

The exact requirements for testimonial-based knowledge are subject to extensive academic debate, but most epistemologists of testimony do agree that successful transmission of knowledge through testimony at the very least requires the speaker to be reliable or trustworthy, i.e. that they are competent to testify on the topic, and are sincere in their testimony. This brings us to what John Hardwig (1985) famously termed *epistemic dependence*, and Goldberg (2011) more specifically calls *direct epistemic dependence*: the epistemic quality of the hearer's testimonial belief is directly depended on the epistemic

perspective of the speaker. If the latter is not in a great position to know, or is being insincere, their testimony is not reliable, which in turn affects the epistemic quality of any belief based on their testimony. In other words, the epistemic quality of citizen's political beliefs depended largely on citizens' ability to distinguish credible from non-credible sources. In David Coady's words, before we can answer the question "What should we believe?", often, we first have to address the question "Who should we believe?" (Coady 2012:27).

The internet has made expert-testimony instantly available to most citizens. You might expect that this lowers the risk of 'skewed' testimonial uptake, as it limits the length and complexity of testimonial chains in transferring knowledge. But large segments of the population have beliefs that do not align with scientific consensus regarding prominent political issues, e.g. climate change or vaccine safety. Why is it that these citizens do not believe expert-testimony, or rely on other sources instead? This answer goes beyond mere features of the speaker and hearer.

This dependence on the say-so of others underscores the social character of knowledge acquisition. But the social aspect goes beyond mere direct epistemic dependence. Contrary to what traditional epistemology suggests, it is not just the epistemic perspectives of the speaker and hearer that influences the epistemic quality of the testimonial belief. Our ability to reliably discriminate between testimonies, and hence the epistemic status of our testimonial-based beliefs, is dependent on the quality of the epistemic community we find ourselves in. This is what Sanford Goldberg (2011) refers to as *diffuse epistemic dependence*. Crucially, diffuse epistemic dependence entails that changes in our epistemic environment can change the epistemic status of our testimonial-based beliefs – even if the epistemic properties of the hearer and speaker stay the same (Goldberg 2011:113).⁶

⁶ According to Goldberg, this picture of epistemic dependence supports criticisms against the credit view of knowledge (Goldberg 2011:121). As Jennifer Lackey (2007) has argued, in some cases it is more so the speaker than the hearer who deserves credit for successful testimonial knowledge transmission. Although he doesn't take a stance one way or the other, Goldberg acknowledges that the case of diffuse epistemic dependence might

A lot of our potential for successfully discriminating between reliable and unreliable testimony comes from what Goldberg terms the process of *distributed credibility monitoring and policing* (Goldberg 2011:117). Simply put, the mechanism works like this: in a properly functioning epistemically community, when members encounter testimony [on important political issues], they scrutinize its credibility. They look for potential reasons to doubt or trust the testimony, and on this basis form a judgement regarding the trustworthiness of the speaker. Where appropriate, they are outspoken about their credibility appraisals. In this way, the people ‘downstream’ from the testimonial exchange don’t have to do all the ‘vetting’ and evaluating from scratch themselves. In ‘healthy’ epistemic communities, unreliable information gets filtered out through remote monitoring and policing, making the chances that one encounters false testimony in the first place less likely. In this way, members of the community benefit from the epistemic labour from those who encountered the testimony before them. Ideally then, distributed credibility monitoring unburdens de individual epistemic agent.

In a healthy epistemic community, the distributed epistemic labour not only functions to filter out unreliable testimony, it also aids in providing sufficient coverage. That is, we not only depend on our community for determining the quality of testimony, but also for epistemic agenda setting (i.e. deciding what epistemic enquiries are worthy to pursue) and for enabling venues to effectively disseminate valuable information. More generally, the norms of distribution of testimony can vary according to our epistemic community. This influences what type of testimony is available, as well as the speed in which it travels (Greco 2020:25). Although these mechanisms are in practice often intertwined, in this paper, I want to focus specifically on the distributive credibility monitoring.

actually suggest that the distribution of credit goes far beyond just the hearer and speaker. For an interesting defence against Lackey’s objecting to the credit view, that still acknowledges the social character of knowledge, see Benjamin McMyler 2012. McMyler argues that the hearer is still deserving of credit in as far as they obtain their testimonial knowledge through “a distinctive and irreducibly social cognitive ability” (McMyler 2012: 348), namely the ability for “taking it on good authority” (McMyler 2012: 346).

I introduce the term *public credibility dysfunction* to refer to a situation wherein the process of distributed credibility monitoring fails to function properly, such that members of the epistemic community cannot rely on their epistemic environment in determining who they should trust. That is, something has gone wrong in the scrutinizing and evaluation process. As a result, non-credible or suspect testimony doesn't get filtered out properly, and credibility appraisals are (systematically) flawed or erroneous. In my understanding, public credibility dysfunction lies at the heart of many of the epistemic concerns mentioned at the outset of this paper. Widespread and systematic erroneous credibility appraisals of political information sources can explain much of the widespread ignorance and increasing false beliefs. But to what extent exactly can it affect the epistemic status of our political beliefs? Do these effects also fall on those who are not (yet) misinformed? In the following section, I look beyond concerns of ignorance and false beliefs, and discuss two epistemic values at risk under conditions of public credibility dysfunction, which are not often discussed in the literature on the epistemic challenges of contemporary political discourse.

1.3. How Public Credibility Dysfunction Undermines the Epistemic Status of True Political Beliefs

To recap the previous section: the epistemic status of our testimonial-based beliefs depends not only on epistemic properties of the hearer and speaker, but also on features of the wider epistemic community in which we conduct epistemic enquiries. Public credibility dysfunction refers to a state wherein distributed credibility monitoring does not function properly. In as far as this thwarts citizens' ability to discriminate between credible and non-credible sources, it affects the epistemic status of our testimonial-based beliefs. This applies also to political beliefs. Making erroneous credibility appraisals regarding sources of political information leads to undesirable epistemic consequences: it preserves ignorance, leads to an

increase of false beliefs, and overall obstructs the transmission and dissemination of knowledge. These consequences are quite significant in their own right, and it is not surprising that the literature dealing with the epistemic challenges to democracy has mostly focussed on these problems. That said, I want to propose that public credibility dysfunction additionally causes other types of epistemic losses. I argue that it does not only prevent citizens from acquiring true political beliefs, but moreover, it affects the epistemic-status of the true political beliefs they do hold.

Here I build on Goldberg's (2011) claim that factors from the broader epistemic environment can affect the epistemic status of our beliefs. To illustrate this point, he asks us to imagine two epistemic agents, who are otherwise identical but find themselves in different epistemic communities: *Happy*, whose epistemic community consists of "*knowledgeable and outspoken people*", and *Unhappy*, whose epistemic community consists of "*lazy, uncritical people*" (Goldberg 2011:120). Happy enjoys the benefits of well-functioning distributed credibility monitoring whereby unreliable testimony gets flagged and filtered out. In Unhappy's community, unreliable testimonies remain undetected as such, and continue to circulate like regular testimony. Happy will fare better in knowledge acquisition than Unhappy, in virtue of their epistemic community, in two ways: Given that they are less likely to encounter unreliable testimony, and hence the epistemic quality of the testimony received is overall better, Happy will gain a higher percentage of true beliefs. Moreover, even if both Happy and Unhappy gain true beliefs, from an equally credible source, the epistemic status of their true beliefs differ in virtue of differences in their environment, i.e. differences in knowledgeableness and outspokenness of their community members (Goldberg 2011:121).

In the remainder of this section I discuss in more detail how public credibility dysfunction affects the *reliability* and *safety* of our true political beliefs. For those accounts of knowledge that take either reliability or safety as a necessary condition for knowledge, this

further implies that public credibility dysfunction thwarts our ability to gain knowledge regarding politically relevant information. I do not aim to compare or defend these accounts of knowledge in this paper – I mainly refer to them to indicate that a loss of safety or reliability of true beliefs appears quite significant on some accounts. In what follows, I briefly introduce the notions of reliability and safety, and illustrate how public credibility dysfunction undermines them.

1.3.1. Reliability

Reliabilism is an account of knowledge or justification that places emphasis on the truth-conduciveness of the used method of belief formation.⁷ In this paper, I always refer to the most common form of reliabilism, namely: process-reliabilism. In broad terms, process-reliabilism holds that:

S knows p, iff p is true, and S's belief in p is produced via a reliable process.⁸

The same goes for testimonial-based belief: testimonial-based belief in p needs to be true and be obtained through a reliable process of testimonial exchange in order to count as testimonial knowledge. This means first, that the speaker is a reliable source of information (they are in a position to know and they are typically sincere in their testimony), and second, that the hearer has a reliable ability to distinguish between credible and non-credible information.

Regrettably, even if people are reliable hearers in general, meaning that they can typically discriminate between credible and non-credible sources, they can nevertheless be unreliable hearers *locally* (Greco 2007). That is, in certain specific contexts and domains, where they lack sufficient background knowledge and/or cues for recognizing trustworthiness, hearers can have a hard time determining which sources to trust. Even when such hearers

⁷ Most notably defended in Goldman 1979 (re. justification) and Goldman 1986 (re. knowledge).

⁸ Note that reliable indicates that the process *typically* leads to true beliefs. It need not be a perfect process.

receive testimony from a reliable speaker in that domain, in an epistemic environment wherein unreliable testifiers are lurking also, the unreliable hearer might have just as easily believed someone else. In this context, their ability to distinguish between credible and non-credible sources is not reliable (Greco 2007: 337). This makes it difficult for otherwise reliable hearers to gather testimonial knowledge about certain topics for which one requires experience or background knowledge that the average person lacks. This is the case for specialized scientific topics, i.e. complex politically relevant issues such as climate change or vaccination practices. So how are we able to gain reliable beliefs about such topics? Consider this example:

JUDY: Judy is doing online research about climate change. She happens to stumble upon a blog from a credible scientist, who testifies – referring to results from valid and credible research methods – that climate change is real. Judy has no expertise on the matter, and barely any knowledge. She cannot determine whether the research results presented to her are plausible or accurate. Nevertheless, she trusts the source and ends up believing that climate change is real. However, had the scientist testified that climate change was a hoax instead, she would have believed him too.⁹

If Judy is unable to reliably distinguish credible from non-credible testimony regarding climate change, how can she possibly gain testimonial knowledge on the topic? John Greco (2007) introduces the notion of *socially approved sources* to explain how such hearers are able to gain testimonial knowledge.¹⁰ Socially approved sources are reliable sources of testimony in virtue

⁹ JUDY is a slightly adapted version of the example MARY in Greco 2007:338.

¹⁰ Greco's (2007) notion of socially approved sources builds on Goldberg's (2008) notion of *epistemic caretakers*. Goldberg introduces the notion of epistemic caregiver as a solution to a challenge against reductionism (the view that testimony is reducible to other sources of knowledge such as rational inference, rather than testimony being a distinct source of knowledge). The objection calls attention to the fact that reductionism has a hard time explaining that children can gain knowledge from testimony, since they have not yet developed the capacity to

of their social status, or special social role. This category includes teachers, parents, experts, journalists, etc. Even if we are not locally reliable hearers, forming beliefs on the basis of testimony from socially approved sources is to *act as* a reliable hearer –as believing socially approved sources is generally a reliable process, at least within reliable social practices. By seeking out the assistance of socially approved sources, we are thus able to gain knowledge from domains we wouldn't be able to gain knowledge from if we only relied on our own ability as hearers. Note that this shouldn't be understood as implying that the social status of the testifier is enough to qualify resulting testimonial-based belief of the hearer as knowledge. First, other factors regarding the speaker and their environment can influence the epistemic status of the testimonial based-belief of the hearer. There might be reasons for doubting the socially approved source's credibility despite their social status, e.g. when we suspect a speaker has reasons to deceive us. Second, the social status of the socially approved sources needs to be established in a *reliable* social (epistemic) practice. This second condition will prove important later in this section.

Considering again Judy's case, we can state that the scientist has a special cognitive status in the context of a reliable social practice (Greco 2007). Correspondingly, in virtue of the source of testimony being an expert, Judy learns about climate change through a *reliable process* of gaining testimonial belief. Because Judy believes the testimony of a 'socially approved' source, in a reliable social practice, we can rightfully say Judy has not just mere true belief, but knowledge regarding the truth of climate change. Note this knowledge status is

properly discriminate between credible and non-credibly sources – yet at the same time, we want to say that children can gain knowledge from testimony, e.g. from their parents or teachers. Goldberg compares the assistance of epistemic caregivers to children forming testimonial belief, to someone with a learner's permit being accompanied by an experienced driver: bringing an experienced driver along is the beginner's way of acting as a responsible driver, in the same way that relying on epistemic caretakers is the underdeveloped or unskilled hearer's way of acting as a responsible hearer.

contingent on including social roles of the testifiers in the specification of processes of knowledge acquisition (Greco 2007: 344-346).¹¹

Now that we have a broad understanding of how reliable belief can be achieved through testimony (even in contexts in which we are locally unreliable hearers), we can ask how public credibility dysfunction poses a problem for the process-reliabilist. I argue that two potential problems might arise. First, since public credibility dysfunction affects the ability of citizens to make apt credibility appraisals, they are at higher risk of mistakenly trusting a non-credible source. In other words, public credibility dysfunction makes it difficult for members of the epistemic community to recognize socially approved sources. Even if they end up with true beliefs, say from a non-credible source who happens to utter correct propositions, the process through which they obtained those beliefs is not reliable in virtue of the unreliability of the speaker.

Second, public credibility dysfunction implies that the epistemic environment itself has become unreliable. Recall that on Greco's account, socially approved sources can only be a source of testimonial-based knowledge if they are socially approved by a *reliable* epistemic community. A community that is characterized by public credibility dysfunction, i.e. by flawed distributed credibility monitoring, runs the risk of erroneously assigning epistemic social status (or high credibility appraisal simpliciter) to sources that actually do not provide very reliable testimony. Consequently, under such conditions, even if one ends up believing a socially approved source, their belief forming process is less reliable than it would have been if it was formed in an epistemic community in which distributed credibility monitoring functions properly.

¹¹ This specification is opted by Greco in response to the 'generality problem for reliabilism', or the question of how to type the belief forming process, when multiple descriptions and potential specifications are available.

1.3.2. Safety

Having considered reliability as an epistemic value at risk in public credibility dysfunction, I now want to turn to potential effects on the modal status of our beliefs. According to proponent of the modal condition for knowledge, S knowing p requires not only that S has a true belief, but further requires S to *not accidentally correctly believe* p and for p *not to be accidentally true*. The most well-known conceptualizations of the modal condition for knowledge are sensitivity¹² and safety¹³, with the latter enjoying more academic support than the former. How to exactly understand these conditions is a much-debated question, and I don't aim to settle this debate here. For reasons of brevity and clarity I will utilize the broad notion of safety, without excluding specific theoretical interpretations of this principle – nor do I exclude that a similar argument can be made using the notion of sensitivity.

According to the safety principle, knowing that p entails that one safely believes p. S has a safe belief only if S would not have easily falsely believed p. In modal terms this is understood in the following way:

S has a safe belief in p iff in a nearby possible world wherein p is false, S would not believe p.

Some ambiguity remains about what exactly makes a world nearby or close, but we can in any case state that this is a matter of degree. The more initial conditions have to be altered in the counterfactual world for p to be false, the further away that world is. Just as a possible world can be closer and further away, beliefs can be more or less safe.

Now, if we accept safety as a relevant condition for knowledge, we can make the following inference: If testimonial knowledge is knowledge, and knowledge is (at least) safe true belief, then it follows that *“testimonial knowledge is (at least) true belief held on a safe*

¹² Most notably Nozick 1981.

¹³ E.g. Sosa 1999, Pritchard 2007, 2009, and Williamson 2000. See Christoph Kelp 2009 (section 1-2) for an argument that equates Sosa's and Williamson's account with Pritchard's 'possible world' account.

basis” (Graham 2016:172). Public credibility dysfunction affects safety of our *true* testimonial-based political beliefs in two ways, which I discuss in more detail below. First, in an epistemic community characterized by public credibility dysfunction, non-credible sources are more often believed than in epistemic communities with proper functioning credibility monitoring. Second, even when in the actual world, one has a testimonial belief based on a credible source, the possible world in which one believes a non-credible source or fails to believe the credible source is closer under conditions of public credibility dysfunction than it is in a healthy epistemic committee. To see how the reliability of sources can influence whether testimonial based true beliefs are safe, imagine the following case;

ALEX: Alex is reading a credible newspaper. The frontpage reports the true finding that candidate C has fallen down the stairs and has to spend several nights in the hospital. Alex knows that this particular newspaper is a credible source of information, and they are thus justified in accepting the testimony regarding C’s whereabouts that night. Alex has a testimonial based true belief that the candidate spent the night in the hospital.

Testimonial beliefs that are based on reports from credible newspapers are, all things being equal, safe. This point draws upon an example from Pritchard (2009): according to Pritchard, when one forms a belief that one lost the lottery based on the testimony of the winning numbers from a credible newspaper, that belief is safe. The idea is that since credible newspapers go through a rigorous editing process, and that editing process needs to really go astray for the erroneous numbers to be printed, the initial conditions need to be changed significantly for the error to occur and not be caught before going to print.¹⁴ As he states, “there is no near-by possible world in which the reliable newspaper misprints the lottery result...” (Pritchard 2009:

¹⁴ Pritchard contrasts this to a scenario in which one forms this true belief based purely on reflection of the low probability of winning the lottery. In a nearby possible world in which one does win the lottery, one could have easily falsely believed (by reflection only) that they lost the lottery, and hence that belief would not be safe.

36).¹⁵ The same can be said for politically relevant news: there is no nearby possible world in which the paper had erroneously printed that the candidate spend the night in the hospital, making Alex's belief safe.¹⁶

Now contrast ALEX with another case;

ROBIN: Robin is reading a fake-news article; however, this article is so convincingly disguised as a genuine news outlet, that Robin cannot distinguish it from a credible source. Even though they are mistaken in that judgement, they have justification for believing the source. The article describes how C shows all the signs of having some mental illness X that significantly hinders her abilities to govern. The article further describes how C had to be medicated after a mental breakdown, and that she had to spend the night at the hospital. The mental illness in this article is completely made-up, either to gain clicks or to convince people that C is not a fitting candidate. Incidentally, and unbeknownst to the writers of the article, C happened to have fallen down the stairs the previous night, and had to spend the night in the hospital. Robin holds a true belief that C is spending the night in the hospital.¹⁷

¹⁵ It should be noted that several authors have pressed Pritchard on this point, claiming that the world wherein the paper prints such an error is not that far-off from the actual world – in which such mistakes do happen (e.g. see McEvoy 2009, Priest2020).

¹⁶ Note that due to the internet and a lot of news being freely accessible online, newspapers lose members and advertisement revenue, leading to budget cuts that affect the quality vetting and reporting. Additionally, the fact that news is now expected to be online within minutes of reaching the news agency, rather than being published in print the next morning, makes it more likely for errors to occur in the reporting of (breaking) news stories. In fact, many online published articles don't get properly edited until after they are online. Arguably then, in a way, our testimonial beliefs based on reliable newspapers report might be less safe in the internet era than they were before. However, this is not the issue I refer to when I state that public credibility dysfunction even affects the safety of testimonial beliefs based on credible sources. The world wherein reliable news outlets report falsehoods might be slightly closer than before, but this vulnerability (which applies mainly to typo's and relatively insignificant facts) is less pressing than the problem I want to highlight here. The important thing is that testimonial beliefs based on reliable news articles are in any case safer than those based on unreliable sources such as fake news articles.

¹⁷ Such justification is arguable dependent on taking an internalist approach. If Robin can be excused for not realizing that the source was not reliable, from her perspective, she was justified in believing the testimony regarding C's mental health and whereabouts.

Robin believes the same true fact as Alex, regarding the whereabouts of C the previous night. However, fake news articles are not like credible newspapers. The possible world in which the fake news article reported this falsely, is very nearby. If C hadn't been in the hospital that night, the fake news article would have testified the same thing – after all, fake news articles are not fact-responsive. Consequently, Robin's true belief that C is in the hospital that night is thus not safe, and hence doesn't constitute knowledge. The crux is that public credibility dysfunction causes more people to end up in a situation like Robin, wherein they believe the testimony from non-credible sources. Even the true beliefs they derive from these non-credible sources are not safe, and therefore do not constitute knowledge.

Even if this is true, one could argue that the amount of people who gather information in the way that Robin does is not that high – and that we shouldn't exaggerate the problem. This is an empirical question, of course, and one that I don't address here. The more pressing point I want to make however is how public credibility dysfunction can even affect the modal status of our true political beliefs that *are* based on credible sources. To see how, compare the following examples of ALEX+, SAM and SAM 2.0:

ALEX+: ALEX+ is mostly identical to ALEX: they consult a credible newspaper and learn from its testimony that candidate C spent the previous night in the hospital. The difference is that for ALEX+ we have some more information regarding their wider epistemic community: Alex+ lives in a relatively healthy epistemic community A. In virtue of a functioning public credibility monitoring, much non-credible testimony gets filtered out, and it is relatively easy for Alex+ to distinguish credible from non-credible sources.

Alex+ has a true justified belief that C spent the night in the hospital. There is no nearby possible world in which the credible newspaper reports this fact incorrectly. Furthermore, because of the functioning public credibility monitoring, there is no nearby possible world in which Alex would trust a non-credible source instead, or in which he fails to believe the credible source. All things being equal, Alex+'s true belief that C spent the night in the hospital is safe.

SAM: Sam is less lucky than Alex+: Sam has to undertake their epistemic endeavours in a relatively unhealthy epistemic environment, characterized by information overload, widespread misinformation, and moreover: public credibility dysfunction. As a result, Sam is very confused regarding the credibility of the sources they encounter when gathering politically relevant information. As it so happens, Sam ends up consulting a credible source, and forms the correct belief that C spent the night in the hospital (because they fell down the stairs).

On first sight, SAM is similar to ALEX and ALEX+: Sam has a true belief, based on a credible source. One would think that their belief that C spent the night in the hospital is therefore safe. However, the fact that Sam has to operate in a different epistemic environment effects the safety of their belief. Due to public credibility dysfunction, Sam cannot effectively distinguish between credible and non-credible sources. Consequently, we can imagine a nearby possible world, wherein Sam ends up believing a non-credible source that reports $\neg p$ instead - or even a nearby possible world wherein p is false, yet Sam trusts an non-credible source instead and falsely believes p . Because he does not have the ability – or more precisely, he lacks the environmental means– to recognize which sources are credible, the fact that Sam believes a

credible source and forms a true testimonial belief, is only accidentally the case. Their true belief that C spent the night in the hospital is not safe.

Even if one does not want to commit to the idea that the possible world in which Sam believes a different source instead is a *nearby* possible world, one can at least see how their problematic epistemic environment makes that world *closer*. More initial conditions have to be altered for Alex+'s credibility appraisal to go astray than for Sam, who could have easily gotten it wrong. Sam's belief regarding p is therefore less safe than Alex+'s belief, as Alex+ was able to more reliably distinguish the credible source from the non-credible one. It thus seems noncontroversial to state that the world in which Sam believes a non-credible source, and hence the world in which they falsely believe p, is at least *closer* than the world wherein Alex+ believes the non-credible source.¹⁸ Both Alex+ and Sam hold a true belief regarding C's whereabouts, based on credible sources. However, due to differences in their epistemic environment, Alex+'s belief is at least *safer* than Sam's.

One could object to this line of thought by pointing out that even if the world in which Sam is wrong is relatively nearby, this has no effect on the safety of their belief. This is because someone's belief is deemed safe if they wouldn't falsely believe p in a nearby world *using the same belief-formation method* as in the actual world. By chance believing a credible source in the actual world, compared to ending up believing a non-credible source in the counterfactual world, might seem like a slight alteration of the initial conditions. However, forming a testimonial based belief on the basis of non-credible testimony can be said to constitute a different method of belief formation than basing a testimonial based belief on credible testimony.

¹⁸ Luck-epistemologists might say that Sam is luckier to end up believing the credible source in comparison with Alex+.

One way to respond to this objection is to state that this is a matter of how general we take the description of the method to be. If we describe Sam's method in the actual world as 'consulting a credible source' and in the counterfactual world as 'consulting a non-credible source', the safety-condition doesn't really apply since this has to be relativized to the method of belief formation. However, we might also give a broader description of Sam's method as 'consulting online sources' – e.g. Then again, one could simply argue that this description is not precise enough.

A second way around this objection would be to adopt an internalist view regarding the method of knowledge gathering. On this view, since Sam's individual *experience* of the method employed is identical in both worlds, we can say that in the counterfactual world Sam employs the same belief-formation method even if he in fact consults a different source (after all, in the nearby possible world they do not choose to consult a non-credible source, but he mistakenly thinks the source is credible). But this is not a very satisfactory response, since the whole point of this analysis is to show how environmental features can affect the safety of belief, if the agent does everything right. That said, there is a way to illustrate this that bypasses these objections by showing how Sam's belief might be less safe even if we assume that in the counterfactual he consults the same source. See SAM 2.0:

SAM 2.0 is mostly identical with SAM. i.e. in the actual world, they operate in an unfortunate epistemic environment characterized by public credibility dysfunction. Like Sam, Sam 2.0 also ends up consulting a credible source, and forms the correct belief that C spent the night in the hospital (because they fell down the stairs). The difference between this example and SAM lies in how SAM 2.0 fairs in the counterfactual world.

In SAM, I discussed how in a nearby possible world SAM consults a non-credible source instead. For SAM 2.0, in the nearby possible world they still consult the credible source (the method of belief-formation remains identical in the counterfactual world), but due to the uncertainty about who they should trust, they fail to believe the testimony of the credible source. If Sam does not think the source is credible, he is not going to believe their testimony, and fails to believe that C spent the night in the hospital. They might suspend judgement, or alternatively, incorrectly believe the source is non-credible, and as result, end up falsely believing $\neg p$. Sam 2.0 uses the same method of belief-formation in both worlds: Sam consults the same credible source in the counterfactual world as in the actual world, however, in the counterfactual world they fail to perceive the source as credible, due to the public credibility deficit. In short, there is a nearby possible world in which SAM 2.0 would falsely believe that $\neg p$, or in any case fail to correctly believe that p . This means that even if we relativize the safety principle to the same method of belief-formation on the strictest notion, Sam 2.0's true belief that p is not safe.

Note that in the examples I have discussed, all epistemic agents have a true belief. However, not all beliefs are equally safe (see table 1). The reason some beliefs are not safe, or in any case, *less* safe, is because the agents in question lack apt credibility appraisal of the source they consulted. As discussed, the ability to make apt credibility appraisals is dependent on features of the epistemic environment. More specifically, public credibility dysfunction undermines the safety of our true testimonial based beliefs.

Table 1 Epistemic Environmental Effects on Modal Condition

| | Actual world | Nearby possible worlds | Modal condition |
|-------------|-------------------------------------|--|------------------------|
| Alex | Alex knows source is credible. Alex | There is no nearby possible world in which | Safe |

| | | | |
|--|--|---|-----------------|
| (believes credible source) | holds a true belief that p. | the newspaper incorrectly reports p and Alex incorrectly believes p using the same belief formation method. | |
| Robin (believes non-credible source) | Robin doesn't know source is non-credible. Robin holds a true belief that p. | In some nearby possible worlds, p is false, yet Robin <i>falsely believes that p</i> via the same method. | <i>Not safe</i> |
| Alex + (believes credible source, fortunate epistemic environment) | Alex+ knows source is credible. Alex+ holds a true belief that p. | There is no nearby possible world in which the credible newspaper incorrectly reports p and Alex incorrectly believes p using the same belief formation method. Neither is there a nearby possible world in which Alex believes a non-credible source instead. | Safe |
| Sam (believes credible source, unfortunate epistemic environment) | Sam doesn't know whether the source is credible. Sam holds true belief that p. | In some nearby possible world p is false, and Sam trusts some non-credible source instead and <i>falsely believes that p</i> . | <i>Not safe</i> |

| | | | |
|---|---|---|------------------------|
| <p>Sam 2.0</p> <p>Believes credible source, unfortunate epistemic environment)</p> | <p>Sam doesn't know whether the source is credible. Sam holds true belief that p.</p> | <p>In some nearby possible world, Sam 2.0 doesn't believe the credible source and <i>fails to correctly believe that p.</i></p> | <p><i>Not safe</i></p> |
|---|---|---|------------------------|

The main point of this section was to point out that even when citizens are not ignorant nor have false beliefs about a given political issue, the epistemic status of their true political beliefs is nonetheless affected by features of the epistemic environment. Public credibility dysfunction negatively impacts citizens' ability to make accurate judgements about the trustworthiness of certain sources, and when this ability is systematically hindered, any true political beliefs are less reliable and less safe than they would have been under more favourable epistemic circumstances. In other words, even for those citizens who, despite the challenging epistemic circumstances in which they have to gather political information, hold true (justified) political beliefs, something of epistemic value is lost in contemporary political deliberation.

The notion of public credibility dysfunction entails that the mechanism of distributed credibility monitoring is failing significantly, and suggests some problematic consequences in terms of its implications for the epistemic status of our beliefs. However, 'public credibility dysfunction' does not tell us much about how that state came to be. A complete analysis of all relevant factors that play into public credibility dysfunction goes far beyond the scope of this work. Still, given that political debate increasingly takes place online, and on social media in particular (Chambers 2021), I do think these epistemic spaces warrant special attention.

1.4. How Social Media Distorts Norms of Testimonial Exchange

Several findings have showed that false information and fake news spread particularly rapidly through social media. At the same time, expert-testimony and fact checking falls on

deaf ears. This section gives an analysis of how different aspects of social media design alter the distributive norms of testimony, explaining why distributed credibility monitoring often goes astray in these online spaces. Part of the explanation can be found in now familiar epistemic structures such as epistemic bubbles and echo chambers. However, I will also argue that there is something more fundamental to social media's communication structures that disrupts distributed credibility monitoring.¹⁹

1.4.1. Self-selective Informational Structures: Epistemic Bubbles and Echo Chambers

In his persuasive book *'The Filter Bubble'*, Eli Pariser argues how the personalization of the internet, and search engines in particular, lead to selective exposure to information sources – a filtering of which most users are not even consciously aware (Pariser 2011). As a result, when browsing the internet, we are more likely to be exposed to content that matches our internet history or 'fits' our pre-existing beliefs, than to content that contradicts those beliefs. Similar mechanisms are present on social media. Like with every new communication technology, the introduction of social media was accompanied by promises of cross-ideological communication (Gans 2010: 13). Websites like Facebook and Twitter do indeed provide plenty of opportunity to engage with different-minded people. However, it also makes it easier for people to find like-minded individuals. In practice, social media websites more often function as *self-selective informational networks*.²⁰ Firstly, we only see content shared by those whom we have befriended on facebook - and we are able to filter out those who share posts that we 'don't want to see' (Rochlin 2017: 386). Secondly, the algorithms selecting users'

¹⁹ A factor that I don't discuss in this paper is that discussions online can involve different levels of anonymity or even involve pseudonymous communication. This of course poses challenges for evaluating testimonial track records of speakers, though it might also bring benefits to the quality of political deliberation (Moore 2018). I do not delve into these different levels of anonymity in this paper, but I simply want to flag that these distinctions potentially complicate the picture of distributed credibility monitoring further.

²⁰ When people do interact with different minded people on social media, the platform doesn't seem to produce good quality of political deliberation (Fredheim and Moore 2015).

recommended content is based on what they have previously ‘liked’. Subsequently, those who get their news primarily from facebook²¹ mainly read the ‘news’ they want to read.

In short, social media contributes significantly to the emergence of so-called *epistemic bubbles*. Essentially, epistemic bubbles comprise of an epistemic community with likeminded people, whereby the consequential lack of epistemic diversity leads to a knowledge gap (Nguyen 2020:143). We thus see a lack of sufficient coverage, indicating suboptimal distributed epistemic labour. Furthermore, a lack of epistemic diversity makes unwarranted beliefs [and the cognitive mechanisms that sustain them] less likely to be detected and corrected. That is, it affects the functioning of filtering mechanisms to filter out false or unwarranted testimonies. What is important to emphasize here is that the exclusion of certain views and opinions in epistemic bubbles typically occurs unintentionally.²² It is relatively easy to break out of an epistemic bubble. All that is needed is encountering other views or counter evidence to one’s unwarranted beliefs, as there is nothing inherent to epistemic bubbles that prevents the epistemic agent from meaningfully engaging with counter evidence once they are confronted with it.

Echo chambers on the other hand are more difficult to break out off, and therefore more worrisome. C.Thi Nguyen’s influential account defines an echo-chamber as “*an epistemic community which creates a significant disparity in trust between members and non-members*” (Nguyen 2020:146). In echo chambers, certain views are not accidentally left out, but actively excluded. The credibility of outside sources is persistently undermined, whilst the credibility of in-group members is overstated. To be considered a member of an echo chamber, your beliefs have to align with the echo chamber’s core beliefs. Outside sources are viewed with suspicion, hence no other sources besides group members are to be trusted. The main difference

²¹ Research has shown that this constitutes a large segment of the population (Pew Research Center 2016).

²² Such knowledge gaps can result from technological filters, such as the previously mentioned filter bubbles, but it also includes non-technological factors such as who you choose to be friends with and who your direct colleagues are, and our overall tendency to mainly socialise with like-minded people.

between epistemic bubbles and echo-chambers is thus that while in the former certain voices are simply not heard due to (unconscious) lack of exposure, in the latter they are actively and maliciously undermined. This makes it practically impossible to correct false/unwarranted beliefs held by members of echo-chambers. Where encountering counterevidence or different perspectives can be enough to pop an epistemic bubble, this does not get someone out of an echo-chamber. Rather, given the background belief that outside sources are not to be trusted, any conflicting testimony from outside only reinforces their credence in the core-beliefs. Any attempts to expose them to evidence that should at least make them consider that their core beliefs might be mistaken, fail because the mechanisms of (dis)trust in echo-chambers prevent them from assigning appropriate credibility appraisals to different sources.

It should be obvious that the active manipulation of credence in echo chambers affects distributed credibility monitoring and subsequently manipulates the distributive norms of testimony within this epistemic community. Not only is there a knowledge gap, but this knowledge gap is actively sustained by the way in which credence is allocated: not according to testimonial track record, diffusely evaluated by critical and knowledgeable members of the epistemic community, but rather according to whether or not the source is a member of the ‘closed off’ epistemic community. In other words: distributed credibility monitoring is not done with the genuine goal of determining the reliability of the testimony, but rather with the goal of sustaining certain beliefs, regardless of whether those beliefs constitute knowledge. Here is an example of how this can affect the norms of testimonial exchange and hence the epistemic quality of one’s testimonial-based beliefs: recall that when distributed credibility monitoring functions well, the individual epistemic agent is unburdened from having to evaluate every testifier from scratch. They can rely on standard norms of testimonial exchange that are contingent on the epistemic labour of others. For example; normally, if one finds that many other *independent* agents endorse p, this provides epistemically normative reasons to consider

the truth of p. However, both in epistemic bubbles and echo chambers, this independence norm is significantly violated. As I will argue, such distorting effects on testimonial norms in social media are not just limited to epistemic bubbles or echo chambers. There are communicative structures inherent to social media design that pose challenges to distributed credibility monitoring, and hence frustrate the practice of testimonial exchange. The problematic features of social media I highlight below obstruct distributed credibility monitoring, because they obscure the motivations and nature of testimony that is shared online.

1.4.2. Bent Testimony on Social Media

Shares and posts on social media are typically treated as ordinary testimony, as people engaging in a type of ‘telling’ through a digital platform. E.g. when I believe p on the basis of an article that my friend shared on Facebook, I come to believe this propositional content because p was presented to me by someone else [via a social media post], and in this sense we can say that the resulting belief is a testimonial belief. However, it is not so clear that social media posts and shares act the way that normal testimony does. There are several factors that contribute to what Regina Rini calls ‘*bent testimony of social media*’ (Rini 2017: E46).

Consider how in the standard cases, when someone testifies p, they *assert the truth* of p. The aim of offering [sincere] testimony is for the speaker to transmit their knowledge to the hearer. This requires that the speaker believes p is true. However, it is less obvious that social media posts are proper assertions, whereby the speaker aims to assert the truth of the information presented to their audience. When we share an article via social media, it is often ambiguous whether we are thereby saying that we believe the content of this article to be true. The same goes for ‘retweeting’ someone else’s post; it is not always clear if we thereby convey that we agree with the propositional content of the original post (Rini 2017). Perhaps we are just trying to bring attention to what someone has said, for other reasons than to assert the truth

of their statement.²³ One factor that exacerbates this ambiguity is the ‘gamification’ of communication on such platforms (Nguyen 2021, Alfano and Sullivan 2021).²⁴ Social media ‘scores’ our communication, and provides both short-term rankings (likes, reposts, etc) as well as long-term rankings (followers) (Nguyen 2021).²⁵ It is often ambiguous whether someone shares/ posts something because they believe its content, or just for the sake of gathering ‘likes’.

This ambiguity hinders distributed credibility monitoring. One way in which we typically evaluate the trustworthiness of testifiers, is by looking at their testimonial track record. If the speaker has a tendency of delivering true testimony, this counts towards them being trustworthy. If they are known to often give false testimony, their testimony might be flagged as suspicious or less credible. When it is not clear whether someone is ‘telling’ or ‘asserting’ p, or instead merely ‘uttering’ p, it becomes tricky to determine their track record. After all, if they utter a falsehood q in an effort to ridicule those who believe q, the fact that they utter false content does not negatively contribute to their testimonial track record. The ambiguity regarding the motivation or intent behind social media posts or shares makes it tough to distinguish between assertion and mere utterance, and hinders our ability to determine and signal the extent to which someone is a reliable source of information. Their level of trustworthiness is partially obscured by bent testimony of social media. As a result, members of the epistemic community become more likely to erroneously contribute to distributed

²³ Relatedly, Jeroen de Ridder and Michael Hannon have argued that fake news is typically not really believed by those who seem to ‘endorse’ it, but rather, that the ‘endorsement’ is a form of expressing their political identity (Hannon and de Ridder 2021).

²⁴ In his paper, Nguyen mainly discusses Twitter, but I think it is safe to assume that if he is correct, the main mechanisms described apply to other social media platforms as well.

²⁵ Note that proponents of gamification could argue that it acts as a motivator, potentially increasing public discourse. But Nguyen is less optimistic about this. He argues that even if participation would increase, gamification of communication risks a simplification of our goals and values, hindering the quality of discourse (the analogy he draws is that of a Fitbit: the value of working out is a complex and important one, step-goals simplify the targets for the individual. However, when the individual becomes mainly focussed on steps, by trying to hit those targets (that’s the game) he is still working out. But when it comes to social media, when people become too focussed on the likes and status, this is more likely to take away from the initial value of participation in political deliberation: it is the kind of simplification that undermines the initial goal, or ‘*value capture*’ (Nguyen 2021:21).

credibility monitoring, or be too uncertain in their judgement to clearly ‘speak out’ regarding their evaluations.

But even when posts clearly take the form of assertions, other distorting factors remain. E.g., Jennifer Lackey draws attention to the epistemic risks that so-called social media bots pose for fruitful evaluation of information online. Social media bots are automated accounts, that are capable of interacting with other [real] accounts (e.g. through likes) and that can share posts and articles – often such bots are utilized to spread fake news or simulate more epistemic support for some view than it actually enjoys. These social bots can be easily mistaken for real accounts, that is, for actual epistemic agents. Their posts and the accumulation of likes they give and receive also create a misleading picture of epistemic support for certain claims (Lackey 2021).²⁶

As previously mentioned, one of the functions of distributed credibility monitoring is to filter out testimony whose content is (likely) false. However, as Rini points out, testimony on social media seems to violate the testimonial norms that are meant to filter out propositional content that is radically at odds with the world as we know it. This is illustrated by the fact that fake news seems to thrive on social media (Shu et al. 2017, Monther and Alwahedi 2018). In her words, *“something about Facebook, etc. allowed a ridiculous story to build testimonial momentum to the point of acceptance by more than the furthest fringe”* (Rini 2017: E49). Perhaps we do not assume for every user who shares an article that they assert the truth of its content, but when a large number of users all share and like the same content, the accumulation of these testimonial-like actions creates the guise of some sort of credibility, at least to the point that it affects normal scepticism towards ridiculous testimonial content. I would even argue that this lack of filtering out false testimony has a self-reinforcing aspect to it: if individual

²⁶ Note that some empirical findings have suggested that bots do not contribute significantly to the spread of fake news [compared to true news] (Vosougi et al. 2018, Brady et al. 2020)

epistemic agents expect their epistemic environment to filter out testimony that is outrageous or most likely false, they might be more inclined to assign at least some credibility to articles or statements that maintain in circulation.

In short, social media is rich in violations of distributive norms of testimonial exchange, such as sharing testimony that contradicts with how we understand the world, disregard for the independence condition in checking for epistemic endorsement, and an overall ambiguity regarding the extent to which social media testimonies are genuine assertions. Subsequently, distributed credibility monitoring is severely frustrated. This all results in uncertainty for citizens about who to trust, which affects also trust in traditional epistemic authorities such as the academic and scientific community and government officials.²⁷ We can therefore conclude that the communication structures on social media are epistemically problematic in as far as they contribute to the state of public credibility dysfunction.

1.5. Conclusion

Citizens are, to a large extent, both directly and diffusely epistemic dependent on each other in their pursuit of politically relevant information. Therefore, a healthy (epistemic) democracy is contingent on a functioning division of epistemic labour, in which (expert-)testimony plays a vital role. I discussed the significance of Goldberg's notion of distributed credibility monitoring for healthy epistemic environments, and introduced the term *public credibility dysfunction* to refer to a state wherein this mechanism fails to such an extent that citizens are severely hindered in their abilities to distinguish between credible and non-credible sources. I have further shown how communication structures inherent to social media distort norm of testimonial exchange and thereby contribute to public credibility dysfunction.

²⁷ We should not ignore other factors that affect (epistemic) trust, such as prior false promises from politicians, have added to a culture of distrust against authorities – but my focus is on the [digital] disruptions of credibility mechanisms.

The notion of public credibility dysfunction explains problematic epistemic consequences that hinder the epistemic quality of the democratic decision-making process, such as the preservation of ignorance (due to failure of testimonial transmission of knowledge) and an increase in false beliefs (due to testimonial uptake of unreliable testimonies). However, framing the ‘epistemic challenges’ to democracy in terms of threats to conditions for [effective] testimonial exchange of knowledge brings to the forefront an additional problem: even for citizens who are not (yet) misinformed, or even hold true beliefs, public credibility dysfunction generates epistemic costs. Even if these citizens hold true political beliefs, the fact that these beliefs are gathered under conditions of public credibility dysfunction, i.e. in an unhealthy epistemic environment, affects the reliability and safety of their beliefs. On some knowledge accounts, this entails that these true beliefs fail to constitute knowledge. In conclusion, the epistemic losses of the ‘epistemic crisis’ run deeper than a lack of true political beliefs; it even affects the epistemic status of our true political beliefs.

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2. Article 2) Echo Chambers, Epistemic Injustice and Anti-Intellectualism*

Abstract

This paper explores the conceptual link between C. Thi Nguyen's (2020) recent account of 'echo chambers' as social epistemic structures that actively exclude outsiders' voices, and Miranda Fricker's (2007) account of 'testimonial injustice' as an instance whereby a speaker receives less epistemic credibility than they deserve, due to a prejudice in the hearer. Contra Nguyen (2020) and Breno R.G. Santos (2021), Amandine Catala (2021) has recently argued that echo chambers necessarily involve testimonial injustice based on epistemic prejudice rather than identity prejudice. This, she argues, is how we can account for testimonial injustice in e.g. anti-vaccination echo chambers. I agree with this conceptual analysis, but offer a way of conceiving of rejection of expert-testimony in anti-vaccination echo chambers that additionally involves identity prejudiced credibility deficits.

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2.1. Introduction

C. Thi Nguyen's (2020) recent account of echo chambers as social epistemic structures that actively exclude outsiders' voices has sparked debate on the connection between echo chambers and epistemic injustice (Santos 2021; Catala 2021; Elzinga 2021). In this paper I am mainly concerned with the connection between echo chambers and *testimonial injustice*, understood as an instance whereby a speaker receives less epistemic credibility than they deserve, due to a prejudice in the hearer (Fricker 2007). Contra Nguyen (2020) and Breno R.G. Santos (2021), Amandine Catala (2021) argues that because echo chambers per definition undermine the credibility of assertions that do not align with their core beliefs, they necessarily

involve a form of testimonial injustice, namely *incidental* testimonial injustice based on *epistemic* prejudice. Here, the term incidental refers to the notion that the injustice's impacts on the speaker are, typically, highly localized (Fricker 2007: 27). E.g. when a climate-change scientist's testimony is not given apt credibility in climate change denial echo chambers, this will hardly affect his life in significant ways. However, it still constitutes an authentic case of testimonial injustice. *Systematic* testimonial injustice on the other hand is typically interwoven with other forms of social injustices, and these seems to be the kind that both Nguyen and Santos have in mind when they claim testimonial injustice is not conceptually inherent in echo chambers. Catala contends that the connection between echo chambers and systematic testimonial injustice is contingent on the prejudice causing the credibility deficit being an identity prejudice.

In her reconstruction of the types of testimonial injustice, Catala implicitly equates incidental testimonial injustice as resulting from epistemic prejudice and systematic testimonial injustice as resulting from identity prejudice. As I will argue, there are certain cases that fall in between these interpretations, namely instances of incidental testimonial injustice, whereby the impact on the speaker is localized, but where the credibility deficit nevertheless results from identity prejudice. One example of how this can manifest is the structural distrust against health-care experts in anti-vaccination echo-chambers, wherein said experts' testimony is dismissed due to unwarranted assumptions regarding their motives qua their social type. Though these cases might not be as normatively problematic as systematic testimonial injustices, they are still genuine cases of testimonial injustice that involve identity-prejudicial credibility deficit even if the speakers targeted belongs to a 'privileged' group. Such instances of testimonial injustice are especially important to acknowledge given the societal trend of increasing distrust against experts. Even if the personal harms to the speaker are highly

localized, structural distrust against experts is detrimental for any healthy functioning epistemic community, given the epistemic authority experts have in their domain of expertise.

To understand the importance and severity of the testimonial injustices in echo chambers, we need to look beyond the specific harms that are done to the targeted speakers and the immediate loss of knowledge, but also take into account the consequences for fairness in public deliberation – the latter being a fundamental condition for procedural democratic legitimacy. Before I present these arguments, a description of this ongoing debate and some clarifications of terminology are in order.

2.2. Echo chambers, Structural Ignorance and Epistemic Injustice

Nguyen defines an echo-chamber as “*an epistemic community which creates a significant disparity in trust between members and non-members*” (Nguyen 2020:146). In order to be considered a member of an echo-chamber, you have to buy into their core beliefs. Not only are certain views *actively* excluded from these echo-chambers: the credibility of outside sources is structurally undermined, whilst the credibility of in-group members is overstated. This makes it practically impossible to correct false or unwarranted beliefs shared by members of echo-chambers, even in the face of counter evidence. On the contrary; the fact that outsiders’ testimonies do not align with the core beliefs, combined with the background belief that outside sources are non-reliable in aiming at the truth, only reinforces the insiders’ conviction that the shared core beliefs must be true. In other words, the credibility deficits for outside sources and credibility excess for inside sources frustrates fruitful testimonial exchange and hinders the circulation of knowledge.

As Nguyen points out, the mechanisms of distrust that are present in echo chambers are compatible with Miranda Fricker’s (2007) account of testimonial injustice and Charles Mills’ (2007) account of white ignorance - though he maintains that these social epistemic phenomena are conceptually distinct from echo chambers (Nguyen 2020:149). Both Santos (2021) and

Amandine Catala (2021) have recently expanded on the relation between echo chambers, epistemic injustice and active ignorance, arguing that these phenomena are more closely connected than Nguyen acknowledges.

Santos argues that a specific understanding of ignorance is inherent in Nguyens notion of echo chambers, namely “*socially supported active ignorance*” or simply “*structural ignorance*” (Santos 2021:113). The idea is that the active ignorance displayed by individuals is dependent on a certain epistemic superstructure, or on how credit is distributed in their epistemic community. Furthermore, Santos points out a link between echo chambers, structural ignorance and *hermeneutical domination* (a term taken from Catala 2015). Hermeneutical domination refers to an instance of epistemic injustice whereby marginalized groups do have the epistemic resources and terminology to understand their experiences (so there is no hermeneutical injustice involved) but their testimony is dismissed not only by individuals (which would be a testimonial injustice) but by the majority, effectively excluding their understanding from the collective imagination. While Santos is thus arguing for an inherent conceptual link between echo chambers and structural ignorance, he nevertheless agrees with Nguyen that an echo chamber is conceptually distinct from testimonial injustice (Santos 2021:115). They are distinct because testimonial injustice, as Santos argues, needs to be rooted either in systematic identity prejudice or in hermeneutical marginalization – two aspects that are not necessarily present in echo chambers. For example, climate change denial echo chambers might reject the testimony of a climate change scientists, but this epistemic maltreatment won’t affect the climate change scientist in other aspects of their live beyond the echo chamber (Santos 2021:7).

However, as Catala rightfully points out, both Nguyen and Santos neglect to distinguish between *systematic* and *incidental* testimonial injustice (Catala 2021:30). Fricker and subsequent writers on testimonial injustice have mainly been concerned with *systematic*

testimonial injustice, or what Fricker terms “*the central case of testimonial injustice*” (Fricker 2007:28). In such cases, the credibility deficit results from a *negative identity prejudice* that *tracks* the speaker through other facets of life (e.g. financial, political, social). Given the social significance of such relevant prejudices it is only rightfully so that such cases have deserved priority in philosophical, conceptual work on epistemic injustice. The primary example case Fricker uses to illustrate systematic testimonial injustice is the trial of Tom Robinson in Harper Lee’s novel *To Kill A Mockingbird*. In this trial, which takes place in Alabama during the Great Depression, the falsely accused Tom is not believed when he pleads innocent to the crime of raping a young white woman by the name of Mayella. It was due to their prejudice beliefs, mirroring the inherent racial inequality of their society, that the all-white jury *assumed* the Tom, a black man, to be dishonest and guilty – even if the evidence available to them pointed in another direction (in fact, it was Mayella who had made advances towards Tom and had been rejected by him – something that was inconceivable to the all-white jury). We can easily see how this type of racial prejudice (“black people cannot be trusted”) would ‘track’ agents belonging to that social group throughout many aspects of their life. *Incidental* testimonial injustice on the other hand are still genuine testimonial injustices (the speaker receives a credibility deficit based on prejudice in the hearer) but the social significance of the prejudice and accompanied epistemic harm is highly localized and doesn’t typically affect the speaker in other aspects of their lives. This is not to undermine the severity of possible consequences of such injustices to the individual, and they might still be persistent in that they happen often over *time*, but they are not systematic or severe in their synchronic aspect.

Like most writers on the topic, Santos and Nguyen seem to have *systematic* testimonial injustice in mind – indeed, Santos links testimonial injustice to “*some pernicious tracking across different areas of one’s life*” (Santos 2021:115). Catala concedes that Nguyen and Santos are right in claiming that echo chambers and *systematic* testimonial injustices are merely

compatible and not inherently connected concepts. However, the (dis-)trust mechanisms in echo chambers *are* conceptually integrated with *incidental* testimonial injustice:

“Echo chambers—understood as epistemic communities that actively exclude and unwarrantedly discredit outsiders’ views—by definition generate at least incidental testimonial injustice. That is, echo chambers automatically create an undue credibility deficit for outsiders based on a type of prejudice that concerns not the social group to which outsiders belong (e.g., women or Blacks), but rather, in this case, the epistemic group to which outsiders belong (e.g., climate advocates or vaccination proponents), regardless of the social groups to which these outsiders may otherwise belong” (Catala 2021:31).

It is important to underscore that according to Catala, echo chambers generate *at least* incidental injustice. They can however generate additional systematic testimonial injustice. For example, a white supremacy echo chamber automatically generates incidental testimonial injustice by undermining the credibility of outsiders view that don’t align with the echo chamber’s core belief (epistemic prejudice). Additionally, it will manifest systematic testimonial injustice by excluding views on the basis of identity prejudice against people who are black, indigenous or people of colour (Catala 2021:32). In short, Catala argues that echo chambers necessarily involve incidental testimonial injustices based on epistemic prejudice, and possible also involve systematic testimonial injustice based on identity prejudice.

2.3. Testimonial Injustice from Identity Prejudice

I agree with Catala that notions of incidental testimonial injustice are inherent in echo chambers and that systematic testimonial injustice in echo chambers requires further conditions. However, I take issue with the implicit classification of incidental testimonial injustice always resulting from epistemic prejudice. What sets systematic testimonial injustices apart from incidental testimonial injustice is not that they are based on negative identity

prejudice, but rather that the work is done by a “tracking” identity prejudice that is connected to other forms of social injustice (such as gender inequality or institutional racism). Fricker herself acknowledges that there can be exceptions wherein identity-prejudicial credibility deficits lead to *incidental* testimonial injustice. She gives the example of a scientific conference where the attendees consist of research scientists, historians of science and philosophers of science. At this particular conference (or perhaps in this particular field) the research scientists and historians of science look down upon the philosophers of science such that they hold them in intellectual disdain. As a result, the philosophers’ views are not given apt credit. This case illustrates merely a case of incidental testimonial injustice since this prejudice against philosophers of science is not a tracking prejudice tied into other social injustices – they might even be considered privileged speakers. Nevertheless, it is an *identity prejudice* against the identity category of ‘philosophers of science’ that makes for the credibility deficit (Fricker 2007, 28-29). In short, identity prejudicial credibility deficit can be present in incidental testimonial injustices against privileged speakers – at least on Fricker’s understanding of the concept. This is important to acknowledge, as it provides additional nuanced understandings regarding the nature of the testimonial injustices that might be at play in echo chambers where the distrust is aimed at groups qua their social identity, even if they are not a marginalized group.

Fricker defines a negative identity prejudice as “*prejudices with a negative valence held against people qua social type*” (Fricker 2007:35). As I argue, even in echo chambers where the testimonial injustice is merely incidental (they don’t perpetrate systematic testimonial injustice or subsequent hermeneutical domination) there can be identity prejudice at work *alongside* the epistemic prejudice. I will illustrate such identity prejudice in incidental testimonial injustice through the example of distrust against healthcare experts in anti-vaccination echo chambers. What makes this case so interesting is that the targeted group is

not affected by other forms of social injustices nor by epistemic distributive injustice, on the contrary: they are partially identified exactly by their access to epistemic goods and those indicators that are taken to increase one's credibility such as education. Within anti-vaccination echo chambers, group members receive credibility *excess*. The anecdotal stories of concerned parents and the claims the anti-vaccination advocates are believed at face value without evidence or good epistemic reasons (Ma and Stahl 2017). At the same time, health care experts are not believed to be trustworthy sources of information, despite the array of scientific evidence confirming their testimony. What explains this dysfunctional credibility appraisal?

Mark Davis (2019) argues that it is a (common) mistake to analyse anti-vaccination discourse in isolation. Instead, we ought to see in as part of what Davis terms *anti-public discourse*. This anti-public discourse is, amongst other things, typified by a strong anti-elitism (Davis 2019:358) and a hostility against expert-knowledge (Davis 2019:362). In other words, anti-vaccination discourse seems riddled with anti-intellectualism, here understood as a negative attitude of distrust against experts. A distrust against health care experts is indeed reported by vaccine denier (amongst other factors) as a reason not to trust expert's testimony on the safety and effectiveness of vaccines, and subsequently not to vaccinate their children (Wilder-Smith and Qureshi 2020:56). When we evaluate someone's credibility, we judge not only their level of competence, but also their sincerity (Fricker 2007:45). Anti-vaccination echo chamber members interpret the testimony of health care experts as attempts to silence them or shield them from the truth, in an effort to promote their own political or financial aims. In the anti-public discourse, the credibility of elite or experts is structurally undermined, as their testimony is dismissed as oppressive or corrupt. It seems then, that those features that traditionally serve as credibility indicators (education, career status or 'being an expert' for short) are taken by certain agents to be indicators of insincerity (which, in turn, leads to credibility deficits). In other words, experts are not trusted by those with anti-intellectual

attitudes as they assume ulterior motives associated with the identity category of ‘experts’. These ascribed motivations are unwarranted; they do not align with the evidence available but are based on identity prejudice. Not surprisingly, empirical research indeed shows a correlation between distrust against experts and scientists and opposition to scientific consensus (Motta 2018; Pasek 2018; Merkley 2020). These findings at least support the idea that identity prejudice might also play a role in echo chambers where the testimonial injustice involved is merely incidental. This is not to say that epistemic prejudice does not play a role at all. In fact, epistemic prejudice might even play a mitigating role in cases where someone is perceived as belonging to the social type of “experts” but are nevertheless seen as epistemically trustworthy when their testimony aligns with core beliefs of the echo chamber. An obvious example is Andrew Wakefield, whose article suggesting a link between MMR vaccines and autism was retracted after public peer review revealed it to contain flawed and unethical research methods as well as a financial conflict of interests (Hussain et al. 2018). Wakefield is one of the few intellectuals that actually portrays the negative attributes of publishing flawed results and falsehoods for financial gain - yet because his work aligns with the core beliefs of the anti-vaccination echo chamber, in these epistemic spaces the paper is still seen taken to be a valid epistemic source on the ‘dangers of vaccination’.

2.4. The Harms of Testimonial Injustice

It might be helpful at this point to clarify the harms that incidental testimonial injustices in anti-vaccination echo chambers cause. To recap, the injustice in testimonial injustice from identity prejudice is manifested in the fact that the speaker is discriminated against and not recognized as a full participant of the epistemic practice. The direct epistemic harm involved in testimonial injustice is a loss of knowledge, as it prevents the hearer from receiving information and insights from the speaker. More broadly, it can create blockages in the circulation of knowledge. These direct epistemic harms constitute a loss mainly for the hearer

and the broader audience. But there are also ethical harms involved that directly affect the speaker – these are the harms Fricker is mostly concerned with. The primary ethical harm consists in the speaker not being recognized in their capacity as a knower, which, so Fricker argues, amounts to being wronged in a capacity central to being human.²⁸ Subsequent secondary ethical harms can be either practical (e.g. personal or professional consequences) or epistemic in kind (by affecting the speaker's future epistemic conduct, e.g. persistently receiving credibility deficits can undermine the speaker's epistemic confidence).

In the case of identity prejudice against health care experts, analogous harms can be detected. The direct epistemic harm in our case is constituted by the fact that the speaker fails to transmit their knowledge to the hearer, regarding the safety and effectiveness of vaccines. The intrinsic ethical harm relates to the fact that the health-care expert is not recognized as a good informant. Regarding the secondary epistemic harms, it might be objected that, contrary to the systematic cases, health care experts most likely have an epistemic community that provides them with resources to counteract any negative impact from testimonial injustices on their epistemic development – they are less likely to develop epistemic self-doubt. Still, persistent encounters of undeserved distrust might discourage them from giving testimony in the future. One might further object that the health care expert in this case is unlikely to encounter secondary moral harms, e.g. their careers won't be affected by their credibility appraisal in such an echo chamber. This does not undermine the fact that we are here dealing with a genuine testimonial injustice nor that it is based on identity prejudice; it merely confirms that this concerns an *incidental* testimonial injustice. However, despite the fact that these epistemic injustices do not typically lead to secondary harms towards these speakers, there are other significant epistemic and practical harms that result from it.

²⁸ Following Edward Craig, Fricker takes the capacity of being a good informant, or a trustworthy testifier, to be central to the notion of being a knower.

The identity prejudice against experts might not (yet) be dominant in broader societal structure: it is not confined to the echo chambers. The fact that levels of anti-intellectualism is increasing throughout society could explain why vaccine related expert testimony is disputed or rejected even by those who do not (yet) identify with the core beliefs of anti-vaccination echo chambers – and I suspect similar analysis will apply to other denials of scientific consensus (e.g. climate change deniers or flat earthers). An upshot of this analysis is moreover that echo chambers are not only closely linked to political oppression: they can be utilized as effective means to foster and maintain anti-intellectualism causing further epistemically polluting effects.

2.5. Can Advantaged Speakers Receive Epistemic Injustice?

Even if health care experts' credibility is structurally undermined, they do not belong to an epistemically powerless social group. Health care experts are still advantaged speakers in society at large – even if their epistemic authority is under threat. It seems strange to group together what's at stake in for example white supremacy echo chambers with echo chamber where the main epistemic harm consists of a denial of scientific consensus (Elzinga 2021:42). Why do we intuitively think it inappropriate to conceive of 'privileged speakers' as being recipients of epistemic injustice? As Morten Fibieger Byskov (2020) illustrates, the driving thought behind this discomfort is that we shouldn't decouple our analysis of testimonial injustice from the broader epistemic inequality structures. The reason for this is that attempts to rectify inequality could then be characterized as injustices. The example he gives is of a male Ivy League alumnus (a privileged speaker indeed) who is a member of some company's board that has been bought up. The company's board was always male-dominated. However, to compensate for this inequality, the new owner decides that from now on, the board should consist of an equal amount of male and female members. The male Ivy Leaguer thus loses epistemic power in the process, but surely this shift in credibility is not an injustice (Byskov

2020:12). The point Byskov wants to drive home here, is that it would be ridiculous to think that a decrease of epistemic powers of previous advantaged groups, in an effort to rectify epistemic inequality, should be seen as epistemic injustice. I agree that this notion would indeed be absurd.

However, the previously cited decline of healthcare experts' epistemic authority is different in a number of ways. The anti-vaccination movement utilizes rhetoric that creates a *guise* of rectifying inequality, where the health care experts (and other providers/ promoters of vaccination) are depicted as oppressors portraying a false picture of the truth. Through this guise, it seems like a good thing that these advantaged speakers are now losing epistemic power: it opens up epistemic space to hear other, previously oppressed voices. But this would be an unfair understanding of the testimonial injustices in the vaccination debate. In the board member case, the disadvantage of female board members was partially so unjust because their epistemic power and ability to give testimony were limited even though they most likely *have* knowledge relevant to the issues the board is trying to solve. Anti-vaccination advocates on the other hand are spreading misinformation, and in effect endangering public health for their own political or financial aim. Their testimonies are neither genuine nor knowledgeable. That is to say: they *should* be given less credit than the health care expert, as the latter is objectively more credible. Trusting medical expertise backed up by scientific research over unsupported claims in a stranger's Facebook post is not an epistemic injustice that needs to be corrected, but rather a correct credibility appraisal. Even though the health care expert is an advantaged speaker, in this case the diminishing of their epistemic authority is not contributing to a just evaluation of epistemic trust.

If instead one wants to exclude privileged people as possible targets of identity-prejudicial testimonial injustice, what is needed is a narrower account of testimonial injustice than Fricker describes. I stick here to Fricker's conception, both for reasons of clarity and

because her framework successfully captures cases of incidental testimonial injustices from identity prejudice where the recipient of credibility deficit belongs to a privileged group such as health care experts— most notably through anti-intellectualist attitudes.

Incidental testimonial injustice might be less significant in the sense that it does not involve identity prejudices that track the speaker throughout other facets of their life. However, this doesn't mean that the moral and epistemic harms involved are therefore without any social significance, in the sense that they affect the broader epistemic community. It leads to significant epistemic losses as well as secondary practical harms, as it causes parents to delay or even refuse the vaccination of their children, thereby imposing unnecessary risks on public health. These instrumental concerns are widely acknowledged. However, less attention has been given to the procedural wrongs that these testimonial injustices against objective epistemic authorities, or epistemically advantaged speakers, entail. Echo chambers mirror a problematic feature of contemporary political discourse: evaluations of contributions tend to be made on the basis of group membership instead of epistemic value. If echo chambers foster various forms of epistemic injustice, given that our public debate increasingly takes place in these epistemic spaces, there seems to be reason for concern regarding procedural democratic legitimacy. Fabienne Peter argues that democratic decision-making is legitimate only if political deliberation takes place under conditions of political equality and epistemic fairness – where political equality and epistemic fairness are taken to be two sides of the same coin (Peter 2008). As the analysis from Nguyen, Santos and Catala already illustrate, these conditions are often undermined in echo chambers given the inherent disparity in trust.

Federica Liveriero has recently made a case for the claim that structural epistemic injustices thwart procedural legitimacy by violating the ideal of co-authorship (Liveriero 2020). The epistemic injustices Liveriero touches on are those interwoven with social injustices, targeted at marginalized groups. My aim in this paper has been to show that echo chambers

prevent not only the full epistemic participation of marginalized groups, but that they also foster unfair epistemic conditions wherein expert's testimony are structurally given less credibility than they deserve. By making explicit that all kinds of groups, including advantaged people, can be targeted by testimonial injustices, I argue that echo chambers can potentially undermine democratic legitimacy by hindering epistemically fair appraisal of many contributions to the public debate, at least by those who identify with one or another echo chamber's core beliefs, due to the variety of testimonial injustices they bring about.

None of this is to deny the idea that systematic testimonial injustices are more pressing or problematic – after all, the systematic cases are directly linked to oppression where the incidental ones aren't. Neither do I intend to argue that healthcare experts (or any advantaged epistemic agent) are immune to charges of epistemic injustice themselves. Yet, the epistemic and moral harms laid out in this paper point to another risk closely associated with (online)echo chambers – namely how they affect the conditions of democratic deliberation.

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3. Article 3) Testimonial Injustice Without Social Injustice: Rejection of Expert-Testimony as Morally Significant Epistemic Negligence

Abstract

This paper expands on Miranda Fricker's (2007) account of testimonial injustice, understood as an instance whereby a speaker receives a credibility deficit due to identity-prejudice in the hearer. I argue that Fricker's dichotomy of systematic testimonial injustice (based on prejudices rooted in social injustice) and incidental testimonial injustice (based on localized prejudice) ignores identity prejudices that are not merely local, yet neither rooted in social injustice. Accordingly, I propose a third category to capture such in-between cases, which I term patterned testimonial injustice. Moreover, I offer a broader interpretation of testimonial injustice, as an instance whereby a speaker is unfairly deprived of testimonial trust; i.e. they receive a credibility deficit due to the hearer's epistemic negligence of failing to correct for prejudicial distortions of perceptions of the speaker, in a context wherein the hearer has an ethical obligation to match their credibility appraisal to the available evidence. This account differs from typical interpretations of testimonial injustice because 1) it is not inherently linked with social injustice, 2) it employs a broader interpretation of prejudiced credibility appraisal, 3) the prejudice causing the credibility deficit need not be based on social identity stereotypes, 4) it is understood as a form of epistemic negligence, and 5) the affective investment driving the prejudicial credibility appraisal need not be ethically bad. I illustrate how my account can capture why certain rejections of expert-testimony, such as in the case of vaccine hesitancy, could constitute a (patterned) testimonial injustice.

3.1. Introduction

Miranda Fricker's (2007) illuminating conception of epistemic injustice as a distinctively epistemic harm that hurts someone in their 'capacity as a knower' has sparked ample debate regarding the application and expansion of this theoretical framework. This paper focusses more specifically on Fricker's account of *testimonial injustice* and offers a broader interpretation of this phenomenon than typically employed in the literature.

On Fricker's account, testimonial injustice occurs when a speaker receives a credibility deficit due to identity-prejudice in the hearer. More specifically, according to Fricker, testimonial injustice results from distortions of the hearer's perception of the speaker due to a *negative identity-prejudicial stereotype*, which is understood as associations about a social group that are held without proper regard for the evidence, due to an ethically bad affective investment. Testimonial injustice entails a failure of recognition for one's capacity as a knower or good informant, effectively excluding testifiers from the community of epistemic trust. The best-known examples of testimonial injustice are undeserved credibility deficits based on prejudices against marginalized social groups, e.g. racial or gendered prejudice.

In this paper, I consider whether we can conceive of testimonial injustice against non-marginalized groups, that could be politically and morally significant in other ways. The case I have in mind refers to the upsurge of vaccine hesitancy, i.e. increasing doubts regarding the scientific consensus on vaccine effectiveness and safety. This can be interpreted as a rejection of expert-testimony regarding vaccine practices. This paper reflects on whether this could be considered a testimonial injustice.

Two contrasting intuitive responses come to mind. On the one hand, there is a credibility deficit that leads to considerable epistemic and moral harms, and it seems like the expert in this case is given an undeserved credibility deficit. On the other hand, it seems clear that there is a morally significant difference with testimonial injustice based on social identity

prejudice against marginalized groups. Understandably, there exists a hesitation to label people from a typically epistemically privileged group as victims of testimonial injustice. In fact, several authors interpret testimonial injustice as inherently conceptually linked to socially unjust structures. In contrast, I claim that testimonial injustice is a concept best understood as unfair treatment of testimony that can, in principle, also affect non-marginalized groups.

Section 3.2 outlines the theoretical framework of testimonial injustice according to Fricker's conception in more detail. Section 3.3.1 questions whether testimonial injustice is necessarily rooted in social injustice. Fricker distinguishes between *systematic* testimonial injustice (based on identity prejudices that are widespread and grounded in socially unjust structures) and *incidental* testimonial injustice (based on *localized* identity prejudices). I maintain that it is only systematic testimonial injustice that is inherently conceptually linked with social injustice. Testimonial injustice simpliciter is not necessarily generated by social injustice. I further argue that the dichotomy of systematic and incidental does not capture all cases of identity-prejudiced credibility appraisal, as we can conceive of identity prejudices that are not merely local, yet neither rooted in social injustice. Accordingly, I propose a third category to capture in-between cases (which might be rooted in social structures that are morally neutral) which I term *patterned* testimonial injustice.

Having excluded underlying social injustice as the locus of the injustice, in section 3.3.2 and 3.3.3, I offer a broader interpretation of testimonial injustice. On my account, testimonial injustice occurs when the speaker is unfairly deprived of testimonial trust; i.e. they receive a credibility deficit due to the hearer's epistemic negligence of failing to correct for prejudicial distortions of perceptions of the speaker, in a context wherein the hearer has an ethical obligation to match their credibility appraisal to the evidence available. This account differs from the typical interpretations of testimonial injustice in that it is not inherently linked with social injustice, the prejudice causing the credibility deficit need not be based on social identity

stereotypes, and the affective investment driving the prejudicial credibility appraisal need not be ethically bad. Furthermore, in its core, it is understood as a form of epistemic negligence that is morally significant either in virtue of the speaker-hearer relation, or in virtue of the moral stakes of the situation.

Section 3.4 Illustrates how my account can capture why certain rejections of expert-testimony could constitute a testimonial injustice, whilst dissolving the tension between the contrasting intuitions I mentioned previously. To put it bluntly, my account acknowledges how those who hold more (epistemic) power can still be treated unjustly in testimonial exchange. Section 3.5 ends with some concluding remarks on a moral obligation to be testimonial just towards expert-testimony.

3.2. Theoretical Framework: Testimonial Injustice

The term epistemic injustice, famously introduced by Miranda Fricker (2007), refers to injustices that are “distinctively epistemic in kind”, meaning that they hurt individuals in their “capacity as a knower” (Fricker 2007:1).²⁹ Fricker distinguishes two forms of epistemic injustice; testimonial injustice and hermeneutical injustice.³⁰ I will here focus solely on the

²⁹ In her book, Fricker explicitly distinguishes her conception of epistemic injustice from questions regarding whether one receives their fair share of certain epistemic goods. She maintains that in the distribution of goods like education, it is merely “incidental that the good in question can be characterized as an epistemic good” (Fricker 2007: 1). Second, epistemic injustice relates to fair treatment of people in epistemic practices and manifests itself in deficits of credibility (or understanding) of certain speakers, and this is not an issue regarding the distribution of something of which there is a finite amount. Hence, epistemic injustice does not fall in the realm of distributive justice (Fricker 2007:20). David Coady (2010) objects that an injustice in the distribution of epistemic goods, such as education or information, can rightly be called an epistemic justice. Contra Fricker (2007), he argues that having access to certain epistemic goods is not just accidentally an epistemic concern. More specifically, Coady argues that unjust ignorance or error can be seen as violations of people’s right to know (Coady 2010:107). It is thus both a moral as well as an epistemic concern – much like the epistemic injustices Fricker is concerned with. In later work, Fricker acknowledges that epistemic injustice should be taken to be an umbrella term that encompasses more than the forms she addressed, and contends that what has concerned her in earlier work - instances whereby prejudice causes one to be taken less seriously as an epistemic agent - should be specified as ‘discriminatory epistemic injustice’, whereas the distribution of epistemic goods can be falls under ‘distributive epistemic injustice’ (Fricker 2013: 1318, Fricker 2017: 53). In this chapter, when I speak of epistemic injustice, I am referring to the discriminatory kind.

³⁰ Hermeneutical injustice takes place when there are no adequate epistemic resources available for someone to express their experience, as a result of societal identity prejudice, as the needed concepts do not exist in the social imaginary. As several scholars have pointed out (e.g. Dotson 2012, Medina 2013) marginalized communities often develop *their own* epistemic tools to communicate these experiences and create shared understanding amongst

former.

In its common understanding, testimonial injustice refers to instances whereby someone “receives a credibility deficit owing to identity-prejudice in the hearer” (Fricker 2007:28). Credibility deficit means that the speaker receives an erroneous credibility appraisal that amounts to less credibility than the speaker objectively deserves, given the evidence available. Fricker defines [negative] identity prejudices as “prejudices with a negative valence held against people *qua* social type” (Fricker 2007:35). The hearer’s distorted perception (due to the negative prejudicial stereotype) of the speaker makes them take their testimony less seriously than they would otherwise have.³¹ Fricker uses the trial of Tom Robinson in Harper Lee’s novel *To Kill a Mockingbird*, to illustrate how such injustices occur. In this novel, Tom Robinson is falsely accused of raping a young white woman, Mayella. It was due to the inherent racial inequality of their society, causing the all-white jury to hold prejudiced beliefs against Tom, a black man, assuming him to be dishonest and guilty – even if this verdict didn’t align with the available evidence (in fact, Mayella had tried to seduce Tom, but was rejected by him – this was inconceivable to the all-white jury).

But what exactly is the harm in testimonial injustice? The harm is first epistemic, as it prevents the hearer from receiving knowledge from the speaker. If a speaker knows *p* and the hearer does not believe that *p* due to a prejudicial credibility deficit, the hearer fails to learn that *p*. Alternatively, if the hearer already believes *p* but not yet knows that *p*, despite the speaker’s confirming testimony, the hearer might miss out on reasons for why their belief constitutes knowledge. More broadly, it can create blockages in the circulation of knowledge. Consequently, an epistemic environment loaded with testimonial injustices is epistemically

each other - Trystan Goetze calls this ‘hermeneutical dissent’ (Goetze 2018). Still, we can see how they are nevertheless disadvantaged in society at large if these epistemic tools are not widely known or not properly understood by most.

³¹ Keep in mind here the difference between believing the content of someone’s testimony and believing that person. In cases of testimonial injustice, the speaker’s statement *p* might still be believed by the hearer, but the hearer’s strength of their belief in *p* is nevertheless lowered by the prejudice towards the speaker.

problematic not just for the hearer, but for [the truth-conduciveness of] the social epistemic practice at large. In short, testimonial injustice preserves ignorance (Fricker 2016:4).

Nevertheless, the fundamental normative issue of testimonial injustice does not lie in these primary epistemic consequences, but rather in the primary ethical harm involved that directly affects the speaker. The primary ethical harm consists in the speaker not being recognized in their capacity as a knower, or more specifically; in their capacity as a good informant.³² This capacity is taken by Fricker to be central to being a human.³³ For this reason, testimonial injustice constitutes an intrinsic harm, and when wrongfully received, this can rightfully be called an injustice (Fricker 2007:145). This harm can also be phrased as an exclusion from the community of epistemic trust.

Testimonial injustices are typically followed by secondary harms, which can be epistemic and/or practical in kind. Having one's status as a knower (persistently) undermined, can cause someone to seriously lose confidence in their own epistemic abilities or even become epistemically servile. This might in turn affect their epistemic development, as someone who lacks epistemic confidence will be less inclined to follow through or even attempt certain intellectual undertakings. One might even internalize the negative identity prejudice, and as such be harmed in their personhood. Alternatively, even if one is resilient enough not to lose epistemic confidence, when you're often not taken seriously because of your social identity, you might become discouraged from giving testimony in the first place. Where this happens systematically, one is in affect being silenced³⁴ and is in this way hindered to partake in shared

³² According to Fricker, the intrinsic harm in testimonial injustice from identity prejudice amounts to 'epistemic objectification' of the speaker, where one is seen merely as a potential source of knowledge rather than as a knower, as an epistemic agent (Fricker 2007:132-133). However, there has been some academic debate and critique regarding Fricker's conception of the primary harm of testimonial injustice (e.g. Pohlhaus 2014, Congdon 2017, McGlynn 2021). At this point, engaging with this debate is not vital for my argument to move forward, but I will return to this issue later.

³³ Fricker follows Edward Craig in his genealogical analysis of knowledge, whereby he highlights that knowledge is derived from the human necessity to share information and to recognize good from bad informants (Fricker 2007:130, 2010:176).

³⁴ See also Kristie Dotson (2011) on '*testimonial smothering*'.

epistemic practices. In both cases, someone is being harmed in their epistemic development because they are excluded from trustful conversation.

Additionally, not being taken seriously (or not being believed) can have morally significant practical implications for the speaker, depending on what is at stake in the given situation. In the case of Tom Robinson, the practical consequences are as severe as can be; because the jury doesn't believe him to be innocent, he is convicted for assault and sent to prison – where he is ultimately killed when trying to escape. This is of course an extreme example of testimonial injustice with clear, tragic consequences. But the practical consequences might be subtler, yet impactful, especially if these testimonial injustices accumulate over time. For example, a female student whose enthusiastic and perhaps less well-articulated engagement during philosophy seminars is systematically interpreted by hearers as 'frantic' or 'irrational' (female readers will recognize these sorts of scenarios) might become uncertain about her views and philosophical capacities and decide not to continue in academic research, despite her passion and talent. Constantly being on the receiving end of testimonial injustice might even hinder the development of crucial parts of someone's identity, or the self (Fricker 2007: 54). In the worst case, testimonial injustice can have a self-fulfilling power that causes someone to become something closer to the stereotype they are perceived as.³⁵ Note that testimonial injustice can occur without causing secondary harms. However, suchlike harms do often serve as an indicator that a testimonial injustice has occurred, and moreover, they underline the morally significant impact (certain types of) testimonial injustice can have.

Several authors appear to understand testimonial injustice as something that can happen solely to marginalized groups. According to these authors, it is inherent to its conception that testimonial injustice follows from structures of social injustice. For example, Wayne Riggs

³⁵ For example, a nineteenth-century middle-class woman whose interest in politics is persistently laughed off because 'women don't know anything about politics', will become discouraged to engage in political discussions and become less and less aware of political affairs, slowly moving towards the stereotype that caused people to not take her seriously in the first place (example taken from Fricker 2007: 54).

(2012) claims that testimonial injustice “is, by definition, part of a wider system of oppression” (Riggs 2012: 150), and Morten Fibieger Byskov (2020) endorses that “in order for an epistemic discrimination or epistemic inequality to be an epistemic injustice, the discriminated individual or group must at the same time also suffer from other social injustices” (Byskov 2020:8).

Granted, the central cases Fricker discusses do take this form, and most scholars working on testimonial justice will be interested in such cases exactly because of their connection to social injustice - and rightfully so. That said, focussing merely on instances of testimonial injustice towards marginalized groups can cloud our understanding of what exactly constitutes the unfair treatment of testimony that is at the core of testimonial injustice. I understand testimonial injustice as a wrong that can, in principle, befall any person, regardless of their social standing. Here I follow the sentiments of authors like Jeremey Wanders, who offers an interpretation of testimonial injustice as an injustice in the social practice of giving testimony (Wanderer 2017), and Elizabeth Anderson, who maintains that deep down, Fricker’s account of testimonial injustice “remains episodic or transactional” (Anderson 2012:156). This paper therefor aims to tease out the features that are conditional for testimonial injustice to occur. I will identify some ambiguities regarding the main features and mechanisms of testimonial injustice, and give my own account of how to fill in these ambiguities. The result is a broader account of testimonial injustice than is typically acknowledged in the literature, that is not conceptually linked with social injustice. Section 3.4 will then illustrate how my account can accommodate cases of testimonial injustice against non-marginalized groups, using failure of uptake of expert-testimony as an example.

3.3. A Broader Account of Testimonial Injustice

3.3.1. Testimonial Injustice Without Social Injustice

Testimonial injustice is often conceptualized as an undeserved credibility deficit due to an identity prejudice in the hearer against the speaker’s social identity. How should we

understand this social identity, and why is it that this social identity is typically assumed to refer to some marginalized social group?

Social identity refers to self-categorization according to membership to social groups. This categorization always takes place against the backdrop of a structured society. I.e. social identity exists in the context of inequality regarding power relations, status, and other factors that influence one's social standing.

Fricker's central case involves the kind of identity-prejudices that are rooted in deeper societal power-differentials, which she calls: *tracking identity prejudices*. These types of prejudices "track" agents from a particular social group, such that they are systematically disadvantaged in all facets of their life. In shared epistemic practices (e.g. through testimonial injustice), but also in their political life, financial situation, career prospects, etcetera. The most prominent and recognizable examples include prejudices towards social groups based on race, ethnicity, sexuality and gender. Testimonial injustices that follow from these types of identity prejudice qualify as *systematic testimonial injustice* – such as in the case of Tom Robinson. It is in virtue of the tracking prejudice that such cases are intertwined with pressing issues of social injustice. This link with social injustice explains why Fricker deems systematic testimonial injustice the central case, and explains why it is given priority in scholarly work on testimonial injustice.

However, there are different types of social identity, based on other (arguably less fundamental) kinds of social groups, such as occupation, political affiliation, sports teams, etcetera. Prejudices against these types of social identity are not tracking prejudices, but identity prejudices nonetheless. As Fricker herself recognizes: testimonial injustice need not involve a tracking prejudice. To illustrate this possibility, Fricker asks us to imagine a scientific conference where the attendees consist of research scientists, historians of science and philosophers of science. At this conference (or perhaps in this particular field) the research

scientists and historians of science hold the philosophers of science in intellectual disdain. As a result, the philosophers' views (i.e. their testimonies) are not given the credit they deserve. Here it is the identity category of being a 'philosopher of science' that makes for the credibility deficit (Fricker 2007:28-29). Because the identity prejudice in this example is highly localized (i.e. it lacks the *synchronic* aspect of systematic testimonial injustice) Fricker calls such cases mere *incidental* testimonial injustice. One might argue that the fact that such cases are not tied in with social injustice makes them less severe or less interesting - it nevertheless constitutes an authentic testimonial injustice. Note also that even if this case is not rooted in social injustice, it is in some way still bearing on certain contextual / social structures (disciplinary differences in intellectual authority and local norms of argumentation styles, for example). Lastly, just because they are not systematic, we should not belittle the potential ethical significance of the effects such injustices can have on the speaker. In fact, if the prejudice causes incidental testimonial injustices in an aspect of someone's life that is dear to them, such as their career, and especially if these are persistent over time, they "may be utterly disastrous for the subject" (Fricker 2007:29).

That said, I acknowledge that there seems to be a morally significant difference between prejudice against social identities such as gender and race, versus occupation or political affiliation. Prejudice against the former seems in some moral sense more severe, since it concerns a social identity one has no control over³⁶ –which is why these are the kinds of social identity that are at the forefront of discussions about discrimination. Nonetheless, prejudice against the latter types is still problematic in its own right.

Before I continue my discussion, I should address a potential confusion regarding some terminology. In the literature on gender, race theory and societal injustice more broadly, the

³⁶ Note that some of these identities, such as gender and sexuality, may be fluid. For example, the same individual may identify as a cis person for the first 20 years of their life and later realize that they now identify as non-binary. So, in that sense, gender identity is subject to change. But even so, one doesn't *choose* what they identify as – they discover it.

words ‘structural’ and ‘systematic’ are often used interchangeably. Here however, when I speak of structural identity-prejudice, I merely mean that these identity-prejudices are widespread throughout society, and contingent on certain features of that society. The term ‘structural’ is thus used in a normatively neutral, purely descriptive sense.³⁷ These structures can be socially unjust, but they need not be. Systematic prejudice however, is rooted in socially unjust structures. It results from unequal power relations in society, and implies the morally problematic notion of oppression. The word ‘systematic’ in ‘systematic testimonial injustice’ sets it apart from incidental cases as it captures the *tracking* property of the relevant prejudice.

Three points follow from the aforementioned example of incidental testimonial injustice that are important to emphasize: 1) testimonial injustice can result from non-tracking prejudices, 2) accordingly, testimonial injustice is not per definition aimed at marginalized groups, 3) the (social) structures underlying unfair testimonial treatment need not be rooted in social injustice.

The prejudices underlying testimonial injustice in the cases of Tom Robinson and the philosopher of science differ in regards to the kind of social group they refer to (race versus academic discipline) as well as the extent of the prejudice (widespread versus local). Fricker’s account seems to imply that all widespread prejudices are based on socially unjust structures, and lead to systematic injustice, whilst local prejudices lead to incidental cases. I agree with the claim that local prejudices can only cause incidental testimonial injustice. However, I argue that this dichotomy does not capture all cases of identity-prejudiced credibility appraisal. We can conceive of identity prejudices that are widespread, though not rooted in socially unjust

³⁷ Whilst she underlines the structural features of hermeneutical injustice, as arising from *structural* identity prejudice, Fricker treats testimonial injustice as resulting from individual identity prejudice. It is the individual hearer, after all, who fails to attribute apt credibility. Several authors have pressed Fricker on this point, remarking that testimonial injustice is at least partially contingent on structural features as well (Alcoff 2010, Langton 2010, Maitra 2010). After all, Fricker contents that “identity prejudice operates via a collective imaginary” (Alcoff 2010: 132). A speaker might be the one giving the credibility deficit, but the speaker is not the cause of the identity prejudice being readily available (Langton 2010: 462).

structures. Accordingly, I propose a third category to capture in-between cases, which I term *patterned* testimonial injustice. The prejudice in question here results from stereotypes such as ‘all politicians are corrupt’, or ‘all lawyers are liars’. These are the kind of stereotypes that we are all familiar with, and that can potentially negatively influence how we perceive the trustworthiness of lawyers and politicians - even in the face of counterevidence. It bears emphasizing that credibility deficits resulting from such prejudices are *not* on par with the systematic testimonial injustice cases. After all, these prejudices might affect the uptake of testimony, it doesn’t affect these social group in other facets of their life; e.g. they are not economically or politically disadvantaged in virtue of belonging to the social group of lawyers or politicians. Yet at the same time the prejudice is not only present in specific contexts, and is not localized in that sense. These are examples of *patterned* testimonial injustice, whereby the identity-prejudice is not rooted in social injustice, but it nevertheless has other political and social underpinnings that cause the prejudice to be widespread (see table 2).

Table 2 Three Categories of Testimonial Injustice

| | Prejudice is widespread | Prejudice is rooted in social injustice |
|----------------------------------|-------------------------|---|
| Systematic testimonial injustice | ✓ | ✓ |
| Patterned testimonial injustice | ✓ | - |
| Incidental testimonial injustice | - | - |

Putting this third category aside for now, I want to focus on the injustice in testimonial injustice. So far, I have established that even though testimonial injustice and social injustice are often interwoven, the two concepts need not coincide. Systematic testimonial injustice is rooted in social injustice, but incidental and patterned testimonial injustice are not. This raises

the question: if it's not underlying social injustice, then what is it exactly that constitutes the unfair treatment of testimony in testimonial injustice?

3.3.2. What Is the Locus of the Injustice?

It should be clear that an erroneous credibility appraisal does not constitute a testimonial injustice per se. Determining the locus of the injustice amounts to teasing out which features of testimonial injustice set it apart from innocent epistemic error. Putting it differently: I have already spoken about the harms involved in testimonial injustice, but what exactly is the *wrong* done by the hearer?

A prominent place in Fricker's discussion of the wrong of testimonial injustice is the use of *negative identity-prejudicial stereotype* in credibility assessment. She understands *negative identity-prejudicial stereotype* as follows:

“a widely held disparaging association between a social group and one or more attributes, where this association embodies a generalization that displays some (typically, epistemically culpable) resistance to counter-evidence owing to an ethically bad affective investment” (Fricker 2007: 35)

Though identity-prejudice is a prominent feature of Fricker's account of testimonial injustice, it is not a sufficient condition. Fricker explicitly acknowledges that also prejudicial credibility deficits might result from innocent epistemic errors, or epistemic bad luck, and it might at times be difficult to distinguish them. To identify the locus of the injustice, we must look at what further features are necessary for testimonial injustice.

In her reconstruction of what sets identity-prejudiced testimonial injustice apart from innocent epistemic errors, Fricker explains that what makes negative prejudicial credibility appraisal morally significant is that they follow from motivated irrationality, where the

motivation is often unconscious yet “ethically noxious” (Fricker 2007: 34). This refers to the ‘ethically bad affective investment’ in the above quote. Utilizing negative identity prejudice is irrational, because it entails a stereotype that is being held in the face of counter evidence. The motivation is ethically noxious, for example when the resistance to counter evidence against a stereotype is rooted in contempt towards the social type of the speaker. The hearer might be motivated to be irrational in this way, because they (unconsciously) gain some kind of psychological benefit from this irrationality (e.g. not having to reflect on their previous convictions, etc.). Fricker also calls this motivation an “affective investment” (Fricker 2007: 35).

In short, according to Fricker the locus of the injustice in testimonial injustice is located in prejudicial credibility appraisal that is driven by ethically bad affective investments. Several authors have pointed out that some features of this account might be too restricting, and risk not being able to capture cases that intuitively seem to involve testimonial injustice.

Ishani Maitra (2010) offers an insightful example of such a case. Imagine a cop taking a statement from a girl who claims to be the victim of a sexual crime. The girl doesn’t make much eye contact and is acting in a shifty manner, and the cop suspects she isn’t telling the truth. He doesn’t believe her. In actuality, the girl is telling the truth. Here the cop has made his credibility assessment based on a reliable stereotype (‘lying people tend to avoid eye contact and act in a shifty manner’), hence the credibility deficit does not result from an identity prejudice. In a way, the credibility deficit towards the girl resulted from epistemic bad luck. However, so Maitra proposes, one could argue that the cop could have done more to check whether his initial appraisal based on the stereotype was correct. For example, even if his appraisal matched the evidence, he could have easily attained more evidence (he could have checked the security cameras, asked medical personnel to undertake forensic examination, etc). More to the point, given the practical circumstances and the relation between the speaker and

hearer, the fact that the cop dismisses the girl's testimony, even if this is done in the absence of identity prejudice, doesn't seem epistemically or morally innocent. This example suggests that Fricker's account needs adjusting in several ways.

Broader Notion of Prejudice

First, in its understanding of prejudiced credibility appraisal. Though Fricker officially characterizes prejudicial stereotypes as associations resistance to counterevidence, she also describes prejudice as a "judgement made or maintained without proper regard for the evidence" (Fricker 2007:33). As Maitra notes, the broader interpretation is perhaps preferable as it can capture instances where the hearer is not resistance to counter evidence per se, but rather, fails to seek out easily acquirable counterevidence - as is the case in the above-mentioned example (Maitra 2010: 205-207).

Other Prejudices

Second, Maitra's example suggests that testimonial injustice need not involve unreliable identity prejudice per se, but can be rooted in prejudices that do not concern someone's social type, nor do they need to be unreliable (e.g. what lying people typically look like). Gloria Origgi (2012) makes a similar point when she calls attention to the fact that identity stereotype is merely one of the many biases that influence and potentially distort our credibility appraisals. Our credibility appraisal largely depends on heuristics of 'epistemic vigilance' that we have developed over the years (Origgi 2012: 224). These heuristics result from the complex of various "cognitive mechanisms, emotional dispositions, inherited norms, reputational cues" (Origgi 2012: 224). Think for example of (internalized) social norms regarding epistemic authority, cues from the way an argument is presented or our tendency to confirm with the dominant view. The less direct evidence one has, (or alternatively; the less certainty people have regarding what counts as 'evidence') the more people rely on these shortcuts in determining who to believe. These heuristic norms can be correct, or they may be incorrect. Depending on the stakes in a given situation, we either default trust our vigilance, or

check the reliability of the heuristics we are using (being actively vigilant). A more comprehensive or complete account of the mechanisms that might cause testimonial injustice, so Origgi claims, will benefit from examining factors other than identity prejudice that can distort our perception of speakers' credibility. Alongside identity stereotypes, there are other heuristics that can cause credibility deficits in this way and bring about unfair treatment of someone's testimony.

For example, when deciding whether or not to trust someone, we not only evaluate the reliability of the speaker, we also take credibility cues from the *content* of someone's testimony (Origgi 2012: 229). Making inferences about the reliability of the content can happen in biased ways, such as when our judgement is clouded by confirmation bias, availability bias or personal validation effects. When such biases are mistaken, and lead to credibility deficits, this seems like merely an epistemic error rather than a testimonial injustice. After all, testimonial injustice results from credibility deficits towards the speaker, and not towards the content of their testimony. However, in a recent article Amandine Catala (2021) provides an argument for how such content related cues might lead to a specific type of testimonial injustice, which is not based on identity prejudice but rather on *epistemic prejudice*. She bases this idea on C. Thi Nguyen's influential account of echo chambers, understood as epistemic practices in which outside sources are excluded whilst the trustworthiness of group members (i.e. those who agree with the echo chamber's core beliefs) is overstated (Nguyen 2020).³⁸ Catala argues that this manipulation of credence can be understood as an instance of testimonial injustice. The basic idea is that the credibility deficit results from prejudice against *epistemic* groups (the outsiders)

³⁸ Epistemic bubbles and echo chambers are much discussed phenomena in the literature on selective exposure, and often used interchangeably – mistakenly so, as C. Thi Nguyen claims. Nguyen defines an epistemic bubble as “a social epistemic structure in which some relevant voices have been excluded through omission.” (Nguyen 2020: 142) and an echo chamber as “an epistemic community which creates a significant disparity in trust between members and non-members” (Nguyen 2020:146). The difference lies in the fact that the epistemic exclusion in epistemic bubbles is passive, with nothing preventing epistemic agent to seriously engage with counterviews when they encounter them, making it easy to break out of such bubbles. Contrastingly, in echo chambers the epistemic exclusion and credence manipulation are both active, and contingent on already accepted group beliefs, making it difficult to break out of echo chambers.

who hold, or deny, certain beliefs, rather than against certain social identity groups (Catala 2021:31).³⁹ In short, testimonial injustice entails prejudicial credibility deficits simpliciter, where the prejudice need not be aimed at social identity.

Epistemic Negligence

Third, Maitra's example seems to imply that the cop might have committed some type of testimonial injustice, because there seems to be some morally significant epistemic neglect on the part of the hearer that causes them not to give the speaker the level of credibility they otherwise would have given. On this (broader) understanding of testimonial injustice, the central question is not whether the hearer bases their credibility appraisal on identity-prejudice, per se, but rather whether the hearer should have done more (besides relying on stereotypes) to come to a correct credibility appraisal (Maitra 2010:203). That is, testimonial injustice might be a type of epistemic negligence.

This seems right to me. After all, it corresponds with Fricker's conception of the virtue of testimonial justice. Testimonial justice can be achieved *naively*, meaning that the hearer has no prejudice, or *correctively*, when the hearer detects and corrects for prejudices that can distort their credibility appraisal. That is to say, the presence of the prejudice itself is not what constitutes the injustice. But rather, the injustice is contingent on a *neglect to address* one's prejudices. Note that in the case of the naïve form, the agent is not virtuous in virtue of the absence of the prejudice, but rather, in virtue of the absence of negligence (since there is no prejudice to correct). In Fricker's own words, the virtuous hearer is one that (reliably) "*neutralizes the impact of prejudice in her credibility judgements*" (Fricker 2007:92, italics in original text). Failing to do so constitutes the vice of testimonial injustice. Origi's (2012) previously mentioned argument also lends further support to the notion of testimonial injustice

³⁹ Incidentally, the mechanisms of testimonial injustice based on epistemic prejudice bear significant similarity to an example Fricker briefly mentions as incidental testimonial injustice, namely a case whereby a scientific panel of referees have a prejudice against a certain research method, disadvantaging any submissions that utilize that method (Fricker 2007: 27). Though she doesn't specify it as such, it seems to me that this is a case of testimonial injustice from epistemic prejudice rather than identity-prejudice.

as type of epistemic negligence. Using her terminology, testimonial injustice can be understood an instance whereby someone default trusts some heuristic, when they should have been actively vigilant. Wayne Riggs (2012) also endorses this line of thought, and offers an understanding of testimonial injustice as ethically culpable epistemic negligence.⁴⁰

Morally neutral affective investments

Riggs further argues that the affective investments involved in prejudicial credibility appraisals need not be ethically bad to constitute unfair treatment of testimony. This is another way in which we can sharpen our understanding of testimonial injustice. Even though it is not sufficient, we have established that *some kind of prejudice* (though not necessarily unreliable identity prejudice) needs to be present to speak of testimonial injustice, where prejudice entails that the hearer did not display proper regard for the evidence in forming their credibility judgement. According to Fricker, negative identity prejudice is always generated by ethically bad affective investments (Fricker 2007:35). However, as Riggs points out, Fricker does little to explain why negative prejudice necessarily follows *solely* from ethically bad affective investments (Riggs 2012: 158). The examples Fricker uses to illustrate the ethically bad in negative prejudice (e.g. motivations such as contempt for women, or racial hatred) are obviously ethically problematic, but we might envision scenarios whereby someone employs negative prejudice from good or morally neutral motivations. Furthermore, it is not clear why the affective investment that blocks uptake in testimonial injustice needs to be accompanied by ethically bad motivation in order to see why (in certain cases) it is morally problematic for someone to neglect correcting for their negative identity prejudice (Riggs 2012: 158-159). To illustrate, consider a slight variation of the cop example. Imagine that in this scenario, the person that allegedly assaulted the girl is the cop's colleague and friend. It would be difficult

⁴⁰ I do not necessarily agree with Riggs when he states that "wronging someone should require culpability for whatever constitutes the wrong" (Riggs 2012;153) - though I acknowledge that Fricker at times seems to endorse such a claim herself (Riggs 2012:152).

to accept for the cop that this person would do something that morally condemnable, and the irrationality might be motivated by feelings of friendship and love for his accused colleague – perhaps he *wants* to believe his colleague is innocent, because he feels morally obliged to his friend to believe in his innocence. This makes it no less irrational, nor does it take away that the cop committed a genuine testimonial injustice by not correcting for any prejudices. It shows that a neglect to correct for prejudice need not be motivated by ethically bad affective investments - nonetheless the epistemic negligence is still morally significant, given the speaker-hearer relation. This broadens the scope of testimonial injustice to include cases whereby the affective investment driving the prejudicial credibility appraisal is not ethically bad.

Let me sum up how my account understands testimonial injustice. At the centre of testimonial injustice is a lack of apt testimonial trust, due to a distorted perception the hearer has regarding the speaker's trustworthiness. The literature on testimonial injustice focuses on negative identity-prejudicial stereotypes against marginalized groups as the relevant distorter of a hearer's perception of the speaker. However, (testimonial) trust can be undermined in various ways, and depending on circumstances under which the hearer maintains a distorted perception of the speaker's trustworthiness, testimonial injustice can be generated from other prejudices as well, if epistemic trust in the speaker is erroneously and wrongfully undermined. On this account, *testimonial injustice occurs iff:*

the speaker is unfairly deprived of testimonial trust, i.e.; they receive a credibility deficit due to the hearer's epistemic negligence of failing to correct for prejudicial distortions of perceptions of the speaker, in a context wherein the hearer has an ethical obligation (towards the speaker) to match their credibility appraisal to the evidence available.

This account differs from the typical account of testimonial injustice in several ways. On my understanding, testimonial injustice:

- 1) need not be rooted in social injustice (as discussed in section 3.1),
- 2) employs the broader understanding of prejudiced credibility appraisal, namely as lack of proper regard for the evidence,
- 3) need not be based on social identity prejudice, but can also result from other prejudices such as epistemic prejudice,
- 4) is understood as a form of epistemic negligence that is morally significant either in virtue of the speaker-hearer relation, or in virtue of the moral stakes,
- 5) can result from morally neutral motivations, meaning that the affective investment causing the irrational motivation in prejudiced credibility appraisal need not be ethically bad.

Lastly, let me emphasize one more aspect in which discussions of testimonial injustice could be enriched – without broadening the conception of testimonial injustice itself any further. As I previously mentioned, central to Fricker’s conception of testimonial injustice is negative (identity) prejudice. However, not all (identity) prejudices are negative, they can be positive as well. Accordingly, prejudicial credibility appraisal can also lead to credibility *excesses*. Why is this relevant to our discussion of testimonial injustice? According to Fricker, cases of [social prejudicial] credibility excess should not be regarded as cases of testimonial injustice. The arguments she provides to defend this statement are twofold: 1) credibility excess does not generate first order distinctive epistemic harms to the speaker (Fricker 2007:20) and 2) testimonial credibility does not follow the distributive model of justice (Fricker 2007:19). Since there is no finite amount of credibility over which people must compete (as opposed to resources that follow the distributive model of justice, such as food or medicine) a credibility excess to one speaker does not create a corresponding credibility deficit to another speaker. Hence, there cannot be cases of someone receiving more than their fair share - or so Fricker

claims. However, it becomes clear that credibility excesses are at least relevant to testimonial injustice when we consider that credibility acts as a *proportional* good (Medina 2011). As José Medina rightfully points out, credibility appraisals usually happen comparatively. When we assign someone a certain amount of credibility, we tend to do so relatively to others. We assign speaker S1 more, less or equal credibility than speaker S2. This means that when I give a certain speaker a credibility excess, I will automatically give less credibility, relatively speaking, to any speaker that contradicts them. That is to say that even if credibility excess is not (epistemically or morally) wrong or harmful in itself, there still exist a strong causal link between credibility excess on the one hand, and credibility deficits and testimonial injustice on the other. When two objectively equally credible speakers testify to contrasting and incompatible claims, a credibility excess to one can lead to epistemic injustice for the other (Anderson 2012:170).

Some authors actually hold that credibility excess can be epistemically and morally harmful to the speaker as well, and can generate testimonial injustice. E.g. Emmalon Davis (2016) argues that credibility excess can cause both first order as well as second order epistemic harms to the marginalized speaker, and that “*inflated estimation*” of marginalized persons can harm them “*qua subject and transmitter of knowledge*” (Davis 2016:486). More specifically, she explains how *positive* social prejudice can lead to identity-prejudicial credibility excess, which occurs when someone is credited to be knowledgeable in a certain domain because of their social identity (Davis 2016:487), e.g. when someone asks an Asian classmate to help with their calculus homework because they assume them to be good at mathematics. Such example of “type casting” show how procedural credibility excess omits acknowledgement of someone’s individuality and affectively reduces them to a stereotype (Davis 2016: 488).⁴¹

⁴¹ Fricker concedes that there are cases conceivable wherein credibility excess can be disadvantageous, for example when patients expect their general practitioner to be more knowledgeable in some medical subfield than they actually are. The GP will be aware that their best advice might mislead the patient in some important health issue, but at the same time the GP does not want to undermine the robustness of the doctor-patient relationship by

Though I am sympathetic to this line of thought, here I do not endorse the idea that prejudicial credibility excess also constitutes testimonial injustice. For now, I merely maintain that that credibility excesses are relevant for discussions of testimonial injustice to the extent that they generate credibility deficits for any counter parties.

3.3.3. Who Can Be a Victim of Testimonial Injustice?

It's plausible that someone would implicitly think of testimonial injustice along the same lines of (institutionalized) racism, and on this basis object to the idea that non-marginalized groups could possibly be targets of testimonial injustice. The thought would go something like this: 'racism' refers to the oppression of black, indigenous and people of colour, based on a societal racial hierarchy that privileges white people. From this it follows that per definition, a person of colour cannot be racist towards a white person (since they cannot invoke the same privilege). If testimonial injustice refers to a similar understanding, such as that it is defined as marginalized groups being ignored due to societal hierarchy of 'valuable knowers' that privileges some speakers over others, then privileged groups cannot be the target of such an injustice (as they cannot be victimized by the hierarchy that favours them). This seems to be the line of thought authors like Riggs and Byskov take.

However, on my understanding, testimonial injustice simpliciter need not be rooted in such prejudice per se, but can be caused by other types of unfair testimonial treatment. What sets *systematic* testimonial injustice apart from testimonial injustice simpliciter, is that the prejudice in question is derived from the always present context of unequal power relations –

correcting their wrongful credibility assessment. In this case, the GP is disadvantaged by the credibility excess as the resulting dilemma ethically burdens him (Fricker 2007:18). Fricker also acknowledges that credibility excesses can potentially harm someone's capacity as a knower. E.g., repetitively receiving credibility excess can cause them to develop certain epistemic vices, such as epistemic arrogance, which harms their capacity to form true and/or justified beliefs. However, such negative consequences on someone's epistemic capacities are examples of consequences after multiple credibility excesses over time. Unlike with credibility deficit, we cannot categorize individual instances of credibility excess as cases of testimonial injustice. However, so Davis claims, in focussing only on credibility excess of privileged speakers, Fricker overlooks the impact that credibility excess towards marginalized speakers might have on them.

this is what makes it systematic. So, it seems accurate to say that privileged groups cannot, per definition, be targets of *systematic* testimonial injustice. They can however be targets of incidental testimonial injustice, as well as patterned testimonial injustices.

Testimonial injustice is sometimes seen as a form of silencing. Because prejudice prevents hearer from taking specific speakers seriously, some social groups are effectively excluded from epistemically contributing to a shared inquiry. Another way to object against the notion that non-marginalized groups can receive testimonial injustice, is to ask whether we can speak of a testimonial injustice to members of a dominant group, given that their voices are still being heard?

I've previously stated how the literature on testimonial injustice assumed identity prejudice as the main if not only relevant distortion of the hearer's perception of the speaker. Another (related) tendency in the literature is to focus on those cases wherein someone's testimony is being *ignored*. As Jeremy Wanderer argues, this overlooks cases wherein testimony is being inappropriately *rejected*, which can rightfully be called manifestations of testimonial injustice (Wanderer 2012: 149). Rejecting someone's testimony is to "throw back" their testimony (this entails both direction and activity), whilst ignoring testimony should be understood as something passive like not registering or "not being aware" (Wanderer 2012: 158). This differs from the everyday interpretation of hearing (=registering) and then ignoring. Once the hearer recognizes the address, they can no longer ignore it (a deliberate response to hearing indicates it is no longer a passive ignoring). Both being ignored and being rejected can be tough on the speaker, and both can instigate feelings of grievance or resentment. It seems that where those responses are fitting, we can speak of an injustice (Wanderer 2012: 160).

This opens conceptual space for cases of testimonial injustice whereby someone is recognized as an informant, yet their testimony is not taken as credible. This differs from the central case of systematic injustice, which is often equated to a form of objectification; by

treating someone not as a participant to the shared epistemic practice, but merely as a passive bystander or object, who is seen as a potential source of knowledge in much the same way as an object can be the source of knowledge, but who is not recognized as an epistemic agent (Fricker 2007: 132). In short, in cases of testimonial injustice, a speaker calls on the hearer to recognize their second-person address, and the hearer fails to appropriately respond to this address. An inappropriate response to testimony can be constituted by the hearer ignoring the address as well as rejecting it. This highlights how testimonial injustice need not entail objectification (as commonly understood) whereby someone is seen mainly as a source of information. When someone's testimony is inappropriately rejected, they are, strictly speaking, recognized as an informant, but the response is directed back at the speaker.

The priority that is given in the literature on testimonial injustice to groups that suffer from systematic testimonial injustice, though justified, tends to lead the discussion away from what constitutes the locus of injustice in testimonial injustice itself. Bringing the focus back to those central features, allows for the notion that all social groups can, in principle, be a victim of testimonial injustice. Let me stress that I am *not* arguing that those who receive incidental or patterned testimonial injustice are in the same boat as marginalized groups who receive systematic testimonial injustice. In terms of harms experienced by the speaker, I accept that systematic testimonial injustice is in many aspects more severe. However, that doesn't mean other types of testimonial injustice are never of social or political significance. Such cases involve analogous mechanisms which affect the credibility appraisal of certain non-marginalized speakers and cause similar epistemic and practical harms. In the next section, I will illustrate such an example by analysing the case of failure of uptake of expert-testimony regarding vaccination practices.

3.4. Rejection of Expert Testimony in Vaccine Hesitancy: Testimonial Injustice?

Vaccination is one of the most successful public health practices to date. It has lowered the rate of vaccine preventable diseases to a fraction of what it was before the introduction of vaccines (Callender 2016: 2464). Adverse reactions to vaccines are mostly benign, and serious reactions are extremely rare. Despite overwhelming scientific evidence proving the safety and effectiveness of vaccines against vaccine-preventable childhood diseases, parents don't always trust their paediatrician's recommendations to vaccinate according to the standard vaccine schedule. Many feel the need to conduct their 'own research' into the risks and benefits of vaccines. The relatively small though increasing group of people who have doubts regarding the scientific consensus that vaccines are safe, effective, or necessary are called *vaccine hesitants*. Note that this group includes, but is not limited to, *vaccine denialists* - who flat out deny the scientific consensus. In other words, an increasing number of people do not fully trust the claims of numerous health care professionals when they testify that vaccinations are in the best interest of their own children, as well as of the common good. Moreover, they often hold false, scientifically disproven beliefs about vaccinations which are (mostly) spread via anti-vaccination websites and social media groups. To put it differently, these vaccine hesitants fail to give apt testimonial trust to their paediatricians.

In this section I want to reflect on whether those parents that have an incorrect, deflated credibility appraisal of the paediatrician's testimony regarding vaccine-safety, and subsequently delay or refuse vaccinating their child, simply made an *epistemic error* by believing anti-vaccination websites over expert-testimony, or if they also committed a *testimonial injustice* to the health-care professional.

3.4.1 Prejudicial Credibility Deficit

Recall that testimonial injustice necessarily involves a credibility deficit. A credibility deficit occurs when a speaker is given less credit than they deserve based on the available evidence that they are giving truthful information. Given the amount of research and the scientific consensus supporting the effectiveness and safety of childhood disease-preventable vaccines, the parents have ample reason to believe their paediatrician is telling them the truth. Their credibility appraisal towards the expert-testimony clearly does not match the evidence available, and constitutes a lack of apt testimonial trust, i.e. a credibility deficit. Note that in this case, the credibility deficit does not cause the testifier (i.e. the expert) to be ignored, but rather, their testimony is heard and afterwards rejected. However, in order to speak of testimonial injustice, the credibility deficit causing this rejection needs to resolve from a (morally significant) epistemic negligence to correct for prejudicial distortions in the hearer's perception of the speaker. As I will argue, several prejudices could potentially underlie the rejection of expert-testimony by vaccine hesitants.

Identity Prejudice

I previously discussed how identity prejudices can be aimed at non-marginalized social groups (section 3.1). Here it becomes relevant to inquire whether 'experts' could be a target of identity prejudice. As I will argue, there is indeed a case to be made for prejudice against experts qua their social type. Furthermore, there are signs that suggest that this prejudice is not just local, but becoming increasingly widespread – implying patterned rather than incidental testimonial injustice.

Amongst vaccine hesitants, there seems to be an increasingly common thought that health care experts are controlled by 'Big Pharma', and that their expert advice is merely financially and politically motivated (Attwel et. al 2017).⁴² Objectively speaking, there is little

⁴² See for example the following quotes from survey studies on vaccine hesitancy: "Unfortunately the doctors end

reason for this distrust. The scientific community has multiple institutional structures in place that aim to safeguard against corruption and incompetent conduct, such as degrees and peer review. Misunderstandings regarding vaccination practices are thus mainly explained by erroneous credibility appraisal. Empirical research does show that distrust against experts and scientists and opposition to scientific consensus are significantly correlated (Pasek 2018, Motta 2018, Merkley 2020). Indeed, distrust against health care experts is self-reported by vaccine hesitants as one reason for why they do not believe the scientific consensus and subsequently choose to postpone or refuse vaccinating their children (Wilder-Smith and Qureshi 2020:56). More broadly, the public sphere is increasingly characterized by anti-elitism and hostility against expert-knowledge (Davis 2019: 358, 362). In other words, anti-vaccination discourse is rich with negative attitudes of distrust against experts, also known as *anti-intellectualism*. This attitude was perfectly captured by Michael Gove in the lead up to the Brexit referendum, when he now infamously stated: “*people in this country have had enough of experts*”.

Note that our evaluation of someone’s credibility depends not only on our perception of their competence, but also their sincerity. Testimonial injustice can result from credibility distortions regarding either aspect (Fricker 2007:45). In the case of vaccine hesitancy, we can derive stereotypes linked to both aspects: ‘the corrupt expert’ refers to a lack of sincerity. According to this stereotype, the healthcare experts’ testimonies are seen as attempts to promote their own political or financial aims. Second, one could recognize stereotypes of ‘the out-of-touch’ expert, who is epistemically flawed in the sense that they are ‘unaware of the real problems’ and ‘live in an ivory tower’.

These ascribed motivations and shortcomings are unwarranted, as there is plenty of evidence available (educational standards for obtaining degrees, peer review and other

up looking bad because they’re turning [in]to advertising... mouthpieces for the pharmaceutical industry and that makes me not trust them.” (Wilson et al.2008)
“Health professionals are required to be ‘pro, it’s going against their professional credibility to advise me against something that they are required to promote.” (Helps et al. 2019)

institutional measures to ensure the quality of the profession) that suggest the multitude of healthcare experts are both competent and sincere in their testimony. The fact that certain corrupt scientists get caught (e.g. the infamous Diederik Stapel, who fabricated and manipulated numerous research datasets) is not proof that ‘all scientists are corrupt’, rather: it shows how the system ultimately catches up with these individuals. Even if there is some evidence of a few scientists being corrupt, this is only a very marginal sample, certainly not enough to render the stereotype of ‘the corrupt scientist controlled by Big Pharma’ a reliable one.⁴³ Making credibility judgements according to the stereotype of the corrupt expert, despite the evidence against its reliability, displays a lack of proper regard for the evidence. In cases where the hearer’s credibility appraisal is hereby distorted, we can rightfully speak of a prejudice against the speaker qua their social type of being an expert. When it comes to the ‘out of touch’ expert, this stereotype might be more accurate – at least when it comes to political and moral decision-making. However, when it comes to scientific facts, any truth that this stereotype might hold has no epistemic bearing on the truth-status of vaccine-related research findings such as that there is no causal link between MMR vaccines and autism. When this stereotype distorts the credibility perception of expert-testimony regarding suchlike factual statements, we can again speak of a prejudicial credibility deficit.

In particular, it is an example of the kind of prejudice I set out earlier that lead to the in-between cases of so-called patterned testimonial injustice. The stereotype of the ‘Big Pharma-controlled health care experts’ does not track them through other facets of their life (e.g. it most likely will not affect their career chances or financial situation) in the way that for example racial prejudice does. Still, even if the prejudiced credibility deficit against health-care experts cannot be equated with a *systematic* testimonial injustice, it is not an incidental

⁴³ Moreover, such evidence is more readily available regarding those rare scientists who deviate from the scientific consensus. E.g. the discredited Andrew Wakefield, who claimed to have found a causal connection between MMR vaccines and autism, but whose paper was later retracted.

case either. After all, the prejudice that questions the health care expert's sincerity is not highly localized, but rather, their testimony is *structurally* undermined in the public debate on vaccine practices. Since the prejudice against (health-care) experts is not rooted in social injustice, yet rests on other socio-political phenomena to the extent that the stereotype is readily available and increasingly widespread through society, it can rightfully be termed a patterned testimonial injustice.

Individual Prejudice

Fake news stories, disinformation and post-truth politics often aim at discrediting their opponent or those sources that contradict their testimony. Part of the tactic of undermining the opponent's credibility is to tackle their reputation, so that they appear less trustworthy, and citizens become less likely to believe their take on the issue. For example, the reputation of health care experts can be undermined by claims about their alleged ties to big pharma, claims about their intellect, or their history of reporting false information.⁴⁴ Often, these reputational cues are entirely fictional.

And these tactics appear effective. Recent research has shown that ad hominem attacks against scientists, such as claiming that their research contained financial conflicts, can undermine trust in their research findings (Barnes et.al 2018). Given how anti-vaccination content is riddled with claims about financial interests of health care experts and other vaccine advocates, we can see how manipulation of reputational cues regarding experts can alter perceptions of the trustworthiness that their testimony holds. When health care experts receive such a n undeserved credibility deficit, they are not fully recognized in their capacity as a good

⁴⁴ An example can be found in the distrust Trump-followers had in Dr. Fauci, a distrust fuelled by attacks from Donald Trump and his aids on Dr. Fauci's reputation (Cathey 2020). For example, Peter Navarro, a close aide to Trump, published an op-ed in USE Today in which he accuses Fauci of being wrong on basically all the predictions regarding the pandemic. However, an editorial note on the online page now warns for its misleading character and states that the op-ed failed the fact-checking standards of the outlet. See: <https://eu.usatoday.com/story/opinion/todaysdebate/2020/07/14/anthony-fauci-wrong-with-me-peter-navarro-editorials-debates/5439374002/>

informant, due to reputational cues that are not in accordance with available evidence.⁴⁵ Such cases differ from the classic case of testimonial injustice, as the distorted perception of the hearer doesn't follow from prejudice about health-care experts qua their social type, but rather due to false accusations about a specific individual's character and past testimonial performances. It nevertheless constitutes an undeserved prejudiced credibility deficit.

Epistemic Prejudice

Rejection of expert-testimony regarding vaccination practices can also occur due to epistemic prejudice. Recall that epistemic prejudice can lead to testimonial injustice when the testimony of those from outside one's epistemic community, or rather from epistemic communities incompatible with one's own, are not given apt testimonial trust due to a prejudice against some epistemic community (often due to incompatibility with one's own core beliefs). In other words, the prejudice is aimed at the content of testimony rather than at the social identity of the testifier. Discussions regarding vaccine-practices have become increasingly politicized and polarized over the last few years, and as people become more extreme and steadfast in their stance on vaccination, so the influence of epistemic prejudice in credibility appraisals regarding vaccination becomes more likely.

One example in which such epistemic prejudices can manifest is through identity-protective reasoning (Kahan et.al 2011). Some beliefs are so entrenched in us, mainly because the authorities in our life endorse them, that they are almost impossible to change. These entrenched beliefs are often tied into our social, cultural or political identity. Accordingly, it can be quite costly to give up (part of) those beliefs, as this requires giving up on some part of

⁴⁵ Rests the question if we can rightfully claim that the hearer hasn't formed a credibility appraisal in line with the available evidence. The evidence the hearer has based the credibility appraisal on (the fictive reputational cues) is false, but whether they were truly epistemically negligent depends on whether the hearer was in a position to know that these were false.

our identity, or to ‘betray’ the image we have of who we are.⁴⁶ For example, when scientific consensus is at tension with someone’s political or cultural convictions, they are less likely to deem the relevant expert-testimony trustworthy, in as far as this would require giving up on some belief that is considered fundamental to one’s identity.

Identity protective reasoning might also result in credibility deficits to healthcare experts when it comes to the topic of vaccines. A recent study by Motta et.al has shown that 8% of Americans always identify with the label ‘anti-vaxxer’ as a social identity, 14% does so sometimes (Motta et.al 2021). Furthermore, the study shows a correlation between self-identifying as anti-vaxxer, trusting medical folk wisdom, and harbouring anti-expert attitudes. Though the study cannot affirm it with certainty, this all supports the hypothesis that anti-vaxxers are likely to oppose scientific consensus regarding the safety, effectiveness, and necessity of vaccines, based on motivated reasoning out of identity-protection. If being an anti-vaxxer is an important part of someone’s self-identity, they are likely to engage in motivated reasoning when coming across testimony from groups that are perceived to be threatening to their identity. Healthcare experts’ testimony denies the core beliefs of anti-vaccinations communities, and those who identify as the latter will unfairly hold a credibility deficit to the healthcare experts, simply because believing them would imply giving up on something they consider integral to their socio-political identity.

In this case, the credibility deficit results not from any identity prejudice against the healthcare experts qua their social type, but rather due to the content of their testimony which deviates from the group’s core beliefs. By not engaging seriously with any content that might contradict their own beliefs, anti-vaxxers neglect to match their appraisal of the testimony

⁴⁶ For example, I long believed that the Netherlands was incredibly progressive, as this belief is embedded in our cultural identity – it is only since recent years that I start recognizing our shortcomings in this regard. In terms of psychological costs, it is not easy to admit that actually, your country isn’t as progressive as you thought and having to admit the longstanding ignorance towards this alters the image I had of myself as a relative progressive person.

accordingly with the available evidence – that is, they employ a prejudicial credibility appraisal that lacks proper regard for the evidence available.

Positive Prejudice

Recall that even if we deny that positive prejudicial stereotypes can generate similar harms to the speaker as negative prejudicial stereotypes, it is still true that credibility excess to one speaker can result in a credibility deficit to another speaker who offers conflicting testimony, and thereby cause testimonial injustice towards the latter. This is certainly often the case when it comes to vaccine hesitancy. If anti-vaccination spokesmen, who lack any (bio-)medical background, are given credibility excess at the expense of objectively more credible healthcare experts, this can result in testimonial injustices against the healthcare experts. Take for example celebrities sharing their take on vaccination-practices. Public figures have a relatively large platform in comparison with normal citizens, and as people care about what they think, their opinions and judgements tend to be more influential. People tend to trust celebrities as epistemic authority, even when they lack the background to suggest that they know what they are talking about. Sadly, this influence gets abused by certain public figures who harbour anti-vaccination attitudes, in order to spread disinformation. Alternatively, some anti-vaccination spokespersons have risen to ‘fame’ due to their public engagement against vaccine practices. They have become spokespersons for the anti-vaccination movement, and in the social circle of those who identify as anti-vaxxers, their word holds epistemic authority, even if it directly contradicts the expert-testimony of healthcare professionals. That these figures can have tremendous impact is once again clarified by a 2021 study on the so-called ‘disinformation dozen’, which showed how 65 percent of anti-vaccination content on Facebook and twitter was attributable to twelve leading individuals from the anti-vaccination community (CCDH 2021). The credibility assigned to these speakers does not align with the evidence available and constitutes a credibility excess.

Subsequently, as their testimony differs, experts are seen by those followers as non-trustworthy sources of information, despite the array of scientific evidence confirming their testimony. Keep in mind here that the same goes for those who are merely thrown into doubt by anti-vaccination sources (recall the difference between not believing something and not believing someone). Even if we don't deem the credibility excess received by anti-vaccination outlets as [ethically] problematic in itself, we can see how these excesses are problematic for the perseverance of a healthy, testimonial just epistemic environment.

In such cases, the testimonial injustice does not follow from a negative prejudice against the speaker, but rather from positive prejudices against other speakers. Again, these positive prejudices need not be identity-based, but can follow from other heuristics as well.

Affective Investment

The affective investments behind the motivated irrationality that these vaccine hesitants demonstrate is not necessarily an ethically bad one. For example, imagine parents whose eighteen-months old child is diagnosed with a cognitive or physical impairment. The doctors cannot tell them what caused this impairment, and the parents are left with numerous questions and concerns. They decide to look online for advice and information. When googling the symptoms of their child, they stumble upon an anti-vaccination website that seems to provide a clear-cut and seemingly logical explanation: 'if your child is vaccinated, and afterwards became ill, it is most likely a result from the vaccination'. The parents are moved by the anecdotal stories on the website and judge them as credible: they give the source a credibility excess, and consequently believe their child's impairment was caused by the MMR vaccine. This goes against what all the doctors had insured them, making the parents lower their credibility appraisal of the healthcare experts. When the parents lose trust in their healthcare professional, they do not do this out of ethically bad motivations: they simply want to feel like they know what is going on with their child, and this explanation provided an answer. Yet it is

still a motivated irrationality, and they could have done more to check for the reliability of their default trust in the emotionally appealing anecdote.

Different from justified scepticism

I should clarify that I am not claiming that science is completely value-free or objective in a sense that makes scientific necessarily true. In fact, part of what gives science its strength and reliability is exactly the notion that theories and claims can in principle be challenged, and the understanding that counter evidence could potentially arise in the future (Douglas 2015: 301). Scientific facts are thus never 100% certain.

Heather Douglas has famously revitalized Hempel's argument from inductive risk about how this uncertainty brings non-epistemic values into scientific procedures. The idea is that since there is always a margin of error, scientists have to decide on what margin of error is acceptable for accepting a certain hypothesis. These judgements are partially based on the significance of the outcome of the research as well as its implications and the risks involved in getting it wrong, and evaluating these outcomes involves non-epistemic values (Hempel 1965, Douglas 2000). Similar non-epistemic values are present in three decision making points in the scientific method: the research agenda setting stage, determining the value and desirability of certain research directions, and determining limitations to methodological practices (Douglas 2000:563, following Longino 1990).

Scientific practice is also not free of biases that undermine the objectivity of a scientific consensus. For example, there are the well-known publication bias and file drawer effect (Levy 2022: 115). Positive results are easier to publish, as are surprising findings, and the chances of publication influences the kind of researches that scientists tend to conduct (publication bias). Furthermore, when first results are negative or indicate a less publish-worthy direction, the research often ends up in the drawer rather than being published (file drawer effect). Moreover, there is the 'Problem of Unconceived Alternatives', which states that often there is an alternative theory that can just as adequately explain the available data. Making choices

between equally capable theories, or being blinded to alternatives, inevitably involves biases and non-epistemic values (Stanford 2001). However, the fact that science isn't completely value-free, doesn't imply that there aren't any standards for proper scientific research or that scientific consensus are 'mere theories', epistemically on par with any other hypothesis (from lay persons). Even without complete certainty, we can speak of some kind of objectivity, and scientific consensus still holds some epistemic authority. When one uses the term 'objective' in scientific context, one refers to the reliability of the knowledge producing process or the trustworthiness of the knowledge claim. Saying something is an objective scientific fact is a type of endorsement (Douglas 2009:116). As Douglas puts it: "Objectivity does not ensure truth, but rather ensures the claim was the result of our best efforts to accurately and reliably understand the world." (Douglas 2009: 117).

I am also not excluding the possibility of other valid reasons for distrusting experts, such as injustices and mistakes from the scientific community in the past. Naomi Scheman also argues that when scientists are mainly made up of a privileged people (e.g. typically white, male, middleclass, heterosexual, relatively able-bodies) they are most likely to receive distrust from 'ordinary citizens' as a lack of diversity might indicate a knowledge gap (again, a form of selective exposure) that prevents a complete objective view (Scheman 2011). But these are not the types of reasons for distrust that anti-vaccination advocates point to, nor does it seem to be particularly relevant to expert testimony on effectiveness and safety of vaccines (these worries might be more relevant to the design of implementation schemes and the extent to which vaccination access may or may not be distributed justly).

In short, not all distrust against scientist (or health care experts) is always unwarranted, and a failure to believe expert testimony is not always a testimonial injustice. Furthermore, testimonial justice does not require blind trust in expert testimony. Apt testimonial trust in

science is compatible with healthy, mitigated scepticism – but not with science denialism (Baghramian and Panizza 2022).

3.4.2. Epistemic and Moral Harms

Does the credibility deficit against the expert result in any epistemic or moral harms that we might expect in cases of testimonial injustice? Testimonial injustice necessarily involves the primary ethical harm and primary epistemic losses. It can also bear secondary epistemic and moral harms. I will argue that all such harms are present in this case.

Let me start with the primary ethical harm. When prejudice prevents the vaccine hesitant to match their credibility appraisal of the paediatrician to the evidence available, the paediatrician is undeservedly deprived of testimonial trust. In this way, the expert is damaged in their standing as a knower. At first, it might seem odd to speak of epistemic harms against the speaker. After all, the speaker maintains their knowledge - if anything, it is the hearer that misses out. However, recall that on Fricker's understanding, a knower encompasses more than simply an agent who epistemic goods such as true beliefs and knowledge. She employs a social understanding of knower, namely as a good informant. By failing to give the expert apt testimonial trust, the vaccine hesitant parents are effectively excluding the expert from the community of epistemic trust, and are thereby not respecting them in a very fundamental aspect of what it means to be human.

Testimonial injustice implies a failure of testimonial exchange, causing the hearer to miss out on knowledge that the speaker could otherwise have transmitted to them. These kinds of epistemic losses are the primary epistemic harm of testimonial injustice. In the case of vaccine related testimony, credibility deficits towards experts causes or maintains ignorance, doubts or even false beliefs related to vaccination practices in the hearer.

Secondary epistemic harms are not necessary for testimonial justice to occur, but they typically follow. Earlier I mentioned how testimonial injustice can lead to secondary epistemic

harm in the form of hindering the epistemic development of the speaker by silencing them or because they internalize the doubts regarding their epistemic abilities. Experts are less likely to be harmed in this way; they have plenty of epistemic resources to understand the mechanisms in place such that even if they might not be believed by some, this will likely not affect their confidence in their epistemic abilities – though they might be prompted to reflect on their communicative abilities, and perhaps be discouraged from sharing vaccine related testimony in certain contexts. However, we should also consider secondary epistemic harms that befall the broader epistemic community when experts are not given apt credibility. Given their epistemic authorities, experts hold important roles as producers and distributors of knowledge. As they occupy crucial roles in the distribution of epistemic labour, when these epistemic agents are not given apt testimonial trust, the effects on the shared epistemic practice can be quite severe. If a large amount of members in the epistemic community do not believe expert-testimony *in virtue of it being expert-testimony*, this does not merely constitute an incidental failure of testimonial exchange, but can cause dysfunction to the overall epistemic system.

A similar point can be made for the secondary moral harms. Even if secondary harms to the speaker are typically quite benign in cases of patterned testimonial injustice, like with the epistemic harms, we should not forget about the secondary moral harms that can befall on the broader community. Depending on the content of the testimony, a lack of testimonial trust in objectively credible information sources can have morally significant consequences. When it comes to the topic of vaccine safety and effectiveness, a dysfunction in distributive norms of testimony causes severe secondary moral harms. In our example, because the parents reject the expert-testimony and instead falsely believe vaccines to be unsafe, they might end up vaccinating their children only partially, on a delayed schedule, or not at all. Some ‘common’ misconceptions regarding vaccination practices include a link between vaccines and autism, that vaccines contain toxins, and that vaccines are a less safe option to protect against vaccine

preventable diseases than ‘natural immunity’ from contracting the disease (Smith 2017). In reality, even though vaccines are not 100% risk free (no medical treatment is), the risk imposed on children by not complying with the expert-recommended vaccination schedule is significantly higher - not to mention the risk (partial) vaccine refusers are imposing on the rest of the population, especially on those who cannot be vaccinated themselves, either because they are too young or because they suffer from autoimmune diseases. From a public health perspective, this is especially troubling when one considers that a drop of vaccination rates increases the risk of impeding herd-immunity against numerous diseases. It is also worth mentioning that even if they are not the recipients of the relevant testimonial injustice, it is marginalized groups that typically fall victim to the morally significant harms of vaccine hesitancy.

In sum, the significance of testimonial injustice against experts is grounded in different considerations than those that underscore the severity of testimonial injustice rooted in social injustice. Underserved credibility deficits against experts, be that qua their social type or due to other prejudices, is extremely epistemically harmful given the important role experts have in the division of epistemic labour, both as producers and distributors of knowledge - especially when it comes to testimonial content that influence decision-making and behaviours which can have large scale moral consequences, such as vaccination practices.

3.5. Concluding Remarks

I have argued in favour of an account of testimonial injustice that is not rooted in social injustice per se, but is understood as a type of morally significant epistemic negligence to match one’s credibility appraisal to the evidence available. While this account preserves the main mechanisms and harms of Fricker’s account of testimonial injustice, it expands on its conception by maintaining that the prejudice involved need not be based on social identity, and the affective investment driving the prejudicial credibility deficit need not be ethically bad. I

have further shown how this account can capture certain cases of rejection of expert-testimony [regarding vaccine safety] as testimonial injustice.

There is still one challenge remaining that needs addressing regarding the status of healthcare experts being the target of testimonial injustice, which has to do with the lack of a one-on-one testimonial exchange. It is easier to make the case for testimonial injustice in scenarios wherein a paediatrician's expert-testimony during a doctor-patient consultation is not taken seriously by some parents, because they assume him to be corrupt. The case becomes more complex when we are talking about cases that take the form of someone seeking information regarding vaccines online and, based on distorting biases, gives credibility excess to anti-vaccination content and/or credibility deficits to the advice of public health organizations. One might wonder if here the vaccine hesitant really does an injustice towards the healthcare experts, or harms *them* (after all, the healthcare experts are most likely not aware of every instance of inappropriate rejection of their expert-testimony by the increasing amount of vaccine hesitants). They will nevertheless experience testimonial insult by noticing how their expert-testimony (of healthcare experts as a group) loses effect in public deliberation. Still, is there really the kind of second-person address that commits the hearer to appropriately respond to the speaker?

According to Maitra (2010), we can imagine instances of such credibility deficits whereby no injustice is done to the speaker, because the speaker and hearer are not in an obligating relation to each other. For testimonial injustice to occur, the hearer needs to have an obligation to the speaker to match her credibility appraisal with the available evidence (Maitra 2010: 201). The question then becomes whether the vaccine hesitant would be under such an obligation to give the healthcare expert apt testimonial trust. Though I suspect there is a case to be made that to some extent, testifiers deserve this commitment always, developing this argument falls outside the scope of this paper. Nonetheless, even if the hearer might not have

an interpersonal obligation of testimonial justice towards to the expert per se, the moral significance of the epistemic content at stake puts a similar obligation on the individual anyway. Given the risks to public health that can result from failures of transmitting and distributing knowledge regarding vaccine-safety, it is safe to say that in general, one is under moral obligation to at least try to be epistemically responsible when it comes to forming vaccine-related beliefs. This includes an obligation to match one's credibility appraisals of relevant information sources to the evidence available.

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4. Article 4) Procedural Epistemic Democracy and Virtue-based Citizen Competence

Abstract

My aim in this paper is twofold. First, I argue that the debate on Political Epistemic Responsibilities (PERs) would benefit from a broader conception of citizen competence than is prominent in the literature. I show how the standard, narrow conception of citizen competence indicates a focus on what I term Belief-based Political Epistemic Responsibilities (BPERs). Mirroring a similar move from belief-based to virtue-based epistemology, I argue that a fruitful research direction for epistemic democracy includes considerations of virtue-based conceptions of political competence, accompanied by Virtue-based Political Epistemic Responsibilities (VPERs). To illustrate how instrumentalist concerns can support VPERs, I discuss the example of a VPER of testimonial injustice.

Second, contra what seems to be the prominent conviction in the literature, I argue that once we consider this broader notion of citizen competence, pure proceduralist views on democracy can ground PERs. I use Fabienne Peter's (2008, 2009) pure epistemic proceduralism as an example to illustrate how *procedural epistemic normativity* can generate VPERs, without any reference to the quality of decision-making outcomes. Again, I use the example of testimonial injustice to illustrate how such VPERs could be generated.

4.1. Introduction

Epistemic democrats claim that democratic decision-making is desirable (partially) due to its epistemic value. According to standard, instrumentalist epistemic democrats⁴⁷, the

⁴⁷ These theorists often refer to themselves - and are often referred to as - epistemic democrats simpliciter. However, as I will elaborate in section 2, not all epistemic democrats are (pure) instrumentalists.

epistemic value of the democratic decision-making procedure lies in its potential to approximate a process-independent standard of quality or correctness and produce epistemically good outcomes.⁴⁸ Such standard notions of epistemic democracy employ a veristic, consequentialist account of social epistemology (following Goldman 1999). On this account, social knowledge-producing practices are evaluated according to their success rate in generating (or selecting) true beliefs or correct outcomes.⁴⁹

Whether democracy performs well in this regard largely depends on the epistemic capacities of democratic citizens. Depending on the normative democratic framework one adheres to, democratic legitimacy requires different capacities from citizens, some more demanding than others. Regrettably, numerous studies have shown that citizens are severely uninformed when it comes to political matters (see for example Delli Carpini 2005, Brennan 2016, Somin 2010) and voters tend to be irrational when it comes to forming their political beliefs, mainly due to cognitive biases (Caplan 2007, Brennan 2021). Therefore, critics of epistemic democracy, or ‘pessimists’, argue that if the average citizen is incapable of making good political decisions, it becomes questionable whether political outcomes that follow from majority voting and universal suffrage approximate procedure independent standards for epistemically good outcomes.⁵⁰

Optimists on the other hand, have more faith in the ability of citizens to live up to the epistemic capacities democratic legitimacy requires of them. They do not necessarily dispute the findings that suggest citizens are relatively ignorant of political matters, but rather, they argue that citizens need not be held to such high standards as the pessimist claims, for

⁴⁸ For pure epistemic instrumentalists, the value of democracy is purely contingent on its epistemic performance, meaning that if other forms of government would outperform democracy in this regard, they should be preferred over democratic decision-making instead.

⁴⁹ Section 2 will clarify why this feature is significant for our discussion of PERs.

⁵⁰ For this reason, critics of epistemic democracy argue for alternative ways of governing than contemporary democracy, such as decentralized smaller government (Somin 2013), epistocracy (Brennan 2016) or lottocracy (Guerrero 2014).

democracy to hold epistemic value. After all, the epistemic value of democracy is not derived from individual epistemic capacity, but rather from *collective* epistemic performance.

(Instrumentalist) optimists can be divided into aggregative epistemic democrats and deliberative epistemic democrats. Both ascribe to some version of the law of large numbers and hold that a big democratic electorate will epistemically outperform a small group of the brightest. Aggregative democrats explain the epistemic merits of democracy entirely through its electoral mechanism of majority voting.⁵¹ Deliberative democrats explicitly include public deliberation (broadly understood as the public exchange of reasons for and against specific political decisions) in their conception of democratic decision-making. Public deliberation should be understood as taking place not only in parliaments and chambers, but incorporates discussions on public issues by (political) journalists, through (mass) media, among friends, and increasingly online, mostly through social media. Deliberative democrats hold that deliberation is epistemically beneficial as it can help detect experts, aggregate knowledge and even generate new knowledge (not previously held by individual participants) (Sunstein 2006, found in Aikin and Clanton 2010). Different epistemic deliberative democrats point to various features of democratic deliberation⁵² as the drivers of these epistemic benefits, most notably diversity (or inclusivity), freedom and equality.⁵³ These values are thus not advocated for by

⁵¹ The Condorcet Jury Theorem (CJT) is perhaps the most well-known in its application to aggregative accounts of epistemic democracy. The theorem states that if all individuals have a higher than random chance of choosing the right answer amongst two options ($p > 0,5$), the chances that a majority vote will lead to a correct decision (p_m correct) increases as the number of participants (N) increases. So as long as $p > 0,5$, for every increase of N , p_m correct reaches closer to certainty. For an elaborate argument defending the epistemic value of democracy based on the Condorcet Jury Theorem, see Robert E. Goodin and Kai Spiekermann's *An Epistemic Theory of Democracy* (2018).

⁵² This is not to suggest that there are no challenges to the realization of these 'ideal' features - as I will also discuss in the following section.

⁵³ For example, John Stuart Mill famously advocated for free speech in the public domain and argued how the inclusion of all opinions and beliefs, including false ones, is beneficial for the deliberative process as they foster reflection. James Bohman (2006) stresses how only (equal) deliberation amongst all can account for the epistemic benefits of diversity of perspectives, and emphasizes including participants who offer different backgrounds, experiences and interpretations. Another theory supporting the notion of the law of large numbers is the Hong-Page theorem, most notable employed in defence of democracy by Hélène Landemore (2012). In a nutshell, the Hong-Page theorem holds that a large group of diverse problem solvers is likely to outperform a small group of high-ability problem solvers in locating optimal solutions.

instrumentalist deliberative democracy for their intrinsic moral significance (as proceduralist and classical deliberative views do - more on this in section 2) but rather instrumentally for the epistemic advantages they bring about. I should specify that deliberative epistemic democrats need not be *pure* instrumentalists (as emphasized by Landemore 2017:289). Nevertheless, academic discussions regarding the *epistemic* benefits of democracy are typically framed from an instrumental perspective, with proponents arguing why democratic deliberation generates epistemically good outcomes. Overall, the debate regarding epistemic responsibilities for democratic citizens tends to deem (mistakenly, in my opinion) procedural views as irrelevant to the issue at hand.

This tendency in the literature is well-captured in Cameron Boulton's (2021) recent taxonomy of what he terms 'Political Epistemic Responsibilities (PERs)' (see table 3), referring to those epistemic capacities required of democratic citizens. His taxonomy divides possible stances on PERs along two axes: *demands*, or whether democratic legitimacy requires citizens to hold certain epistemic capacities, and *competences*, or the ability of citizens to live up to the PERs demands (also referred to as *citizen competence*). All views categorized as 'demanding PERs' are instrumentalist, and are further divided into *optimism* (aggregative and deliberative epistemic democrats) and *pessimism* (epistocrats and epistemic libertarians).⁵⁴ Pure proceduralists and classical deliberative democrats are categorized as not generating PERs for democratic citizens, hence there is no divide on the competence axe, and they are grouped together as *non-epistemicism*.

Table 3 Boulton's Taxonomy of Political Epistemic Responsibilities (Boulton 2021:409)

| | | Competences | |
|-------------|----------------|---|--|
| | | Citizens tend to be epistemically competent | Citizens do not tend to be epistemically competent |
| D e m | Generates PERs | Optimism: Aggregative epistemic democrats Deliberative epistemic democrats | Pessimism: epistemic libertarians epistocrats |

⁵⁴ Or to be more precise: the arguments Boulton discusses in relation to these views' position on PERs are all instrumentalist – I will say more on this shortly.

| | | |
|----------------------------|---------------------------|---|
| a n d s | Does not generate PERs | Non-epistemicism: Pure proceduralists Classical deliberative democrats |
|----------------------------|---------------------------|---|

My aim in this paper is twofold. First, I argue that the debate on Political Epistemic Responsibilities (PERs) would benefit from a broader conception of political competence than is prominent in the literature. I show how the standard, narrow conception of political competence focusses on what I term Belief-based Political Epistemic Responsibilities (BPERs). Mirroring a similar move in the field of epistemology, namely the shift from belief-based to virtue-based approaches, I argue that a fruitful research direction for epistemic democracy includes considerations of virtue-based conceptions of political competence, accompanied by Virtue-based Political Epistemic Responsibilities (VPERs). I illustrate in more detail how we can conceive of such VPERs with the example of testimonial injustice. Second, contra what seems to be the prominent conviction in the literature, I argue that once we consider this broader notion of citizen competence, pure proceduralist views on democracy can ground PERs. One potential strategy is to argue that certain democratic, moral values generate responsibilities to be epistemically virtuous in some way. In response to the objection that such requirements are not, strictly speaking, *epistemic* responsibilities, I argue that the standard, veristic consequentialist account of social epistemology is not the only epistemological framework available to epistemic democrats, and that procedural views which employ an alternative epistemological framework could ground VPERs in their epistemic benefits. I use Fabienne Peter's (2008, 2009) pure epistemic proceduralism as an example to illustrate how *procedural epistemic normativity* can generate VPERs, without any reference to the quality of decision-making outcomes. Again, I use the example of testimonial injustice to illustrate how

such VPERs could be generated. The final section of the paper addresses some potential misunderstandings and implications of VPERs and procedural demands for VPERs.

4.2. Belief-based and Virtue-based Political Epistemic Responsibilities

Citizen competence is difficult to define, even harder to measure. Political decision-making typically does not have a ‘right’ answer (or in any case this is not epistemically available to us). Accordingly, one cannot measure citizen competence simply by looking at ‘who got it right’, but has to find other indicators for assessing whether democratic citizens perform adequately (Kulinski & Quirk 2001:285-286). Different researchers make different choices regarding the exact criterion and indicators used to evaluate the state of citizen competence, but most empirical research on citizen competence can be categorized as measuring one of the following: factual knowledge, issue consistency (or: knowledge regarding political models) and (correct) use of heuristics (Kulinski and Quirk 2001: 290). In short, citizen competence is typically measured by assessing whether citizens possess certain epistemic goods, mainly in the form of veristic goods or true beliefs.⁵⁵ Subsequently, the epistemic capacities that take centre stage in the (instrumentalist) literature on citizen competence can be classified as what I call Belief-based Political Epistemic Responsibilities (BPERs).

As I argue, this focus is too narrow to capture what it means to be an *epistemically responsible* citizen. Interestingly enough, although a central and prominent question in epistemology concerns the difference between knowledge and mere true belief, the way empirical (survey) studies on voter competence aim to demonstrate (lack of) citizens’ political

⁵⁵ As Boulton’s (2021) taxonomy acknowledges, PERs are *not necessarily* aimed at veristic goods. The example he mentions is Michael Hannon’s (2020) proposal of empathic understanding as a politically relevant epistemic good. But here empathic understanding is still seen as an acquired epistemic good; on this understanding, it is still a BPER.

‘knowledge’ doesn’t reflect the same considerations.⁵⁶ In short, on this prominent understanding of citizen competence, the emphasis is on *what* citizens know (or more precisely, what they believe), and not on whether their true beliefs really constitute knowledge (a notable exception is Jason Brennan (2011), who emphasizes the importance of *justified* political beliefs rather than *true* political beliefs).⁵⁷

Granted, many scholars do acknowledge that what makes a competent epistemic agent is not merely the amount of knowledge they possess, but also *how* they acquire that knowledge. This is why pessimists are quick to point to citizens’ irrationality in forming political beliefs (e.g. Caplan 2007). Rationality is a more plausible focus for PERs than merely the possession of politically relevant facts, however, overemphasising rationality as the main focus for PERs is problematic for two reasons: First, several interpretations of what it means for something to be epistemically justified or epistemically rational might imply extremely demanding PERs, given that traditional accounts of epistemology often assume *idealized* and *over-individualized* epistemic agents. In reality, epistemic agents are shaped by their social and epistemic environment and agential history, which often affects (and limits) their ways of thinking beyond their control. Second, there is a significant limitation to (Bayesian) rationality models, which is that pre-existing false or unwarranted beliefs (i.e. ‘priors’) can render objectively incorrect outcomes as rational from the perspective of the individual agent in question.⁵⁸ These

⁵⁶ See also Jason Ross Arnold’s ‘The electoral consequences of voter ignorance’ (2012) for some critical remarks regarding the empirical literature on citizen’s ignorance.

⁵⁷ Jason Brennan emphasizes the difference between justified and true belief in *The Ethics of Voting* (2011). On his conception of voting well, what sets a competent voter apart from an incompetent one is, strictly speaking, not that one has true beliefs and the other one does not, but rather that the competent voter has justified political beliefs –even if these turn out to be false (Brennan 2011:69-76). As I point out elsewhere, prioritizing justification over truth opens up room for considering epistemic negligence as a failure of voter competence. This in turn invites questions regarding the responsibility and culpability of citizens’ ignorance and the relevance of virtue epistemological approaches to citizen competence (Klijnman 2021: 95-97)

⁵⁸ For example; given the scientific evidence and expert-opinion available, it is irrational to believe that MMR vaccines cause autism. However, if someone already holds false prior beliefs that credible studies have shown that MMR vaccines cause autism, that these ‘real’ studies exposing vaccines are kept a secret and the scientific consensus is ‘fake’ – if they truly believe all this, it seems rational for them to also believe that vaccines cause autism. In fact, one could argue that problematic epistemic structures such as epistemic bubbles and echo chambers, both phenomena which have received ample attention in recent scholarly work, are so persistent exactly because rational belief-formation can easily go astray in these epistemic structures.

prior beliefs might in turn be acquired irrationally, but it is not clear when one should evaluate the acquisition of pre-existing beliefs. Ideally, one ought to update their credence in the face of new evidence. But how can one do this if their false prior beliefs prevent them from treating new evidence as such?⁵⁹

To reiterate, most citizen competence tests aim to measure the possession of certain epistemic goods in the form of true, rational beliefs. It is this approach to citizen competence which generates solely what I termed Believe-based Political Epistemic Responsibilities (BPERs). However, as other scholars have emphasized, focussing on cognitive success in the form of true, rational belief should not be the main focus for evaluating citizen competence. As Duncan Pritchard rightfully remarks, having access to information is of little value if one lacks the cognitive skills to recognize what information is accurate and useful (Pritchard 2013: 237). Maxime Lepoutre (2022) for example argues that political *understanding* is more fundamental than political knowledge of facts, and, moreover, that ignorance of political facts does not necessarily entail a lack of political understanding. His reasoning behind this claim rests on the idea that the acceptance of falsehoods in one's political model can undermine political understanding, but it can also benefit it. In the latter case, felicitous falsehoods help exemplify or highlight certain features or aspects of the processes, hence generating a better understanding of the target (Lepoutre 2022:7).⁶⁰

Michael Hannon makes a related point regarding the shortcomings of focussing on knowledge acquisition, when he questions whether *knowledgeable* voters are necessarily *better* voters (Hannon 2022). First, it is not obvious that citizens who know more political facts make

⁵⁹ E.g. when someone treats counterevidence as 'propaganda' or as further proof of a conspiracy theory?

⁶⁰ Lepoutre's argument depends on an analogy between scientific modelling and political modelling. One could argue that this analogy breaks down once we realise that scientists are typically aware of the felicitous falsehoods being false and that they can shift from one model to another. Citizens on the other hand really believe these falsehoods and are more committed to their political models (Lepoutre 2022:16). Lepoutre refutes this objection by emphasizing how the process of exemplification is not dependent on recognizing the falsehood of the accepted claims. For what concerns limitation for individual capacity in regards to multiple modelling, Lepoutre uses this limitation as an argument in favour of participating democracy (enabling a division of epistemic labour regarding multiple modelling) rather than as a reason to criticize participatory democracy (Lepoutre 2022: 17).

better decisions (the knowledgeable partisans tend to be more dogmatic and closeminded) and second, people with better analytical skills also tend to be better at motivated reasoning, especially when they hold more political facts as argumentative ammunition.⁶¹ In short, possessing true beliefs or political facts and being able to construct rational arguments is not always enough for competent political decision-making - in fact, partisan thinkers can weaponize politically relevant facts in a way that is not conducive to good deliberation.

Arguably, truly competent citizens (capable of deliberation and making political decisions) possess a minimum amount of political knowledge, wherever that threshold lies, but also have the appropriate attitude towards any counterviews or new information they might encounter, and have an idea of what kind of epistemic inquiry is fitting in preparation of voting competently. Having the right sort of epistemic attitude seems at least as important, and possibly more fundamental for citizens' epistemic responsibility, than possessing certain political facts (especially for deliberative accounts). It therefore seems fruitful to turn our attention from (merely) 'being informed' to other, more fundamental features or *characteristics* of responsible epistemic agents that make for competent citizens. In simple terms, being an epistemically responsible citizen goes beyond *what* one knows, or even *how* they acquire knowledge; it has to do with the kind of epistemic agent they *are*.

This move mirrors a similar development in general epistemology, where the last couple of decades have witnessed the emergence of virtue (and vice-) epistemology. Where the focus in traditional epistemology is primarily on beliefs, and relatedly on justification and knowledge, in the field of virtue epistemology, the focus of the epistemic evaluation is on the

⁶¹ For this reason, Hannon argues that the epistemic deficit of democracy is better addressed by not focusing solely on knowledge, but rather on the epistemic virtue of *objectivity*. By being objective Hannon means being "*free of cognitive bias*" (Hannon 2022:39). Though I agree with Hannon that focusing on political facts is not sufficient to characterize epistemically responsible voters, I am not convinced by the 'epistemic virtue' of objectivity as a placeholder. This proposal of objectivity as a virtue-based conception of political competence runs into similar problems as the focus on rationality and objectivity I discussed earlier (Hannon explicitly refers to Brennan's idea of Vulcan's, political actors free from biases and able to take an 'objective' point of view, as an example of the kind of objectivity that makes for competent democratic citizens).

epistemic *agent* (Battaly 2008). The fundamental concepts in virtue epistemology are those of epistemic virtues and vices, and its central questions are on what sorts of features make for an excellent thinker.⁶² Two understandings of the nature of epistemic virtues are prominent in the literature: reliabilism and responsibilism. Reliabilist conceptions conceive of epistemic virtues as skills, cognitive faculties or reliable dispositions, over which the agent has little control (e.g. Greco 2010, Sosa 1980). On the responsibilist account, epistemic virtues and vices are (acquired) epistemic character traits, dispositions or ways of thinking that typify someone's epistemic behaviour (e.g. Code 1984, Zagzebski 1996, Tanesini 2018). Contrary to reliabilists, most responsibilists hold that epistemic virtues (and vices) involve a motivational component, making the agent at least to some extent responsible for their epistemic virtues and vices.⁶³ Most scholars in the field accept that the reliabilist and responsibilist conceptions do not mutually exclude each other. Still, since my aim is to inquire questions regarding citizens' epistemic responsibilities, I focus my discussion here solely on the responsibilist notion of epistemic virtues and vices.

Virtue-epistemologists disagree over the conceptual link between knowledge and epistemic virtue, but most do seem to implicitly assume an acquisitionist view, meaning that what makes an epistemic habit virtuous is at least partially contingent on the extent to which it tends to be knowledge-producing.⁶⁴ I.e., epistemic virtues (e.g. open-mindedness or epistemic humility) typically lead to knowledge gain. Correspondingly, epistemic vices (e.g. dogmatism or arrogance) tend to prevent epistemic agents from acquiring true beliefs, or in any case,

⁶² This move from belief-based epistemology to virtue-based epistemology is analogous to modern academic debates in virtue-ethics, which represented a shift from the focus on what actions are morally right to what makes for a good (or excellent) moral agent.

⁶³ There is some debate on this motivational approach. For more on this academic discussion see Cassam 2016, Crerar 2017 and Tanesini 2018.

⁶⁴ See Manson 2012 for a more elaborate explanation of the implicit 'acquisitionist' conception of epistemic virtues in most of virtue epistemology, and for considerations of intellectual virtues of epistemic constraint. See also Kwong 2017 and Madison 2019 for a more nuanced perspective on whether open-mindedness is really truth-conducive.

frustrate their attempts to do so. For the standard, instrumental epistemic democrat, epistemic virtues are relevant in as far as they advance the knowledge producing character of democracy.

Instrumentalist epistemic democrats (and their critics) should take seriously the suggestion to include virtue-based conceptions of political competence.⁶⁵ This would also mean expanding discussions of PERs to include Virtue-based Political Epistemic Responsibilities (VPERs). I will list a few examples of potential epistemic virtues (and vices) that we might envision a responsible citizen ought to cultivate (or avoid). Afterwards, I will work out one example, regarding the virtue of testimonial injustice, more elaborately.

4.2.1. Epistemic Virtues and Vices in Democracy

Examples of epistemic virtues and vices that affect the individual epistemic performance of democratic citizens are readily available. Epistemic virtues that one might picture an epistemically responsible citizen to hold on account of their knowledge producing potential, are for example intellectual humility (Whitcomb et.al 2017), curiosity (Watson 2018), open-mindedness (Baehr 2011) and epistemic courage (Kraemer 2018). Likewise, we can think of epistemic vices that will typically set back the epistemic pursuits of both the individual agents as well as their epistemic community, e.g.: epistemic arrogance or servility (Tanesini 2016, 2021b), closed-mindedness and dogmatism (Battaly 2021) or gullibility (Cassam 2016). Relatedly, Pritchard (2013) argues that the epistemic goal of understanding is more effectively realised by making epistemic agency the focus of education. That is, focus on cultivating epistemic virtues in the pupil rather than making sure they know certain facts.

⁶⁵ This suggestion to think differently about citizens' competence borrows from Robert Talisse's (2004) distinction between different types of citizen's ignorance, and how political critics only seem to focus what he terms *belief-ignorance*. In Talisse's terms, belief-ignorance entails not knowing the facts (e.g. falsely believing p). One way in which citizens can be ignorant is by drawing correct inferences from false premises (in which case they are *misinformed*). Alternatively, when one has access to correct premises yet conducts their epistemic inquiries in a careless matter, one obtains false belief due to *agent-ignorance* for which they are to some extent culpable. It is the latter type of ignorance that the virtue-based approach takes as more fundamental.

Although epistemic virtues are in general knowledge conducive, they entail more than that, and are integrated in one's cognitive character (Pritchard 2013: 237).

Perhaps more important is to emphasize that epistemic virtues are not simply knowledge-producing from the individual point of view, but they aid in the manifestation of the epistemic merits of democracy from a social epistemology point of view, i.e. they improve collective epistemic performance. This claim echoes Scott F. Aikin and J. Caleb Clanton's (2010) argument for deliberative virtues. Aikin and Caleb argue that, rather than merely focussing on the ideal institutional settings for deliberation, deliberative democrats should also consider what characteristics of individual deliberators make for desirable outcomes of deliberation (see also Talisse 2007, Grönlund, Setälä & Herne 2010). As Alessandra Tanesini (2021a) has recently shown, various epistemic virtues significantly overlap with such deliberative (or argumentative) virtues, in the sense that they tend to improve deliberation (examples of such virtues or character traits she mentions include being a good listener (Cohen 2019) and the attitudes Aberdein (2010) lists as characteristic of the virtuous arguer).

In fact, epistemic virtues can be effective in counteracting many of the cognitive limitations and biases cited by critics of democracy that affect political deliberation (Tanesini 2021a). Roberts and West make a similar point on the cognitive correcting potential of self-vigilance and intellectual vitality (Roberts and West 2015). Epistemic vices on the other hand can limit attempts to deliberate effectively; e.g. arrogance not only maintains ignorance in the arrogant participant, but can effectively silence others and hinder testimonial exchange of knowledge (Tanesini 2016, see also Lynch 2018).

Relatedly, we might also consider the possibility of VPERs consisting of what Jason Kawall calls *other-regarding* epistemic virtues (Kawall 2002). These are virtues that concern not (solely) knowledge-gathering for the individual agent, but (also) knowledge-production for others in their epistemic community (e.g. honesty, integrity, patience or creativity).

Several epistemic virtues then, seem beneficial for epistemic democracy because they can improve individual epistemic performance (re. information gathering, knowledge acquisition and understanding) as well as collective epistemic performance (re. information pooling, aggregation of knowledge and exchange of reasons in public deliberation). If epistemic virtues contribute to the epistemic value of democratic decision-making, we can conceive of instrumental accounts of epistemic democracy generating VPERs.

To further illustrate the benefit of opening up conceptual space and include virtue-based notions of epistemic responsibilities for democratic citizens, consider how several epistemically costly tendencies of democratic citizens could be remedied by the cultivation of an epistemic virtue like testimonial injustice.

Recall the epistemic value of equality, diversity and inclusion for deliberation mentioned previously. These values can be undermined not merely by lack of formal access to epistemic goods or to participation, but also by informal, socially influenced *epistemic* factors. Several feminist scholars have criticized classical accounts of deliberative democracy for not living up to their self-imposed constraint of ‘inclusivity’ (e.g. Benhabib 1992, Young 2002). These failures occur in two ways: first, the emphasis on rationality and argumentation leads to ‘dialogical exclusion’ (Dieleman 2015: 798, Sanders 1997). This emphasis on norms of speech and communication advantages more privileged groups in public debate and disadvantages certain social groups whose style of communicating differs from the dominant group. Second, dominant assumptions about how to interpret the common good tend to set the boundaries of what is deemed appropriate content for deliberation. This excludes contributions based on understandings of the common good that deviate from the status quo - ‘judgmental exclusion’ for short (Dieleman 2015: 799). As a result of these types of exclusion, certain voices are systematically not heard or ignored, even if they formally have a seat at the table. This deprives certain social groups of an active voice in public discourse (Wanderer 2012: 164). As Susan

Dieleman (2015) remarks, these critiques touch upon failures of epistemic inclusion that seem to involve what is now widely known in feminist and social epistemology as *epistemic injustice* – a term famously introduced by Miranda Fricker (2007). Fricker distinguishes between two types of epistemic injustice: testimonial injustice and hermeneutical injustice. Hermeneutical injustice occurs when a speaker is disadvantaged in contributing to the shared epistemic practice because the shared imagery lacks the epistemic tools and resources needed to express their experiences to others (Fricker 2007:154).⁶⁶ Testimonial injustice is an epistemic vice on the part of the hearer. Testimonial injustices takes place when a speaker “*receives a credibility deficit owing to identity prejudice in the hearer*” (Fricker 2007:28). Here I focus solely on the vice of testimonial injustice.

Testimonial injustice is morally problematic, as the speaker is in effect not recognized in their status as a knower or good informant. Frequent occurrences can even affect the agent’s development of epistemic character and personal identity (Fricker 2007). These harms can be significant in their own right, and make for an extremely interesting and important direction of philosophical inquiry. I will say more on the moral significance of this vice in section 2.1, but what is more important for our discussion now, regarding the *instrumental* value of democracy, is that testimonial injustice leads to epistemic losses. In situations where the speaker knows *p*, and prejudice prompts the hearer to attribute them a credibility deficit, the hearer fails to receive knowledge regarding *p* from the speaker. Alternatively, potential hearers might miss out on testimonial evidence that their already held beliefs constitute knowledge (Fricker 2016: 162-163). Furthermore, as Christopher Hookway (2010) emphasizes, testimonial injustice not only

⁶⁶ Fricker states that the problem is that the epistemic tools necessary to communicate their experiences might not be available (yet) to certain social groups because they do not exist in the social pool of epistemic concepts. As several scholars have pointed out (e.g. Dotson 2012, Medina 2013) marginalized communities often develop *their own* epistemic tools to communicate these experiences and create shared understanding amongst each other - Trystan Goetze calls this ‘hermeneutical dissent’ (Goetze 2018). Still, we can see how they are nevertheless disadvantaged in society at large if these epistemic tools are not widely known or not properly understood by most.

blocks the dissemination of knowledge but can also exclude important questions, suggestions and other potential contributions to the shared epistemic practice. This can severely limit the potential epistemic benefits from deliberative practices. In short, epistemic injustice preserves ignorance (Fricker 2016).

The main take-away here is that the aforementioned instrumental benefits of inclusiveness and epistemic diversity in the public debate are hindered by the occurrences of testimonial injustice. To prevent or counteract such epistemic losses, one can cultivate the virtue of epistemic justice, understood by Fricker either as not having implicit prejudices (which is very unlikely for any of us) or as learning to recognize and correct for any identity prejudices one might hold in making credibility appraisals (Fricker 2007: 93). Cultivation of testimonial justice can combat and prevent the ignorance and loss of knowledge that testimonial injustice causes. It is beneficial not just for the individual hearer, but ultimately prevents the blockage of information flow. This is just one example of how epistemic virtues can be instrumentally valuable for the epistemic quality of democratic decision-making outcomes – in my view a prominent one.

4.2.2. Avoiding Criticisms of Elitism

Conveniently, the concept of VPERs avoids criticisms of elitism raised against conceptions of voter competence that measure performances via political knowledge tests. Arthur Lupia (2006) calls attention to the fact that the questions that make up political knowledge tests are typically elitist, in the sense that the facts deemed ‘necessary to know for democratic citizens’ reflect the interests and worldviews of those who design and analyse these tests, mainly political scientists and other politically oriented academics. It is not clear what the average citizen, or society at large for that matter, would gain from individuals knowing political facts such as the name of the current Chief Justice, or how it would improve their

political performance (Lupia 2006:218).⁶⁷ Furthermore, Lupia stresses that different types of elections require different sets of knowledge and that studies into voter competence should take this into consideration.⁶⁸

Lepoutre (2022) raises a related though slightly different criticism against (multiple-choice) political knowledge tests. Recall that Lepoutre (2022) argues that the application of false beliefs in political models can actually aid political understanding. In response to scepticisms of Philip Converse (1964) - and other authors after him – regarding the average citizen employing political models at all, Lepoutre remarks that this concern implicitly assumes an elitist conception of what counts as a political model (e.g. emphasizing frameworks like ‘liberalism’ versus ‘conservatism’), and fails to acknowledge the epistemic value of political models based on group identity. This can be read as another kind of elitist challenge, where it is not the set of political facts deemed relevant, but the set of political models deemed relevant in the literature on voter ignorance that creates a skewed picture of citizen competence.

By not (merely) focussing on the possession of political facts, but emphasizing concerns regarding citizens’ epistemic attitudes, a virtue-based conception of political competence avoids the elitist challenge. This approach maintains that competent citizens should have some idea of which epistemic inquiries are worth pursuing and which are less important, yet the epistemic virtues that make for a responsible citizen are not selected on the basis of elitist interpretations. Epistemic virtues such as open-mindedness, intellectual humility or testimonial justice are not determined by one’s level of education⁶⁹. Neither do epistemic virtues prescribe

⁶⁷ Actually, citizens might be more competent than the literature suggests, as possessing merely a subset of certain political facts or depending on reliable proxies and heuristics can often suffice for making the same decision they would have made if they were optimally informed (Lupia 2006:226-229).

⁶⁸ NB: Lupia still considers citizens’ *performances* in voting, not necessarily how they come to those decisions. Though he lowers the bar to what facts citizens ought to know in order to be considered competent, he still relies on the idea that citizen competence can be measured by testing their political knowledge, even if he holds a different (less demanding) conception of what the minimum standard entails – more fundamental in his view is citizens’ knowledge regarding the proxies they use, or the indirect justification of their political beliefs.

⁶⁹ One might question whether the elitist challenge is completely avoided by the virtue-based approach. After all, privileged people with more access to epistemic resources can be said to have better or more opportunities to pursue certain epistemic ends. In a way this is true; marginalized groups who are not always taken seriously by

or exclude particular political models. On the contrary, virtues like open-mindedness and epistemic humility will most likely facilitate considerations of other perspectives and alternative political models than one originally holds, promoting the fruitful exchange of different perspectives which is so fundamental to the epistemic benefits of deliberation.

To summarize what I have discussed so far: discussions regarding PERs, and whether or not citizens tend to live up to those responsibilities, can benefit from incorporating a virtue epistemological approach to citizen competence. This is not to criticize the instrumental take on epistemic democracy per se, but rather to argue for a different emphasis regarding where to place the evaluative locus of the epistemic responsibility of democratic citizens within an instrumental framework. Competent, epistemically responsible citizens are not (solely) characterized by whether they possess enough knowledge of political facts or a capacity for rational thinking, but by the character of their epistemic *agency*.

4.3. Proceduralism Generating Political Epistemic Responsibilities

In the previous section, I have advocated for a virtue-based conception of citizen competence, and correspondingly for a conception of Virtue-based PERs. So far, I have maintained an instrumentalist perspective to support these arguments. I now want to turn to procedural views of democracy – which, as previously mentioned, are typically deemed irrelevant for discussions of epistemic responsibilities of democratic citizens. According to pure proceduralists, democratic decision-making should be valued not because of the outcomes it produces, but due to intrinsic values that the democratic procedure embodies. In this view,

their epistemic peers run the risk of becoming epistemically servile. However, at the same time, those who are privileged in society at large run a greater risk of becoming epistemically arrogant, and close-minded (Tanesini 2022). All these vices tend to get in the way of knowledge gain, but arguable those vices that affect the privilege are of greater concern to the functioning of public debate (e.g. see Lynch 2018 on arrogance in public discourse).

the evaluative locus of democratic legitimacy lies entirely in the features of the procedure itself and avoids reference to the substantive outcomes of the decision-making process.⁷⁰

In this section, I argue that the assumption that pure proceduralist views do not generate PERs is mistaken. To be fair, I think the claim has merit when we consider only the narrow view of citizen competence and limit our discussion of PERs to Belief-based PERs.⁷¹ However, when we consider the broader interpretation of citizen competence I have just argued for, this opens up possibilities of procedural grounds generating Virtue-based PERs. In this section, I will first illustrate how procedural values such as inclusion and equality can be undermined by epistemically vicious behaviour in the public debate, indicating that procedural views can generate VPERs on the basis of various procedural, moral values. Against the objection that these are not, strictly speaking, *epistemic* responsibilities, I then go on to show how certain VPERs can also be generated by *procedural epistemic* norms, such as those employed in Fabienne Peter's (2009) pure epistemic proceduralism.

4.3.1. Virtue-based Political Epistemic Responsibilities Based on Procedural, Moral Values

The assumption that pure proceduralist views and classical accounts of deliberative democracy cannot generate PERs, is false. For the sake of argument, I'll grant that BPERs (for the acquisition of epistemic goods) cannot be generated by pure procedural views. However,

⁷⁰ As Amy Gutmann and Dennis Thompson rightfully remark: most procedural views will implicitly commit to some substantive principles. Gutmann and Thompson therefore hold that *pure* procedural views are not sustainable (see chapter 3: 'Deliberative Democracy beyond Process' in *Why Deliberative Democracy*, Gutmann and Thompson 2004). I don't want to engage with this conceptual discussion too much here, but I will say that I employ pure proceduralism here more as category of the arguments used - in the same way that I discussed instrumentalist arguments regarding epistemic democracy even if the views that employ them are not necessarily *purely* instrumental. Pure procedural arguments refer to those arguments that lean entirely on features of the procedure itself, and that do not refer to any standard of outcome as a point of evaluation of the democratic procedure (substantive issues are thus only relevant in as far as they affect the procedure).

⁷¹ Given the scope and focus of this paper, I do not challenge the claim that BPERs demands cannot be grounded by proceduralist views – however, nor do I exclude the possibility that procedural views can ground BPERs. For a consideration of proceduralist grounding of Belief-based PERs see Adam Lovett 2020. In this interesting paper Lovett argues that being informed and rational regarding political matters is essential for the procedural value of democratic autonomy.

when we employ a virtue-based conception of citizen competence, we can conceive of several proceduralist values that could generate VPERs.

Again, I will take testimonial justice as an example of an epistemic virtue relevant to political competence. Recall that in occurrences of testimonial injustice, the speaker is wronged in her capacity as a knower, or not recognised as a (potentially) good informant (Fricker 2007: 44, 132). This is in tension with several pure procedural values:

- *Inclusivity*: Testimonial injustice based on structural social prejudice (also known as *systematic* testimonial injustice, see Fricker 2007: 27) prevents certain social groups from being heard, effectively excluding them from the public debate. This goes against the importance of inclusivity, the informal deficits of which have long been overlooked by classical deliberative democrats (Young 2002).
- *Mutual Respect*: a core value of democratic deliberation is mutual respect. The goal of deliberation is not necessarily to agree (though some will dispute this), but in any case to be able to see the moral merit of your opponent's claims. Respectful deliberation requires citizens to evaluate the positions of their fellow participants according to their merit (Gutmann and Thompson 2004: 7, 21). By discounting someone's testimony due to their social identity, the principle of mutual respect is not adhered to.
- *Equality*: Another candidate for the fundamental moral value of democratic decision-making processes is equality (e.g. Christiano 1997). By prejudicially ignoring or rejecting someone's testimony, one fails to treat and respect someone as a potentially valuable contributor to public deliberation. Furthermore, the interests of social groups that are effectively not or less heard in the public debate due to testimonial injustice are not given equal consideration, given that they are not given an equal say in the decision-making process.

- *Fairness*: the principle of fairness in democratic decision-making, or a fair process of public reasoning, is a related procedural ideal. This principle includes equal chances to participate in public deliberation and be heard, without one's social status undermining their standing in the political debate (Dryzek 2000). Instead of dismissing contributions to the debate because of who utters them (reputational cues set aside), testimony should be evaluated according to consistency with the available evidence. This also echoes the Habermasian idea of the unforced force of the better argument, free of internal or external influences such as prejudice.
- *Reciprocity*: Another core principle of deliberative democracy is reciprocity, which requires "mutual justification among free and equal persons" and has procedural implications (Gutmann and Thompson 2004: 120). Not giving apt credibility to someone's testimony due to prejudice, constitutes a failure to appropriately and in a reciprocal manner respond to testimony.

In short, testimonial injustice entails a failure to acknowledge and treat one another as autonomous, equal, free and potentially valuable contributors to public deliberation. On this basis, we can conceive of VPERs to avoid testimonial injustice/cultivate epistemic justice. Other epistemic virtues can be cited as relevant for upholding these procedural, moral values. E.g., intellectual arrogance entails a lack of reciprocity in terms of discursive expectations (Tanesini 2018), and closed-mindedness and dogmatism prevent reasoned debate (Cassam 2016). These examples illustrate how proceduralist and classical deliberative accounts could generate various VPERs, in as far as certain epistemic vices undermine several intrinsic moral values of democratic decision-making, and hence affects *procedural* democratic legitimacy – and not merely instrumental legitimacy.

4.3.2. Epistemic Normativity from a Pure Proceduralist View

Still, even if one accepts that procedural legitimacy requires epistemically virtuous behaviour of citizens, this is not enough to conclude that proceduralist views are therefore relevant to the discussion of procedural epistemic responsibilities of democratic citizens. One might object that these responsibilities, whilst they have some epistemic flavour, are technically speaking moral responsibilities, and not *epistemic* responsibilities. One way to address this point is to treat this objection as a disagreement over the correct use of semantics. To illustrate, consider scholarly work on the epistemic condition of moral responsibility, which includes inquiries regarding what moral agents *ought* to have known before committing a certain act. Take the example of John pushing a button, not knowing this suddenly stops the treadmill Suzie is using at the time, causing her to fall. In this scenario, John has unwittingly harmed Suzie. It seems an innocent mistake, for which John cannot be held responsible. However, once we consider that there was a sign above the button, clearly indicating this was an emergency stop button, we can hold John *morally responsible* for being *epistemically negligent* by not bothering to read the sign before pressing the button out of boredom or curiosity. Just because the negligence here is morally relevant, doesn't make the behaviour for which we hold him responsible any less epistemic. We might thus say that in this scenario, morality poses epistemic responsibilities to John. However, the objection wants to point out that these responsibilities do not follow from epistemic normativity, and that the latter is necessary to speak of PERs. For the sake of argument, I will accept the sharp distinction between moral and epistemic responsibility, and grant that the VPERs such as testimonial justice are, technically speaking, *moral* responsibilities, *if* they follow from the *moral* procedural values I mentioned in the previous section.

On the face of it, conceding this point doesn't seem to point a problem for my argument – after all, many instrumentalists argue that we should care for the epistemic performance of

citizen exactly because political decisions have morally relevant consequences. However, a more charitable interpretation of this objection states that even if procedural views can generate epistemic responsibilities as such, these are not directly demanded by concerns of *epistemic democracy*. In other words, if generated from moral values, these responsibilities do not follow from concerns regarding the knowledge-producing capacities of democracy, hence they do not fall under PERs as understood in Bouldts taxonomy.

The claim that procedural views cannot evoke epistemic normativity rings true, *if* we assume the standard, veristic account of social epistemology and corresponding account of knowledge that are typically employed in these debates. But this is not the only epistemic framework available to epistemic democrats. In this section, I argue that procedural frameworks coupled with alternative accounts of epistemic normativity can generate VPERs, without reference to a procedure-independent standard. That is to say, this section emphasizes that epistemic democrats need not be instrumentalists, and hence, PERs needn't follow from instrumentalist epistemic concerns per se. Drawing on Fabienne Peter's (2008, 2009) framework of *pure epistemic proceduralism*, I will illustrate how a proceduralist view can properly generate VPERs – i.e. from purely epistemic normativity.

A few caveats are in order: Though I am sympathetic to Peter's conception of democratic legitimacy, this paper does not necessarily defend this framework against alternatives. I am merely illustrating the compatibility of pure epistemic proceduralism with generating VPERs. I also don't exclude the possibility of other pure proceduralist views generating similar VPER on epistemic grounds. I should also note that the alternative epistemology employed by Peter (namely: a proceduralist epistemology borrowed from Helen Longino (2002)) on which I rely in this section as well, is rather controversial. Again, I do not aim to argue for this procedural epistemological account per se. My aim here is solely to open

up conceptual space and emphasize how purely procedural considerations needn't be excluded from discussions of epistemic democracy.

In the literature on democratic legitimacy, instrumental and procedural accounts are often portrayed as being in opposition to each other. However, as David Estlund has notably argued, these accounts are not mutually exclusive (Estlund 2008). According to Estlund, what makes democratic decision-making so appealing is that it holds a procedural value of fairness as well as a truth-tracking ability. Estlund terms this hybrid account of democratic legitimacy 'Epistemic Proceduralism' (Estlund 2009). On this account, the epistemic dimension is still interpreted as an ability to track a process-independent correct outcome. If we want to make sense of pure proceduralist grounds for VPERs, we need an account of the epistemic value of democracy that avoids references to a process-independent outcome altogether. Fabienne Peter's *Pure Epistemic Proceduralism* provides such a framework. Peter agrees with Estlund that participation in democratic procedure is not the only end of democracy, and that we value also the epistemic capacities of political decision-making. However, Peter argues that this epistemic value should be interpreted differently from the understanding that the standard account in epistemic democracy employs.⁷² Pure epistemic proceduralism does not rely on a veristic consequentialist account of social epistemology but instead employs a *proceduralist* social epistemology, taken from Helen Longino (Peter 2007, 2008). This constitutes a more radical, and arguably more controversial take on how epistemic democracy can be reconciled with proceduralism than Estlund proposes. Instead of evaluating the appropriateness of knowledge-producing practices according to the quality of outcome, the procedural approach focuses on the conditions that processes of inquiry should satisfy and defines knowing and the content of knowledge accordingly.

⁷² Estlund's epistemic proceduralism is more specifically a '*rational* epistemic proceduralism', to emphasize the outcome-based evaluation of the epistemic practice (Peter 2009).

Longino's social procedural epistemology is termed 'Critical Contextual Empiricism' (Longino 2002: 208). The 'empirical' refers to data as less defeasible input, and 'contextual' refers to how conclusions from data differ according to the method and background assumption one uses to analyse the data. Finally, the critical refers to the process of detecting these background assumptions and mitigating the uptake of criticisms. Longino specifies four norms of inquiry for social knowledge-producing practices (Longino 2002:128-134):

1. Tempered Equality (equality of intellectual authority, this entails that one's socioeconomic status shouldn't affect one's epistemic standing, but we should nevertheless account for differences in experience and expertise).
2. Public Standards (some shared values, standards, referring terms)
3. Venues (public forums for criticism)
4. Uptake (responsiveness to criticism)

Longino specifically discusses norms of scientific inquiry but mentions that all forms of social knowledge should obey these norms⁷³. These "conditions of affective or transformative criticism" (Longino 2002:134) emphasize the social character of knowledge and safeguard against epistemic exclusion.

Recognizing similar risks relating to contextualism, blind spots and unchallenged assumptions in the political realm, Peter applies these norms of inquiry to political decision-making. According to her account of pure epistemic proceduralism, democratic decision-making is legitimate if it results from deliberation under conditions of political equality as well as *epistemic fairness* (Peter 2008). This view is *deliberative* because it incorporates public deliberation in its definition of the democratic decision-making process. The view is *epistemic* insofar as its appraisal of democracy explicitly acknowledges the knowledge-producing

⁷³ What sets scientific knowledge apart is that it requires the shared value for epistemic success – though we could argue that democracy requires something similar.

potential of democratic decision-making, but understands this in procedural epistemic terms. Accordingly, the epistemic dimension is rooted in a fair decision-making procedure rather than in the quality of the outcome⁷⁴. More specifically, it emphasizes the ‘constructive function’ (a term taken from Amartya Sen) of public deliberation and exchange of public reasons. It is nevertheless a *pure proceduralist* view, in the sense that its criteria for legitimacy lie entirely in the fairness of its democratic decision-making procedure, without reference to a procedure-independent standard of correctness or quality of outcome.⁷⁵

Recall that the norms of inquiry Longino endorses aim to stimulate the detection and correction of social influences, or more broadly the detection of background assumptions and the uptake of criticism. In the democratic realm, this entails that no background assumptions are *a priori* to be excluded from contestation in the public debate. This emphasizes a variety of perspectives or inclusiveness as conditional for optimal epistemic value, though not in its instrumental understanding as I set out in section 1, but because the outcome of any social inquiry that *a priori* excludes certain voices from the epistemic practice cannot rightfully be called knowledge - on the procedural epistemic account.

To illustrate how pure (epistemic) proceduralist views could generate VPERs, let me use testimonial injustice again as an example. Recall that testimonial injustice implies that a speaker receives less credibility than she would otherwise have, due to a prejudice in the hearer. Previously, I explained how testimonial injustice is instrumentally problematic as it hinders the circulation of knowledge. It thus undermines epistemic success on the veristic consequentialist account of social epistemology. The proceduralist account, so I argue, captures perhaps more accurately the problematic mechanisms of testimonial injustice that distort the epistemic

⁷⁴ The view thus escapes criticisms regarding the theoretical and practical difficulties of evaluating democratic outcomes according to epistemically inaccessible ‘correct’ outcomes.

⁷⁵ We might think of epistemic value as a process independent value, and on this basis question whether the view doesn’t invoke some form of instrumentalism. Even if we conceive of epistemic fairness as an independent value, this needn’t be the case. Arguably, we can conceive of Pure Epistemic Proceduralism as a form of ‘*extrinsic* proceduralism’ (Destri 2020).

environment, because it considers how interpersonal relations affect our shared knowledge-producing practices. In procedural epistemological terms, we can argue that testimonial injustice is epistemically undesirable, as it threatens the norms of inquiry for social knowledge-producing practices. By excluding certain (minority) voices from the public debate, and at the same time advancing socially privileged groups, certain background assumptions remain hidden or undetected. If deliberation takes place under conditions of widespread testimonial injustice, tied to social identity prejudice, it becomes quite difficult for marginalized and underrepresented groups to challenge status quo assumptions that are not informed by the perspectives of these excluded social groups. In terms of pure epistemic proceduralism, we might say that any political decisions following deliberation under conditions of widespread testimonial injustice lack democratic legitimacy in as far as the deliberative process did not fulfil the requirements of epistemic fairness and political equality. Like instrumentalist views, pure epistemic proceduralism could then ground VPERs to cultivate testimonial justice or avoid testimonial injustice. Other epistemic vices might have a similar detrimental effect on the norms of inquiry, so again, we can conceive of other VPERs too. For example, being close-minded or arrogant might make one less likely to give criticism to their views any real thought. Given that these vices are more likely to be found in the privileged groups (Tanesini 2022), again we can see how the status quo can hardly be criticized in a public forum, and that the challengers will not be given due diligence due to these epistemic vices.

The difference with the instrumental grounding of (V)PERs, based on how these responsibilities promote the truth-tracking abilities or other outcome-related features of the decision-making procedure, is that on the proceduralist grounding, the normative force grounding VPERs is derived entirely from the epistemic norms of the procedure itself. If pure epistemic proceduralism requires citizens to be (for example) testimonial just, on the grounds of procedural epistemic norms of inquiry, the responsibility to be epistemically virtuous in this

way can rightfully be called an *epistemic* responsibility. Whether failure to adhere to these epistemic responsibilities is also morally significant is beside the point.

4.4. Concluding Remarks

In this paper, I have questioned some common assumptions and convictions that are widespread in the literature on epistemic democracy. I have shown how the literature on citizen competence tends to focus on what citizens know and how they reason, rather than on what kind of epistemic agent they are. As a result, discussions of PERs tend to be limited to what I have termed Belief-based PERs. I have argued that a complete conception of citizen competence ought to include the notion of politically relevant epistemic virtues. Correspondingly, I proposed the notion of Virtue-based Political Epistemic Responsibilities (VPERs). Such epistemic responsibilities seem just as (if not more fundamentally) important for a conception of epistemically responsible citizens and are epistemically beneficial for both individual and collective practices of inquiry. I have discussed the possibility of a responsibility for testimonial justice as a prominent example of such VPERs.

Additionally, I have challenged the claim that pure procedural views cannot generate PERs. More specifically, I have argued that once we consider the broader notion of citizen competence and allow for VPERs, we can conceive of pure proceduralist views demanding such VPERs. As an example, I illustrated how the epistemic vice of testimonial injustice jeopardizes several procedural values. Against the objection that these are strictly speaking *moral* normative concerns, I've argued that procedural epistemic norms following from alternative, non-veristic epistemic frameworks can generate VPERs, using Peter's pure epistemic proceduralism as an example. Again, the avoidance of testimonial injustice serves as an example of such VPERs, as testimonial injustice harms pure epistemic *proceduralist* requirements for democratic legitimacy, namely: epistemic fairness and political equality in public deliberation, where both requirements are here understood as conditions of inquiry for

social epistemic practices, not as moral values. By shifting focus from veristic to procedural social epistemic normativity, which emphasizes norms of inquiry over standards of the outcome, it becomes possible for pure proceduralist views to generate VPERs based on purely epistemic concerns. That is to say, epistemic democrats or proponents of PERs needn't be instrumentalists. Anticipating some potential misunderstanding regarding my argument, I will end with some clarifications and concluding remarks.

First, let me reiterate that I realise that both Peter's pure epistemic proceduralism and Longino's procedural account of social epistemology are quite controversial. Although I am very sympathetic to procedural social epistemology, as well as to pure epistemic proceduralism, in this paper, I am not arguing against the veristic picture, nor against instrumentalism, per se. Whether one endorses either of these views doesn't change the compatibility of pure epistemic proceduralism with VPERs. In the same way that one cannot be a deliberative democrat and an epistocrat at the same time, yet still acknowledge that both accounts are compatible with PERs (hence why both are incorporated in Boulton's taxonomy as 'generates PERs'), so too can one acknowledge that pure (epistemic) proceduralism can generate VPERs without having to identify as a proceduralist. I do not aim to convince the reader of the superiority of proceduralist takes on epistemic democracy over instrumental ones. The main point I want to make here is that all proceduralist views need not be labelled as non-epistemicist.

The second point to clarify is that by advocating for a virtue-based conception of citizen competence, I do not mean to imply that true beliefs and knowledge are no longer relevant issues for discussions on epistemic democracy. Nor am I saying that ignorance and irrationally shouldn't be labelled problematic for epistemic democracy. I'm simply arguing that the evaluation of citizens' epistemic irresponsibility shouldn't be (solely) measured by ignorance and irrationality. To see why, consider how agent-specific (socio-economical) factors might

excuse someone from not being aware of certain politically relevant facts, despite their best efforts to cultivate the appropriate epistemic virtues and inform themselves on relevant issues. It seems to me that one can be wrong about certain political matters and at the same time be an epistemically responsible citizen. Similarly, one might be right and still be epistemically irresponsible; the most arrogant, close-minded people also have some true, justified beliefs relevant to the political debate – especially if these epistemically vicious agents happen to belong to the socio-economical elite. Instead of focussing solely on what people know, it seems more appropriate to look at people’s epistemic character traits and the epistemic habits they employ in the political realm in order to determine whether someone can be classified as a competent, epistemically responsible citizen. Being informed might be *part of* the picture of what makes for a competent citizen, but it cannot account for citizen competence completely.

Third, note that acknowledging the relevance of VPERs for citizens’ competence is not incompatible with pessimism. One might hold that democratic legitimacy requires citizens to be epistemically virtuous in some way, for example being open-minded, and also hold that citizens are on average not open-minded at all, and for this reason, argue for an epistocracy or other alternative.

Fourth, it would be remiss of me not to mention a common criticism against agent-centred virtue-epistemological approaches, namely that they focus too much on individual conduct. In particular, I should note Boulton’s (2021b) recent doubts regarding whether individual improvement of epistemic character can improve political inquiry – because, as he rightfully remarks, the successes of political inquiry are to a large extent dependent on environmental and structural factors, even in a constitutive sense (Boulton 2021b). Though I agree that individual improvement alone cannot solve our epistemic challenges, I stand behind the notion that agent-centred approaches should be included in any strategy for remedying the situation. But that is not important here. After all, what I have argued for is a conception of

citizen competence that employs different criteria and indicators than traditional accounts, and ways to generate corresponding PERs. Recall that Boulton (2021) takes these PERs as requirements for epistemic democracy to actually generate epistemic responsibilities. Accepting a virtue-based conception of competence as such a requirement leaves open whether the capacity for citizens to live up to those responsibilities is more likely to be actualised by individual improvement or structural improvement – in fact, it leaves open whether we should measure such virtues on the individual or institutional level.

Lastly, I should address some practical implications of the virtue-based approach to citizen competence. A potentially problematic aspect of the virtue-based approach is undoubtedly the difficulty in measuring epistemic virtues (or vices), as it is not always clear what could count as reliable proxy's for different virtues (or vices). However, this is a practical challenge to overcome more than a theoretical objection. Just because empirical research into epistemic character comes with practical challenges, does not mean that it is not a more appropriate variable to try to measure when empirically researching citizen competence. As I discussed in section 4.1.2, political knowledge tests might accurately measure the extent to which citizens are informed, but it fails to capture fundamental features and epistemic habits that one might imagine epistemically responsible citizens to embody. Developing indicators of epistemic virtues for empirical research into citizens' competence would be a fruitful direction for further research.

Looking beyond facts and rationality and including considerations of epistemic virtues in our conception of epistemically responsible citizens invites also new questions and directions of inquiry regarding the way we might address and remedy some of the epistemic challenges in our modern democracies – both on the individual and structural level. Conceptualizing more virtue-based conceptions of citizen competence, as well as developing more accurate tools for measuring and cultivating virtue-based political epistemic

responsibilities makes for a promising and much-needed research agenda for political epistemology.

4.5. References

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