

Does public justification face an 'expert problem'? some thoughts in light of the COVID-19 pandemic

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Does public justification face an 'expert problem'? Some thoughts in light of the COVID-19 pandemic

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ABSTRACT

Policies are often justified to the public with reference to factual claims that most people cannot easily verify or scrutinise because they lack relevant knowledge or expertise. This poses a challenge for theories of public justification which require that laws are justified using reasons that all can accept. Further difficulties arise in cases such as the response to the ongoing COVID-19 pandemic where the factual base of knowledge used to justify policies is limited, subject to a high degree of disagreement amongst experts, and marked by rapid changes. This paper reviews some strategies that public justification theorists might draw on to address the question of how to justify policies that depend on this kind of expert knowledge. Whilst such strategies cohere with existing theories of public justification, they do not yield intuitively attractive recommendations. Ideally, theories of public justification would provide criteria by which to evaluate expert testimony such that it guides and informs, but does not lead, policy making. However, in cases like the pandemic response, theories of public reason currently tend towards recommendations that are intuitively unattractive: either requiring citizens to defer to 'experts' in a fairly uncritical way or being overly permissive of most factual claims.

KEYWORDS Public reason; political liberalism; expertise; democratic theory; COVID-19

Introduction

Throughout the COVID-19 pandemic, a number of states have introduced a range of non-pharmaceutical measures that were previously unthinkable. Some severely impinge upon the liberties of many citizens, especially the various forms of 'lockdown', but also 'mask mandates', whilst others depend on significant amounts in public funds, such as measures requiring distancing and sanitising in public spaces. As such they require either direct or indirect (through being paid for by taxation) coercion, and would therefore standardly fall within the realm of policies that should, for theorists sympathetic to the idea, require public justification (Dahlquist & Kugelberg, 2021). Whilst compliance and support for these measures has been high in most countries,

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where there has been opposition it has often been rooted in skepticism about or even the dismissal of 'expert' knowledge. Though this paper does not endorse that stance, nor the assertion of poor motivation amongst experts that often underpins it, the pandemic raises valid questions around the role of expertise in politics. These are thrown into sharp relief by the fast-moving nature of the pandemic, wherein policy responses are concerned with managing uncertainty and risk using an evidence base that is complex, rapidlyevolving and inaccessible to most people. In this paper I consider the ramifications of using this kind of evidence to justify laws for theories of public justification which posit, roughly speaking, that all coercive laws must be justified in a fashion that is somehow acceptable to all people. This paper seeks to contribute to an emerging set of literature on various related topics including: the difficulties public justification has in accommodating expertise (Kogelmann et al., 2021; Reid, 2019); the proper role of science in public justification (Bellolio Badiola, 2018, 2019; Kappel, 2021); the specific question of public justification in the pandemic (Bonotti et al., 2022; Dahlquist & Kugelberg, 2021); the relationship between experts and lay-people in democratic politics (Anderson, 2011; Brennan, 2020); and how this relationship ought to manifest itself in the case of the pandemic (Ivanković & Savić, 2021; Pearse, 2020).

Public justification hinges on the idea that citizens ought only accept as normatively legitimate laws that are justified in ways that all have sufficient reason to accept.¹ Underpinning some of these mutually acceptable justifications are factual claims. This raises questions for public justification about the way that facts are 'certified', in the sense of becoming a part of the set of widely accepted facts that underpin public justification (Tyndal, 2019, pp. 10-13).² Prescribing some limits on the set of facts that might underpin public justification appears necessary. There are some facts that cannot be certified because they are patently false, and therefore citizens ought to reject laws that are justified with reference to such facts. However, most of the facts that are treated as certified in policy debates are not clear or uncontroversial. Many of these factual claims will only be accessible to experts, in that only experts will be able to analyse and verify them (Jønch-Clausen & Kappel, 2016, p. 126).³ For example Donahue imagines a scenario where a law is justified by a state in the following terms: 'W is a good law because computer models show it will improve environmental health' (Donahue, 2020, p. 382). He notes that in this scenario the best that most people can hope for is to accept that the computer models in question show this, and repeat the claim in such basic terms; few will be able to actually explain or fully understand the relevant models.

If we allow that facts only accessible to experts can still be certified, then this risks excluding people from vast swathes of policy discussion, depending on where the bar is set. For example, very few people understand the

mathematical modelling that provides the basis for the regulation of the health insurance market through the Affordable Care Act, or 'Obamacare', in America (Kogelmann et al., 2021, pp. 161–3). If we state that certification requires that all people accept the factual basis of policies on their own terms, presumably involving some form of assessment of their veracity, then this fairly mainstream set of healthcare policies will fail to meet the standards of public justification (Kogelmann et al., 2021, p. 163). However, if we allow that there are certified facts that very few understand, this implies dissenting positions might be excluded from deliberation and treated as unreasonable. This appears unfair given that some might hold these dissenting views and not be guilty of any epistemic vice beyond failing to comprehend a set of factual claims that they had no realistic prospect of understanding. One possible way out of this is to argue that reasonable people might be expected to defer to experts on some issues where they have good second-order reasons to do so, even where the main factual claims under discussion remain inaccessible to them. However, this introduces similar problems around what count as adequate second order reasons that all should accept in such cases (Reid, 2019, pp. 497–500).

The policies introduced in light of COVID-19 generate an acute example of this problem. The subject is hard to understand and much of the research on the topic is beyond most people. In addition, even amongst experts the evidence base has been subject to rapid evolution and sharp disagreement; there is no established consensus on many questions about the efficacy of different pandemic mitigation strategies. Whilst some might fairly be considered to have expertise in relevant areas like epidemiology, public health, and mathematical modelling there are still limits to the scope of the claims such experts can reasonably make, given that 'instead of knowledge, experts can only provide information on risks, probabilities and uncertainties on COVID-19' (Parviainen, 2020, p. 6). When citizens are asked to accept coercive laws on the basis of such knowledge, they do so not only from a position of more limited expertise, but one where the ongoing fluidity of the situation makes judging expertise more difficult than it already is (Parviainen, 2020, p. 7). The public justification of COVID mitigation measures (and indeed the lifting of such measures) therefore does not just depend on the public making assessments of which experts to defer to on the subject, and responding to expert disagreement. It also hinges on an understanding of domains of knowledge, non-knowledge and uncertainty.

The paper briefly sets out what we might want from a theory of public justification in such circumstances, before working through the issues of expertise and testimony that arise when seeking to apply a theory of public justification in this case. One thing we might want from a theory of public reason is a more precise articulation of the intuitively attractive view that we should defer to experts on some technical issues, but not in an unconditional and uncritical way. I argue that theories of public justification struggle to generate conclusions in this spirit because they struggle to navigate between an overly permissive and an overly restrictive stance on when we should defer to experts. Whilst theories of public justification contain the basis for a coherent account of the role of expertise in establishing the base set of facts that underpins deliberation, situations like the pandemic throw up significant challenges. This is in part the product of a failure to integrate an account of deference to experts and assessment by laypeople of expert testimony into existing theories of public justification.

Public reason: what do we want?

In this debate about the role of facts in public justification there are really two discussions going on. First, we might wonder whether all reasonable people would accept as justifying a set of reasons based on facts, the perceived veracity of which was entirely contingent on expert testimony. This is a debate about whether the set of factual reasons one might draw upon to underpin public reasons includes facts that most cannot verify. A common theme in theories of public justification is that reasons must be *accessible* to all people and some expert knowledge does not appear to fall into this category.⁴ Second, we might ask whether it is ever unreasonable to reject a factual claim that is only accessible to experts. If it can be, then in these situations some people will be branded unreasonable for rejecting factual claims that they cannot easily discover or verify.

How might differing answers to these questions map on to wider debates about the role or expert knowledge in laws around the COVID-19 pandemic? One way to approach the role of facts in politics is to delineate areas of reasonable disagreement on factual matters, wherein we use an account of public justification to establish a range of factual claims that can underpin laws, and a set of unreasonable positions that cannot. For example, in the case of COVID-19 most would accept that there is scope for reasonable disagreement about how the 'R-rate' is calculated, how effective a putative treatment or vaccine might be, and the efficacy of different social distancing measures. But there are some empirical claims that others cannot reasonably be expected to accept on epistemic grounds. For example, then President Donald Trump's statement that sunlight might provide a treatment for COVID-19 if somehow shifted into the body is based on an obviously fallacious factual claim. Beyond these clear and obvious cases, though, delineating reasonable disagreement becomes hard. Claims about the efficacy of vaccines or the way the infection rate is calculated lie beyond the understanding of most people, and most would struggle to critically evaluate the kinds of primary research and data underpinning these discussions. As such,

most people's beliefs about the extent of reasonable disagreement on such issues is largely based on an assessment of the credentials of those who are presenting the information.

One hope might be that the concept of 'reasonableness' as I use it in the paragraph above could be fleshed out with reference to some or all theories of public reason that deploy a similar concept, and that the account of justification in these theories might be applied. We could utilise theories of public justification to specify *how* experts ought to justify their claims to the wider public, and to specify whether members of the wider public are guilty of some form of epistemic vice when they fail to defer to an expert in a given context.

In what follows, I cast doubt on the usefulness of using theories of public justification in this way. I argue that the kinds of epistemic idealisations that public reason theorists apply leads the theory away from an attractive tradeoff between deference to experts and adequate inclusion of the wider public. Instead, theories of public justification suggest that the set of facts that might justify laws in response to COVID-19 is either limited to those that are only accessible and certifiable to a small number of experts, or is permissive to the point that it cannot help us demarcate the set of reasonably acceptable facts any better than a 'commonsense' understanding of the issue. Both of these come with trade-offs. The latter view suggests that public justification is essentially inert on an issue where it ought to have something to say. The former cuts against the ideal of inclusion at the heart of the theory. Indeed, it risks rendering the theory self-defeating, in the sense that we might justifiably question whether citizens ought to accept, and are wrong to reject, factual claims that they will struggle to verify or comprehend the bases of. We might accept that public justification implies a strongly libertarian position precisely because very few laws can be justified to all reasonable (in the everyday sense) people without requiring them to accept, on essentially blind faith, laws that an epistemically idealised version of themselves might (Kogelmann et al., 2021).

The orientation of this paper is that this is an undesirable conclusion to reach in this case at least, as to adopt a strong libertarian conclusion that no coercive measures around COVID-19 could be justified would be to eliminate any effective pandemic strategy, and as such risk severe harms (Dahlquist & Kugelberg, 2021). Moreover, the intuitively attractive model of public justification here is one that offers an account of the acceptable use of expert knowledge to underpin laws that neither effectively rules it out, nor metaphorically shrugs and assumes that on some complex issues the range of reasonable disagreement is close to infinite. This is, I think, how most people approach these issues, and most would accept the need to defer to expertise in some cases, but not to do so uncritically. An appealing approach to the pandemic response is one that is 'guided' by experts, but not *led* by them



(Pearse, 2020, p. 574). More pessimistically, we might ask how to ensure that the wider public can avoid undercutting the communication and dissemination of important information only accessible to experts, without completely undercutting the democratic process (Ivanković & Savić, 2021). Theories of public justification as they stand struggle to generate conclusions that are compatible with either of these intuitively attractive propositions.

The epistemic structure of public reason

In spite of their manifold differences, all theories of public justification argue that coercive laws should be justifiable to all reasonable people. This does not mean that all real people will accept a publicly justifiable law, because some will not be *reasonable*.⁵ As such, theories of public justification are set out to appeal to an idealised justificatory constituency. One of the major debates amongst public reason theorists is how idealised the hypothetical citizens that make up this constituency are. Some argue that they are proxies for real people, who are roughly the same but avoid serious errors of reasoning and do not mislead others (For example Gaus, 2011); others that they adhere to thicker epistemic norms and thicker normative values (For example Rawls, 2005).⁶ Increasingly these two sets of theorists are seen as engaging in fundamentally different projects. In a recent paper Vallier and Muldoon argue that the former set of theorists are concerned with 'diversity', and providing a framework for the generation of moral norms under existing conditions of pluralism, whilst the latter are 'coherence' theorists, looking to generate a fuller set of political norms through speculation about a more idealised community (Vallier & Muldoon, 2021). These differences in what counts as reasonable lead to significant downstream differences in what counts as a justifying reason; in particular, 'diversity' theorists argue that reasonable citizens might appeal to reasons that others reject, such as religious ones, in justifying a common conclusion. Despite these differences, all theories of public justification adopt a degree of epistemic idealisation, however minimal.⁷ This is because even according to 'thinner' versions of these theories, reasonable citizens accept, if nothing else, common epistemic standards that are not necessarily shared by all people (Laborde, 2017, p. 119). In both cases, there might be factual claims that reasonable people accept but some real people do not, because the idealised constituency being imagined has internalised some epistemic norms that real people have not.

This set of facts might plausibly include some expert knowledge. We tend to recognise experts in two ways. First, we might appeal to an external epistemic standard and define experts as people who are systematically more likely to be correct on a given issue than laypeople. Alternatively, we might point to a social dimension, where expertise is something that is recognised by others (Goldman, 2018, p. 3). I return to this discussion in greater detail later, but note here that if we are to accept that there are standards of expertise that impact upon what counts as a public reason, it implies a hybrid account between these two approaches. If all reasonable people can recognise and accept expertise in some area, such that expert testimony counts as a public reason, then this is an account of expertise that hinges on the esteem of others. However, the justificatory constituency contains individuals who are to some extent epistemically idealised, so if they reach a consensus that an individual possesses expertise this to some extent reflects the quasi-objective epistemic standards embedded in the theory.

The role of expertise is understated in theories of public justification, given that in many cases, people will appeal to expert testimony alone, or at the very least will only be able to explain an expert perspective in simple terms that might not stand up to the scrutiny of public justification (Donahue, 2020, pp. 381–382). When we appeal to scientific modelling to justify a COVID-19 mitigation method, many of us offer little more than a cursory, over-simplified version of the expert perspective. There is no good reason for another person to accept our perspective here if they do not accept the expertise of those whose testimony we are invoking. The site of the discussion about epistemic idealisations therefore shifts from the way individuals evaluate reasons, to the way we choose and identify relevant experts.

COVID-19 and the problem of expertise

Expertise can be defined as a state that arises when individuals possess superior insight about a relevant case, such that they are able to help laypeople to resolve certain problems, or certain tasks, in ways that they might not otherwise be able to (Goldman, 2018, esp. pp. 3–6). Whilst there might well be reasonable disagreement about what this entails, it provides a good starting point for this discussion because reasonable individuals may come to accept and defer to expertise of this kind without surrendering their epistemic autonomy unduly. There are two main ways that expertise like this can be acquired: access to superior information; or the possession of some distinct skills or capabilities that enables someone to draw more robust conclusions from the same body of evidence (Fricker, 2006, p. 233). In the first case, people might simply have access to information that others do not, such as data, scientific material or classified briefings. On the issue of expertise via superior insight, developing the relevant capabilities requires time, effort and dedication, and perhaps in some cases 'natural' ability.

This brings us to the question of what all members of a justificatory constituency might reasonably be expected to find out when proposing or evaluating a law, and what skills they ought to cultivate. On the one hand, it seems unreasonable, in the minimal sense, for people to be wilfully ignorant when proposing or rejecting laws in ways that would be easy for them to address. If, in the case of COVID-19, I advocate the government invest heavily in a drug that I claim has positive effect in treating the illness, but this is based on a hoax article that I read online and would have realised was fake if I investigated it for 10 minutes, then there seems to be no good reason for others to accept my proposal.

On the other hand, it seems harsh to dismiss an individual's proposal as unreasonable because they have failed to grasp a mathematical concept that only those who have been to graduate school are able to understand, or because they did not consult information they would struggle to access. Even where people could find out more about something over time, building their knowledge and skills, this is impossible in all areas that are salient to policy. The whole purpose of public justification as a project is to set out a way of justifying laws that is compatible with the wide range of goals and projects people might want to pursue, including: moral and interpersonal commitments; interests that do not make them better or more informed citizens; friendships and the cultivation of community, etc. All of these take time and resources. For this reason, even a relatively demanding view of public reason which stipulates reasonableness in such a way that it requires citizens to be much better informed than they actually are, cannot require citizens to be informed to their maximum potential in all areas (Donahue, 2020, pp. 382–6). Instead, it can specify reasonable expectations that are compatible with pursuing these other goods.⁸

Response 1: are scientific reasons public reasons?

There are two strategies that public reason theorists might pursue when arguing that all reasonable people ought to accept reasons underpinned by expert knowledge they cannot verify. First, they can point to the nature of the facts in question (for example, scientific versus non-scientific, robust versus non-robust). They might then argue that all reasonable people will accept some factual claim they cannot verify because they accept the methodological approach and process by which said factual claim was produced and is subject to ongoing scrutiny. Second, they might engage in a deeper second-order evaluation of either the credentials of experts, or the way an expert consensus has been formed. Both are plausible ways of generating factual claims that might be adequate to underpin public justification. They can also co-exist, but are logically independent. So, some people argue that all 'scientific' knowledge that is produced according to the norms typically ascribed to the 'scientific method' can underpin public justification, and others would argue that there might be a reasonable consensus on the expertise of some

individuals; it is possible to believe either of these but not the other, or both at the same time.

We can, plausibly, extrapolate from Rawls' brief remarks on the topic to either of these positions. Rawls states that public justifications 'are to appeal only to presently accepted general beliefs and forms of reasoning found in common sense, and the methods and conclusions of science when these are not controversial' (Rawls, 2005, pp. 224–5). He does not develop this line of argument, and this has led some to claim that his apparent privileging of scientific knowledge or facts in public justification is unjustified without further elucidation (Jønch-Clausen & Kappel, 2016). Recently, some have tried to fill his statement out a little and make the case for 'scientific reason as public reason' (Bellolio Badiola, 2018, 2019; Kappel, 2021). The strong claim here is that in some cases only expert knowledge (as I have used the term) can provide the factual basis for public reasons, where this adheres to certain norms around science. Kappel articulates this as follows: 'that some policyrelevant factual proposition P is part of public reason if and only if there is consensus about P among scientific experts in the relevant well-functioning scientific institutions' (2021). This is in spite of the fact that many apparently reasonable citizens might disagree with, or at least not be able to grasp, some of the factual issues in play.

Some advocates for this viewpoint to the symmetry between the epistemic norms of scientific methods and public justification. For example, Bellolio Badiola appeals to 'the virtually universal recognition of its principles of reasoning and rules of evidence' as being justifiable to all (Bellolio Badiola, 2018, p. 420). Kappel eschews appeals to the scientific method, instead offering a 'dogmatic' defence of science of public reason. He argues that there is a need in some cases to defer to the testimony of others, then we ought to defer to the most reliable sources we have; and that 'wellfunctioning' scientific institutions are the best sources of information on a range of issues (Kappel, 2021). Even where people deny the second half of this claim, as some reasonable and rational people might, the dogmatic part of the argument comes in, specifically that the scientific process is a philosophically 'well-intentioned' perspective that does not conflict with the values of public justification (Ibid). Notably both strategies hinge on nonexperts being able to assess that scientific institutions are functioning well, and on fairly widespread acceptance of certain broad epistemic norms.

I will not judge the success of these strategies in general terms, but the COVID-19 pandemic provides challenges to the successful application of either. The extent of non-knowledge means that even if scientific reasons are public reasons, scientific reasons can only yield a range of factual beliefs that one might reasonably hold on a given matter. The role of public reason norms here is almost negative, in that it specifies the boundaries of the domain of facts that people might hold without being considered

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epistemically unreasonable. What is being produced in the discourse around COVID-19 is not so much publicly justifiable knowledge, as new 'defeater reasons' that imply some views are unacceptable. Even so, there are few points of consensus being reached amongst all reasonable people around specific defeater reasons beyond 'obvious' fallacies. As such the 'scientific reason as public reason hypothesis' does not help us narrow the extent of reasonable disagreement by generating new defeater reasons due to the extent of expert disagreement and acknowledged non-knowledge around the pandemic.

Furthermore, even if we accept the 'scientific reason as public reason' hypothesis, it is not clear that all of the expert knowledge produced by scientists or academics around COVID-19 meets these criteria. It might well be true that most 'natural' science that is currently being produced adheres to this method, or something like the spirit of it, though this is contentious. But responding to a pandemic requires engaging with academic disciplines and aspects of knowledge formation where this methodology is less ingrained. Much of the modelling around the efficacy of potential measures that might be used to respond to COVID-19 depends on assumptions and predictions around social engagement, and the extent to which people observe and respond to government dictats and social norms. These assumptions are informed by disciplines in the social sciences and other academic disciplines where the commitment to a scientific method is weaker, as well as the broader set of information available to policy-makers. Because of the time pressure associated with the pandemic response, there is also a tendency to give increased credence to 'frontline' evidence or testimony, and the testimony of those who have worked in similar situations. If anything, drawing on this more diverse set of information is helpful. Pandemic response measures impact on people's everyday lives in manifold ways, and this lived experience needs to be reflected in policy making if it is to be publicly justified (Bonotti et al., 2022). As such, an effective and publicly justifiable pandemic response will look to information and facts beyond those produced according to the traditional scientific method not just out of necessity, but because of the potential epistemic benefits of doing so.

Finally, the 'scientific reasons as public reasons' hypothesis tends to demarcate the scientific endeavour as a distinct epistemic field concerned with the production of a certain kind of natural facts, as I have done through this paper. In the case of the pandemic response, questions of natural fact are hard to separate from normative positions on who ought to shoulder the burden for specific responses to the pandemic. Whilst all scientific inquiry is to some extent value-laden, advocates of the scientific reason as public reason position tend to argue that scientific reasons can serve as public justifications because of a combination of publicity and the 'spirit' of the venture. Both of these things are harder to show in the case of the COVID-19

response. COVID mitigation measures impact significantly on people's rights, questions of distributional justice, and wider concerns around social justice. People might reasonably be wary of accepting scientific reasons as public reasons because doing so could distract from the trade-offs that are central to how states respond to the pandemic. For example, in the UK COVID-19 mitigation policies have frequently been justified by the government on the basis that they are 'following the science'. However, such policies have ramifications beyond simply public safety in the pandemic including a medium- to long- term distributional impact, leading to the plausible charge that the government is using the appeal to experts to enable a form of depoliticisation (Kettell & Kerr, 2022). Isolating the factual claims that underpin reasons will therefore be difficult in this case.

Response 2: second-order assessments of expertise

An alternative approach is to focus on the expertise of others in a broader sense. In the framework of public justification, there are two ways this might manifest itself: either there might be a reasonable consensus that an individual or a group of individuals are experts on a relevant issue, so there is a reasonable consensus that people should defer to them; or there might be a consensus reached on certain facts at the end of some deliberation amongst different stakeholders with relevant expertise, and following a robust epistemic procedure. To see how this might work, consider an influential, and in some ways quite optimistic, account of lay people's ability to assess expert testimony by Elizabeth Anderson. She argues that we might assess expertise in a field based on three main variables: the credentials of an expert; their disposition, especially their honesty and epistemic 'responsibility'; and the extent of expert consensus (Anderson, 2011). In public justification terms, it might be that there are cases where all reasonable people would come to the conclusion that they ought to defer to an expert in a given case based on these criteria (Reid, 2019, p. 492).

There are a range of objections to this. Some simply believe that Anderson is too sanguine in her assessment of the kinds of research that the average person – she uses the example of someone with a high school diploma and an internet connection – is capable of doing (Anderson, 2011, pp. 150–1). In the case of COVID-19 responses this seems a real worry. At the very least, the complexity of the task combined with the time pressure means that the 'credentials' part of her argument will end up having to do a bit more work. Speakers are frequently coming from a position of non- or partial knowledge such that in effect, in deferring to them, we are trusting them to navigate 'known unknown' situations, and to make the best of fragmented information upon which there is no consensus. It is also worth noting that the stakes of public justification, and the fact that the issue at hand here is coercive law,

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makes a difference. Whilst Anderson's criteria still make sense as a 'rule of thumb' to follow in our everyday lives, they do not provide the kind of justificatory force that public justification demands without further clarification. Another thing that the discussion of COVID-19 exposes is that Anderson's approach appears much easier for lay people to apply when there is a relatively stable consensus of opinion amongst relevant experts, and that changes to this are either gradual, or are widely accepted in short order. We can see a disanalogy between the case of COVID-19 and that of climate change, for example, where the relatively clear consensus amongst experts on certain facets of that question lies in sharp contrast to the more fragmented set of beliefs on COVID-19, and where the body of factual knowledge has been subject to a much longer and more thorough process of both intra-expert and more general review and scrutiny.

More fundamentally, Anderson's view presupposes a hard line between 'experts' and non-experts, where those in the non-expert camp who purport to possess epistemic authority are, at best, misguided and at worst guilty of serious epistemic malpractice. Her 'framing' is one of 'a lopsided battle between a dominant group of credible scientists and a few "crackpots"" (Lane, 2014, p. 104).⁹ In discussions of COVID-19 the kinds of epistemic obstacles people will need to overcome - political pressures, self-interest and the like - appear to apply evenly across the expert and non-expert groups. Moreover, drawing the line where one can be considered an expert appears somewhat arbitrary in these cases. We might say that those with advanced training in relevant fields might be better placed to judge expertise, for example those with an undergraduate degree in natural sciences.¹⁰ These approximate signifiers around education do not provide a solid enough basis to determine who has access to privileged information or distinctly valuable expertise to make judgments over a realm of knowledge as volatile and complex as this. They cannot yield sufficient evidence to delineate experts and non-experts in a satisfactory way to underpin the claim that all reasonable people would accept this stark distinction. Instead, on issues salient to the pandemic response there appear to be a range of individuals who possess some expertise, or at least superior insight, relative to the general public, but there is not a clear group of experts that all reasonable people would agree to defer to in this context.

A possible solution to this is to buttress Anderson's account by providing a more specific account of the set of norms that lay people are expected to adhere to when assessing expertise. This might allow more nuanced and finegrained judgments about expertise in specific areas, or the status of some factual claims only verifiable by experts. One approach to this is a 'metacognitive' one, which requires people to apply more rigorous standards to their own beliefs than, as well as those of experts. Brennan argues for such an augmentation of Anderson's view, pointing out that, at its heart, Anderson's argument relies on people being moved by facts. As such it requires an adherence to some epistemic norms around not just the evaluation of experts, but in reflecting on the contingent nature of people's own beliefs, and is vulnerable to people's tendency to inflate their own perspective or ability (Brennan, 2020, p. 232). The meta-cognitive approach that he advocates is one which requires people to be cognisant, and assess, gaps in their own knowledge, whilst also policing their tendency for over-confidence in their own beliefs (Brennan, 2020, p. 234). Applied to the arguments around public justification, one reason that idealised reasonable people might reach a consensus on a factual matter that real people do not is that unlike the general public, reasonable people *always* do the work to overcome meta-cognitive obstacles like this.

Alternatively, we might augment Anderson's perspective by requiring greater engagement between lay people and experts, and more demanding lay scrutiny of expert testimony. Lane argues that an ongoing dialogue between experts and lay people over domains of expert knowledge could allow people to form more robust understandings of expert opinion (Lane, 2014). This approach breaks down the stark 'novice 2-expert' framing that Anderson adopts, in favour of more direct engagement with the substance of the debate (Lane, 2014, p. 104). It is certainly worth exploring options like this when considering the practicalities of public justification, because it might be that reasonable people could come to accept facts that they could not verify themselves if they were able to interrogate those who were able to and raise questions and objections directly.

Both of these suggestions are consistent with the way that reasonableness in the minimal sense is set out in theories of public justification. Reasonable citizens are required to be somewhat open minded in their approach to justification, in acknowledging that there is a degree of reasonable pluralism and uncertainty around many issues (Rawls, 2005, pp. 55–8). In practice, the lack of self-awareness that Brennan describes might plausibly be considered a form of unreasonableness. Similarly, the kind of engagement that Lane advocates might fall into the category of information acquisition. Both could also be something that is required of all reasonable citizens: to make a *reasonable* effort to consult and gather information that is available and accessible to them on the subject at hand; and then to be self-aware enough to respond to it appropriately. If they were adopted, such approaches would represent another site where the central epistemic tension that theories of public justification encounter, between idealisation when imagining the justificatory constituency and inclusion on a broader level, would play out.

Perhaps, in order to give adequate credence to expertise in cases like these, public justification theorists might 'bite this bullet' and accept the more demanding view of epistemically reasonable behaviour on the part of the general public. It would, at least, provide a framework whereby 14 👄 A. REID

expert knowledge is privileged in guestions of justification without requiring people to accept it uncritically. The ability to offer reasonable arguments would still, by stipulation, be within the grasp of the vast majority of people, even if most were unlikely to take this up in practice. However, this would entail a degree of deference to experts that would undercut the impulse towards inclusion and epistemic pluralism that underpins public justification and renders it attractive to many (Bertram, 1997). In cases like the COVID-19 response it appears that the number of people making reasonable arguments by these standards would be very small. To make such demands would exclude people from parts of deliberation who appeared to be engaged in 'normal' or even 'good' epistemic conduct. Given that the attractive quality of public justification is that it draws in all people who reason 'well enough' this marks a significant deviation in intent from the wider project. If nothing else, an adequate account of expert testimony in public justification will need to make explicit where this balance between idealisation and inclusion lies and how it reconciles deference to experts with some form of public reasoning.

The challenge of echo chambers and epistemic bubbles

To illustrate how difficult navigating this tension is, consider the practical strategies that we might adopt to challenge our own cognitive biases in the way that Brennan suggests. An influential account of how biased beliefs manifest themselves in the current age is Nguyen's distinction between 'epistemic bubbles' and 'echo chambers' (Nguyen, 2020). Epistemic bubbles omit certain perspectives from an ongoing discourse. These emerge because people are more likely to socialise with those who have similar beliefs, backgrounds, interests and, therefore, biases as themselves. Echo chambers, meanwhile, are more pro-actively re-enforced, and are defined by the outright denigration of external voices. As a result, epistemic bubbles can be pierced by mere exposure to alternative perspectives, whilst those in echo chambers are more prone to wrongly discount robust sources of evidence (Nguyen, 2020, pp. 143–150). Both of these phenomena describe situations where incorrect assessments of others' expertise arise, as people wrongfully inflate the standing of those within the bubble or echo chamber at the expense of those on the outside.

Whilst the re-enforcement or pro-active creation of either structure seems unreasonable, I do not believe that it is *always* unreasonable to reject expertise when one is within these kinds of epistemic environments. Take the question of epistemic bubbles. Any attractive epistemic standard attached to reasonableness in the minimal sense will include a receptiveness to evidence. So, it seems uncontroversial to say that any reasonable citizens within an epistemic bubble would be open to change in a way that might include leaving that bubble. However, beyond this, the question of what one might reasonably be expected to do is more complex.

In setting out the idea of an epistemic bubble, Nguyen suggests that those within them often suffer from an epistemic vice of laziness, in not seeking relevant information, and might therefore be held responsible for false beliefs held as a result of operating within that bubble (Nguyen, 2020, p. 154). I believe that this view understates the internal obstacles people face when changing their views in significant ways, or the reasons they might want to preserve them. It is one thing to be receptive to expert opinions, but it is quite another to change fundamentally held beliefs around a topic as a result of 'expert' advice, especially where the subject of expertise remains so contentious. This is because being responsive to expert testimony here requires a shift in outlook on who counts as an expert that is deeply socially and culturally engrained for many. Indeed it often requires a re-evaluation of who are 'true' experts and which actors are acting in good faith.¹¹ The idea that mere exposure to alternative views would be sufficient to move people to make appropriate judgments of expertise is overly optimistic. To illustrate this Watson points to his own experience of coming to believe in theories of evolution having grown up in a religious epistemic bubble where such views were rejected. Changing his beliefs required a concerted effort on his part to seek out opposing perspectives and an atypical acceptance that he might be wrong (Watson, 2020, pp. 54–5).¹²

From a public justification perspective, the salient concern is that it requires proactive effort to seek out certain forms of information and a high degree of self-awareness and discipline to transcend the epistemic bubbles and echo chambers people might find themselves in. Given the prevalence of epistemic bubbles at different levels of people's social life, it is unlikely that they might shatter them all at once. Even if it were possible, I am not convinced that we can reasonably expect people to seek out information that 'bursts' epistemic bubbles and go through the process of challenging their beliefs in all cases. This is in part because of the demandingness and complexity of this process. Presumably if some piece of expert knowledge will shatter an epistemic bubble, it is because people understand it and allow that it might change their mind. But if the expert knowledge in question is beyond a person's easy comprehension, they must either devote significant time to understanding it, or consult some intermediary to help them interpret it. There are other considerations, too, including: the costs and burdens associated with acquiring this information; the salience of the issue at hand; the extent to which someone is entrenched within an epistemic bubble, and how deeply ingrained their beliefs are; and how central the faulty epistemic premises they rely on are to justifying the laws they are proposing or 16 👄 A. REID

evaluating. All of these need to be considered when determining what constitutes a reasonable effort to escape and avoid especially problematic epistemic bubbles.

The burdens of escaping epistemic bubbles and echo chambers are also spread unevenly, so a question of fairness arises. There is fairly robust evidence that disagreement with the scientific consensus on certain issues, say creationism, coincides with political perspective, amongst other things. Whether someone adopts such beliefs is therefore partly a function of the 'epistemic luck' a person encounters in their life (Levy, 2019, p. 322). Some people are less likely to accept theories of evolution as a product of the chains of reasoning and testimony that they are involved in. Making judgments on these issues that might include someone changing their mind requires deferring to experts at various points, and we look to social cues in experts to help decide when we should do this - Levy points to the apparent 'competence' and 'benevolence' of experts as things people look out for (Levy, 2019). When people misjudge the expertise of others, either by overor under-stating it, it is often a product of a misjudgement about the other party's intentions or competence. When and how people succumb to these misjudgements is tied to the epistemic *milieu* in which they formed their opinions. There is even emerging evidence that the standards and nature of reasoning and use of cues like benevolence does not seem to vary between those who do or do not accept a scientific consensus; only the epistemic environment does (Levy, 2019, pp. 321-2). This opens up the possibility that people could adhere to the epistemic demands of reasonableness at every stage, but because of the deficiencies of the epistemic community they find themselves in, they end up holding unreasonable views. The differing costs and burdens incurred when one behaves in an epistemically reasonable manner poses a problem for theorists of public justification when it comes to establishing what can reasonably be expected of people in such a situation. At the very least, the argument must be framed as an obligation to overcome some instances of epistemic bad luck. In doing so it must be cognisant of the risk of unfairly excluding those who have, in a broad dispositional sense, behaved reasonably but who have also experienced significant bad epistemic luck.

A further complicating factor is that epistemic bubbles and echo chambers might be tied to valuable projects that we cannot expect people to give up. The desire to conform to group norms and beliefs may come into tension with the epistemic standards they hold, such that, for example, 'people will sometimes accept discredited scientific views if doing so helps them to coordinate better with individuals who hold similar beliefs' (De Cruz, 2020, p. 441). If people interact, primarily, with members of a religious or artistic community they are a part of, piercing this epistemic bubble might mean sacrificing some of these

interactions. It is difficult to disentangle the purely factual epistemic aspects of existing within such social networks from the other valuable aspects of interpersonal relationships. If, for example, a religious sect is at odds with the scientific consensus on a number of issues, then ceding on any point might serve to undermine the integrity of the group (Jønch-Clausen & Kappel, 2015, p. 378).¹³ Rejecting parts of the scientific consensus might form part of a wider rear-guard action against the threat from wider society to the integrity of the group. Of course, some liberals might argue that regressive or conservative groups are not entitled to such protections, and that is a separate debate. For the purposes of this discussion, though, determining a fair account of deference to expertise will need to be mindful of the differential social and non-epistemic costs people encounter when gathering information, and reaching their judgments. It must also be mindful that the increase of information available to many and our increased connectivity might actually exacerbate this epistemic polarisation, reducing the factual base we might reasonably agree on. The COVID-19 pandemic is a situation where such costs are exaggerated, because most people are heavily reliant on social cues when evaluating salient expert testimony. In the absence of a thicker theory of testimony, it is unclear that public justification can provide an adequate account of when it is unreasonable not to defer to experts, and risks lapsing once again into a framework that is either unduly deferent towards expertise or that understates its import in these cases.

Concluding remarks

In this paper I have discussed the relationship between facts that can only be verified by experts and public justification in two senses. The first is whether such reasons are admissible as public reasons. I have argued that there are many cases where the answer is 'yes', although this still depends on there being some reasons to accept the testimony of experts beyond assertions about their expertise and good intentions. A second way of drawing on theories of public justification is to set out the eligible set of facts that we might draw upon when justifying certain policies, including situations where the set of facts that reasonable people would draw upon might only be verifiable by experts. I have argued that drawing on theories of expertise to delineate this set is logically consistent with a theory of public reason, but that mapping this set of admissible factual claims is very difficult, and doubly so in cases like COVID-19 responses where expert knowledge often amounts to more accurate mapping of uncertainty and non-knowledge. The degree of controversy and complexity in even the expert discussion of many policy areas, combined with the difficulties that 18 😉 A. REID

people might face in overcoming flawed beliefs that they hold, for example as part of 'echo chambers', means that it is often difficult to make the case that people are unreasonable in rejecting factual claims based on expert knowledge. However, if all such objections and alternative facts are treated as reasonable, public justification has little to say on such policy matters.

This leads to an unsatisfactory conclusion in some ways, that predominant theories of public reason do not, in their current form, generate conclusions that accord with the intuition that expertise should play a role in decisions on policies like this, but that we should avoid unquestioning deference to experts. This is disappointing, in that a possible attraction of theories of public justification in cases like this is that it can foster more inclusive policymaking whilst preserving some general epistemic standards to constrain debate. However, as they stand, theories of public justification lack an account of expertise and testimony that is adequate to address complex issues like COVID-19. They therefore succumb to being permissiveness in either direction - either by stipulating that to fail to defer to experts is typically unreasonable in a way that excludes many people and amounts to a post hoc rationalisation for uncritical deference to traditional experts, or that allows nearly unbounded reasonable disagreement on factual matters. Perhaps permissiveness of one of these kinds is the correct approach after all, but theorists of public justification need to be mindful that they are working around this dichotomy.

Whether or not succumbing to one of these positions is desirable, existing theories of public justification could do a lot more to incorporate ideas about the nature and role of expertise and expert testimony into the account of epistemic reasonableness that they offer. This paper has shown that epistemic standards and the inclusive aspirations of public justification can cohere and even be reinforcing, but also that there are a lot of areas of uncertainty that are not neatly resolved using the tools available to public justification theorists as it stands.

Notes

- 1. This is often referred to as the 'public justification principle'. See Vallier (2018, Section 2).
- 2. Tyndal here is using a definition of certification put forward by Kitcher (2011, p. 12).
- This is something that is overlooked in Rawls' paradigmatic account of public justification (Holst & Molander, 2017, p. 236).
- Laborde sets out accessibility of a purely epistemic kind as a feature of public reasons (Laborde, 2017, p. 120). For a fuller discussion of Laborde's account of accessibility see Bardon (2018) and of accessibility in general see Badano and Bonotti (2020).

- 5. By 'reasonable' here I just mean conforming to the requirements stipulated by that particular theory of public reason. Some public reason theorists eschew the word 'reasonable' because they reject Rawls' account of what reasonableness entails, but they still all appeal to a somewhat idealised justificatory constituency.
- 6. For a summary of this debate and a defence of moderate idealisation in public justification see Vallier (2019).
- 7. Or, put another way, all theories of public justification apply some objective criteria to the eligible set of reasons such that they are not simply the set of subjective reasons the population holds (Peter, 2019, pp. 153–4).
- 8. For a fuller discussion about what reasonable expectations around information acquisition might look like, see Tyndal (2016).
- 9. Lane is criticising a passage in (Anderson, 2011, pp. 146–7), She identifies Brewer (1998) as an interlocutor who is much more skeptical of lay people's ability to assess experts as a result of this.
- 10. Lane makes this point in a different case, whilst criticising Brewer for demanding a similar level of expertise be required to serve as a judge on a case where scientific knowledge were relevant (Brewer, 1998; Lane, 2014, p. 102). As Lane points out, why not require a PhD, or why not only require a high school diploma or equivalent?
- 11. As one reviewer correctly pointed out, there is not even a consensus on what counts as a 'hoax' in many cases, despite my stating earlier that such examples are straightforward. This serves to highlight the degree of epistemic polarisation on scientific issues.
- 12. Watson is responding here to Brennan, and the argument that we might exercise meta-cognitive discretion when evaluating expert testimony.
- 13. Jønch-Clausen and Kappel are talking about the importance to individuals of preserving their 'epistemic systems', and the potential costs when these are undermined.

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References

- Anderson, E. (2011). Democracy, public policy and lay assessments of scientific testimony. *Episteme*, 8(2), 144–164. https://doi.org/10.3366/epi.2011.0013
- Badano, G., & Bonotti, M. (2020). Rescuing public reason Liberalism's accessibility requirement. Law and Philosophy, 39(1), 35–65. https://doi.org/10.1007/s10982-019-09360-8
- Bardon, A. (2018). Is epistemic accessibility enough? same-sex marriage, tradition, and the bible. Critical Review of International Social and Political Philosophy, 23(1), 21–35. https://doi.org/10.1080/13698230.2018.1487231
- Bellolio Badiola, C. (2018). Science as public reasons: A restatement. *Res Publica*, 24(4), 415–432. https://doi.org/10.1007/s11158-018-09410-3
- Bellolio Badiola, C. (2019). The quinean assumption. The case for science as public reason. Social Epistemology, 33(3), 205–217. https://doi.org/10.1080/02691728.2019. 1599462
- Bertram, C. (1997). Political justification, theoretical complexity and democratic community. *Ethics*, 107(4), 563–583. https://doi.org/10.1086/233760
- Bonotti, M., Borghini, A., Piras, N., & Serini, B. (2022). Learning from COVID-19: Public justification and the ontology of everyday life. *Social Theory and Practice*, 48(3), 429–456. https://doi.org/10.5840/soctheorpract2021211118
- Brennan, J. (2020). Can novices trust themselves to choose trustworthy experts? Reasons for (reserved) optimism. *Social Epistemology*, 34(3), 227–240. https://doi. org/10.1080/02691728.2019.1703056
- Brewer, S. (1998). Scientific Expert Testimony and Intellectual Process. Yale Law Review, 107(6), 1535–1679. https://doi.org/10.2307/797336
- Dahlquist, M., & Kugelberg, H. D. (2021). Public justification and expert disagreement over non-pharmaceutical interventions for the COVID-19 pandemic. *Journal of Medical Ethics*, *49*(1), 9–13. https://doi.org/10.1136/medethics-2021-107671
- De Cruz, H. (2020). Believing to belong: Addressing the novice-expert problem in polarized scientific communication. *Social Epistemology*, 34(5), 440–452. https://doi.org/10.1080/02691728.2020.1739778
- Donahue, S. (2020). Public justification and the veil of testimony. *The Journal of Political Philosophy*, *28*(4), 378–396. https://doi.org/10.1111/jopp.12216
- Fricker, E. (2006). Testimony and epistemic authority. In J. L. In & E. Sosa (Eds.), *The epistemology of testimony* (pp. 225–250). Oxford University Press.
- Gaus, G. (2011). The order of public reason. Cambridge University Press.
- Goldman, A. I. (2018). Expertise. *Topoi*, *37*(3), 3–10. https://doi.org/10.1007/s11245-016-9410-3
- Holst, C., & Molander, A. (2017). Public deliberation and the fact of expertise: Making experts accountable. Social Epistemology, 31(3), 235–250. https://doi.org/10.1080/ 02691728.2017.1317865
- Ivanković, V., & Savić, L. (2021). Deferring to experts in public health emergencies. In F. Niker & A. Bhattacharya (Eds.), *Political philosophy in a pandemic: Routes to a more just future* (pp. 191–204). Bloomsbury.

- Jønch-Clausen, K., & Kappel, K. (2015). Social epistemic liberalism and the problem of deep epistemic disagreements. *Ethical Theory and Moral Practice*, *18*(2), 371–384. https://doi.org/10.1007/s10677-014-9523-y
- Jønch-Clausen, K., & Kappel, K. (2016). Scientific facts and methods in public reason. *Res Publica*, 22(2), 117–133. https://doi.org/10.1007/s11158-015-9290-1
- Kappel, K. (2021). Science as public reason and the controversiality objection. *Res Publica*, *27*(4), 619–639. https://doi.org/10.1007/s11158-021-09503-6
- Kettell, S., & Kerr, P. (2022). 'Guided by the science': (De)politicising the UK government's response to the coronavirus crisis. The British Journal of Politics and International Relations, 24(1), 11–30. https://doi.org/10.1177/13691481211054957
- Kitcher, P. (2011). Science in a democratic society. Prometheus Books.
- Kogelmann, B., Stich, S., & W, G. (2021). When public reason Falls silent: Liberal democratic justification versus the administrative state. In D. Sobel, P. Vallentyne, & S. Wall (Eds.), Oxford studies in political philosophy 7 (pp. 161–193). Oxford University Press.
- Laborde, C. (2017). Liberalism's religion. Harvard University Press.
- Lane, M. (2014). When the experts are uncertain: Scientific knowledge and the Ethics of democratic judgment. *Episteme*, 11(1), 97–118. https://doi.org/10.1017/epi.2013.48
- Levy, N. (2019). Due deference to denialism: Explaining ordinary people's rejection of established scientific findings. *Synthese*, *196*(1), 313–327. https://doi.org/10.1007/s11229-017-1477-x
- Nguyen, C. T. (2020). 'Echo chambers and epistemic bubbles. *Episteme*, *17*(2), 141–161. https://doi.org/10.1017/epi.2018.32
- Parviainen, J. (2020). 'We're flying the plane while we're building it': Epistemic humility and non-knowledge in political decision-making on COVID-19. Social Epistemology Review & Reply Collective, 9(7), 6–10.
- Pearse, H. (2020). Deliberation, citizen science and covid-19. *The Political Quarterly*, 91 (3), 571–577. https://doi.org/10.1111/1467-923X.12869
- Peter, F. (2019). Political legitimacy under epistemic constraints: Why public reasons matter. In J. Knight & M. Schwartzberg (Eds.), *Nomos LXI: Legitimacy* (pp. 147–173). New York University Press.
- Rawls, J. (2005). Political liberalism (expanded edition] ed.). Columbia University Press.
- Reid, A. (2019). What facts should be treated as 'fixed' in public justification? *Social Epistemology*, 33(6), 491–502. https://doi.org/10.1080/02691728.2019.1637965
- Tyndal, J. (2016). Moderate idealization and information acquisition responsibilities. *Res Publica*, 22(4), 445–462. https://doi.org/10.1007/s11158-015-9295-9
- Tyndal, J. (2019). Public reason liberalism and the certification of scientific claims. Social Epistemology Review & Reply Collective, 8(11), 8–14.
- Vallier, K. (2018). Public justification. In E. N. Zalta (Ed), *The Stanford encyclopedia of philosophy*. Online resource available at https://plato.stanford.edu/archives/spr2018/entries/justification-public/
- Vallier, K. (2019). In defense of idealization in public reason. *Erkenntnis*, *85*(5), 1109–1128. https://doi.org/10.1007/s10670-018-0067-8
- Vallier, K., & Muldoon, R. (2021). In public reason, diversity trumps coherence. The Journal of Political Philosophy, 29(2), 211–230. https://doi.org/10.1111/jopp.12227
- Watson, J. C. (2020). Hunting the expert: The precarious epistemic position of a novice. *Social Epistemology Review & Reply Collective*, 9(4), 51–58.