

Public deliberation and the fact of expertise: making experts accountable

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This paper discusses the conditions for legitimate expert arrangements within a democratic order and from a deliberative systems approach. It is argued that standard objections against the political role of experts are flawed or ill-conceived. The problem that confronts us instead is primarily one of truth-sensitive institutional design: which mechanisms can contribute to ensuring that experts are really experts and that they use their competencies in the right way? The paper outlines a set of such mechanisms. However, the challenge exceeds that of producing epistemically optimal expert deliberations because a deliberative political system must also fulfil the ethical and democratic requirements of respect and inclusion. Yet epistemic concerns justify expertise arrangements in the first place, and measures taken to make the use of expertise compatible with these requirements have to balance the potential rewards from expertise against potential deliberative costs. In the final part of the paper, the regulatory framework of a best practice expert advice system is tentatively analysed to illustrate the applicability and critical potential of our approach.

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Introduction

In modern democracies, there is a plethora of expert bodies, from independent central banks and a wide range of regulatory and audit agencies, to advisory committees. Commentators talk about “the rise of the unelected” and the development of a new branch of government made up of those with expert knowledge that cuts across the traditional separation of powers (Vibert 2007). Developments along these lines have, of course, many critics. However,

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citizens seem to accept “expertization” (Turner 2003, 71) of policymaking in large doses and place considerable trust in procedures and institutions that privilege experts and expert opinions. This acceptance and trust are intimately linked to the “scientization” of contemporary societies (Habermas [1963] 1971) and their expert dependency (Kitcher 2011): it is hard to make rational political decisions without relying extensively on expert advice and even expert decisions, and most people seem to accept that this is the case. Expertise dependency constitutes a basic fact of modern democracies that is similar to the “fact of reasonable pluralism” (Rawls 1993); one could refer to it as “the fact of expertise” (see also Post 2012). The question of what separates legitimate from illegitimate expert arrangements is therefore a core question for normative political theory. Expertise is there—unavoidably, it seems—but how could it be institutionalized defensibly within the frames of a democratic order? Or, to put it differently, how are we to solve the dilemma that “something has to give: either the idea of government by generally intelligible discussion, or the idea that there is genuine knowledge that is known to few, but not generally intelligible” (Turner 2003, 5).

The characteristics and role of experts and expert knowledge are treated within different academic subdisciplines, including social epistemology, philosophy of science and science and technology studies (STS). The fact of expertise has, however, received strikingly little attention as a problem for normative theories of democracy. It is not one of the “general facts” that Rawls’s (1993) political liberalism addresses, and it is not discussed by Habermas (1992) as a fact that a deliberative model of democracy has to take into account, although the relationship between science and politics was an important theme in his earlier writing (see e.g. Habermas [1963] 1971). One theorist of democracy who has raised the problem of expertise is David Estlund (2008, 206–222). However, his concern is not contemporary expertization processes and the legitimacy challenge they involve, but rather the epistocratic challenge to an epistemic conception of democracy: if political authority should be “truth tracking”, why not let the knowers rule? His argument why such a rule will fall short of being legitimate is that it cannot satisfy a “general acceptability criterion” because people will unavoidably disagree on who the experts are (Estlund 2008, 36). We shall return to this argument. A related discussion has also been pursued by some scholars in their recent contributions to the philosophy of science (Longino 2002; Carrier, Howard, and Kourany 2008; Douglas 2009; Kitcher 2011). However, they deal mostly with how science and scientific expertise should relate to non-epistemic values (i.e. how science can play a political role without being compromised as science). Here we take the other route and start from a

normative theory of democracy and ask how science could be integrated into politics in a way that is consistent with democratic requirements as well as epistemic standards.

According to Mansbridge et al. (2012, 11–12), public deliberation is supposed to fulfil three different functions in a democracy: the epistemic function of ensuring “reasonably sound decisions”, the ethical function of promoting “mutual respect among citizens” and the democratic function of promoting “an inclusive process of collective choice”. How does the use of expert knowledge in political decision-making relate to these three functions? Allegedly, it contributes to the epistemic quality of decisions: expertise is supposed to be the “filter” ensuring the “truth-sensitivity” of policies and legislation passing through (Christiano 2012). The standard approach to the normative legitimacy of expert involvement in policymaking is intimately linked to the “instrumental”, “problem-solving” and “Enlightenment” functions of knowledge utilization (Weiss 1979; Boswell 2008): if expert involvement is defensible, it is defensible—or so it is typically argued—on the grounds that it contributes to epistemically better decisions and policies (Christiano 2012).

However, this ideal picture is questioned, and in the first part of this paper, we examine some standard epistemic objections to the political role of expertise and argue that—given the fact of expertise—the problem with which we are confronted is one of institutional design: which mechanisms can contribute to ensuring that experts are really experts and that they use their competencies in the right way in a situation where non-experts are often unable to assess the quality and soundness of expert explanations and judgements directly? We outline a set of such mechanisms. However, the challenge exceeds that of producing epistemically optimal expert deliberations because to be normatively legitimate, a deliberative political system must also fulfil the ethical and democratic requirements of respect and inclusion. Yet epistemic concerns justify expertise arrangements in the first place, and measures taken to make the use of expertise compatible with these requirements have to balance the potential rewards from expertise against potential deliberative costs.

Our contention is that the question of accountability of experts has not been given an appropriate level of concern. In this respect, the outlined deliberative approach is no exception, even if it provides a fruitful framework for discussing it. When addressed by scholars within STS who downplay, or even nullify, the difference between science and politics, it is often conceptualized one dimensionally as a question of “democratizing” expertise and without proper consideration of the significance of experts’ epistemic performance, the need for divisions of labour in policymaking, goal conflicts and the problem

of epistemic asymmetry.² However, recent discussions on the ethics of scientific communication are in line with our approach (Keohane, Lane, and Oppenheimer 2014; Lane 2014). By elaborating on expert accountability mechanisms and discussing the sometimes uneasy relationship between epistemic, ethical and democratic requirements, we outline an approach of how to ensure the epistemic soundness of expert contributions while making the use of expertise compatible with unsurpassable non-epistemic requirements.

In the final part of this paper, we present a tentative characterization and interpretation of a real-world best practice case of expert advice regulation to illustrate the applicability and critical potential of our approach.

Epistemic Worries about Expertization

The democratic objection against the expertization of politics is, of course, that it is at odds with “the rule of the people”—a topic that we shall revisit later in this paper. However, there are also epistemic worries, and this is where we shall start out, focusing on four of them—all included in Robert Dahl’s (1989) criticism of a rule based on “guardianship” (chaps. 4–5): (1) that one cannot know decisively who the knowers or experts are as this is continually and reasonably contested (for different versions of this argument, see Estlund 2008, as mentioned, and e.g. Wynne 1996; Elster 2013); (2) that all political decisions have moral dimensions and that there is no moral expertise (e.g. Fischer 2009; Kitcher 2011; Cowley 2005); (3) that experts are subject to bias and make errors (e.g. Tetlock 2005; Kirkebøen 2009; Mercier 2011); and, finally, (4) that one cannot know whether the knowers act on the basis of their knowledge or on the basis of some interest or commitment that may conflict with the aim of investigation (see e.g. Shapiro 2003; Goodwin 2010; Zenker 2011). For this reason, critics argue that it is unlikely that a large scope for expert judgement and decisions in political processes will enhance the epistemic qualities of public deliberation. The worries raised in (1) and (2) are arguably the more basic concerns because they also apply to ideal experts, who are not subject to biases and conflicting interests. We start out therefore with these two concerns before returning to the worries raised in (3) and (4).

However, before we start our examinations, we need to address two flawed assumptions that give apparent strength to the aforementioned criticisms. First, it is

² To be sure, Harry Collins and Robert Evans (2007) have loudly questioned this STS convention in their “rethinking” of expertise, but they have not yet developed any notion of expert accountability that resembles ours.

sometimes argued that the fact that distinguishing between x and y is difficult or impossible contributes to discrediting claims that include references to x or y . For example, pertaining to (1), because it can be hard to distinguish between expert and non-expert, we cannot distinguish at all and argue that some know more about a subject matter than others. Or pertaining to (2), because facts and values are intertwined, one cannot make use of arguments that refer to technical expertise as something distinguishable. And with regard to (4), because distinguishing between people's motivations is difficult, any argument assuming that experts or others operate on the basis of something distinguishable from private interests is naïve and suspect. The flaw of the underlying assumption is that the lack of clear-cut criteria means that there are no demarcating criteria at all or that all attempts to identify something as x (and not y) are in vain.

Second, critics sometimes argue as if there can be a viable democratic rule that makes (1) to (4) somehow irrelevant. However, the fact of expertise makes the most democratic of modern societies dependent on a certain epistemic division of labour and, thus, deeply reliant on expertise. For this reason, the problems associated with distinguishing between expert and non-expert and the possibility that there may be no such thing as moral expertise are challenges not only for the justification of expert arrangements but also for any conception of democratic rule under contemporary conditions. The case is similar with regard to errors and biases.

(1) *Who are the knowers? Who qualify as experts?* Undoubtedly, people often disagree on the answers to these questions. It is easy to say that decision-making would improve if decisions were informed and even made by experts. However, it is notoriously difficult to identify, beyond controversy, who are experts and who are non-experts in different cases. This is the basis of claim (1): that one cannot know for sure who the knowers are undermines claims of extensive powers to those who say they know.

Expertise is a comparative phenomenon. According to Alvin Goldman's ([2001]2011, 114) definition, experts are those within a given domain who "have more beliefs (or high degrees of belief) in true propositions and/or fewer beliefs in false propositions within that domain than most people do (or better: than the vast majority of people do)". However, there must also be a threshold. In Goldman's words to qualify as an expert, "a person must possess a substantial body of truths" (115). If someone knows marginally more about trivial aspects of something, it does not seem right to call this person an expert. Moreover, experts possess not only accurate information but also "a capacity to deploy or exploit this fund of information to form beliefs in true answers to new questions that may be posed in the domain" (115). Real

experts understand and internalize their knowledge in ways that make it possible for them to apply it to new intellectual and practical problems in their field.

When it comes to political decision-making in contemporary democratic societies, different kinds of expertise are involved. There is a special relationship between expertise and science because what counts as knowledge in modern societies must typically be validated in accordance with scientific norms and procedures. Experts exist and can be identified in other capacities as well, however. Proper experts operate in accordance with, or at least in ways that do not contradict, scientific standards but are not necessarily full members of scientific communities. Moreover, there are sources of expertise other than scientific training, such as especially relevant practical experiences: experts can become knowledgeable about something by means of practical engagement with certain issues over time (Collins and Evans 2007). For example, experienced civil servants can possess this kind of practically gained regulatory expertise in addition to their expertise acquired through scientific training and education; the same applies to civil society actors and interest group representatives whom one often sees entering into meaningful issue-specific discourse with scientific experts on the basis of practical field knowledge, typically combined with scientific training. Finally, an important distinction can be drawn between the ability to “contribute” in a domain of expertise (“contributory expertise”) and to have enough competence in this domain to be able to make sense of what its contributory experts are saying and doing (“interactional expertise”) (13–44). The latter is vital for the communication between different types of expertise and between experts and non-experts.

However, a general problem for citizens is that they as non-experts, lacking both in contributory and interactional expertise, are not in the epistemic position to assess expert reasons. Traditionally, epistemology warns against relying on authority as a source of knowledge. In *An Essay Concerning Human Understanding* (1690), John Locke famously lists reliance on authority as one of the main sources of false beliefs. Yet one is dependent on the testimonies of others, and especially those of experts, and use in effect “arguments from authority” when one appeals to expert opinion (Walton 1997). This means that not only direct evidence but also trust are sources of knowledge (Hardwig 1985, 1991). However, blind trust is irrational, and there must be some justification for believing in an expert judgement. But how can non-experts ascertain the trustworthiness or reliability of experts? Hardwig suggests two strategies: one is to rely on other experts; the other is to rely on independent second opinions. Both these strategies redistribute trust. The object of trust is no longer the single expert but his or her co-experts and, in the end, the epistemic or scientific community itself.

The layperson/expert problem is thus rephrased in terms of what makes an epistemic community trustworthy.

For the question at hand, there may, however, be competing claims to expertise, what Goldman (2011) refers to as the “novice/2-experts problem”. In addressing this issue, Goldman lists possible evidential sources (incorporating Hardwig’s two strategies): argumentative performance of experts; agreement from fellow experts in the field; experts’ past track records; and evidence from interests and biases (116). The first source of believing an expert statement is “dialectical superiority”: if one of the experts scores the best in an argumentative exchange, this may be an indicator that justifies the inference that his or her conclusion is the most correct one. However, non-experts are variably able to assess experts’ argumentative achievements. To be sure, it may sometimes be possible for most people to evaluate consistency, accuracy and reasonableness of expert statements without possessing extensive expertise in the field. In other cases, the problem is exactly that a real assessment of the quality of expert argumentation requires expert knowledge that non-experts lack.

Drawing a conclusion about expertise on the basis of agreement from fellow experts may in some cases be sound, but it is generally somewhat problematic. To what extent does the fact that more experts reach overlapping conclusions indicate that these conclusions are correct? History is full of examples of majorities of putative experts getting it wrong. According to Goldman, a central variable is experts’ independence of one another: there are reasons for laypersons to emphasize the relative number of experts that approves of a statement or a theory if the experts in question have reached their conclusions independently of one another. However, if experts support other experts without any independent investigation and assessment of the case in question, expert consensus is of little value, and non-experts may just as well rely on their own judgement. If so, we are once more confronted with the general layperson-expert problem.

This is also the case if laypeople are to choose among competing experts based on past track records because to do so, they must be able to have justified beliefs about the cognitive quality of these experts’ achievements. The same is very often the case when non-experts are to rank experts on the basis of possibly distorting influences from interests and biases. With regard to interests, this can be part of laypersons’ assessments, but it is a concern that should not necessarily be decisive. An expert statement can be correct even if the expert in question has an interest in it being correct, and disinterested experts can possess little expertise, or be real experts, but be wrong in the case at hand. Moreover, evidence on pecuniary interests is more accessible for a novice than the more subtle influence of biases. If all or most members

of a community of experts have the same bias, the problem of numbers becomes even trickier. Non-experts are then once more dependent on being able to trust epistemic communities' capability to sanction improper behaviour, reveal biases and correct themselves.

To summarize the discussion of claim (1) so far, there are criteria and procedures for non-experts to identify experts. Real experts are accepted as experts by epistemic communities where members' expertise can have multiple sources (scientific training, practical experience, etc.) and be more on the "interactional" than on the "contributory" side, or vice versa, but where all as a rule, owing to the special relationship between science and expertise, operate within the limits of what scientific standards allow for. The question is which communities qualify on this basis, including how they cope with and communicate scientific disagreements and uncertainty. Although epistemic communities or members of such communities can make this or that promise, they can be more or less trustworthy. It is therefore in novices' interests to institutionalize mechanisms that contribute to assessments and fostering of epistemic communities' credibility, and in this paper we outline a set of such mechanisms.

(2) *No moral experts.* However, we first have to deal with claim (2), which states that all political decisions have moral dimensions and that there is no moral expertise. In this case, there are really two claims in need of assessment: the first claim is that all political decisions have moral dimensions. This is the claim—we call it (2a)—that facts and values are always intertwined. The second claim (2b) is that there is no moral expertise, meaning that even if one could know who the knowers are with regard to is-questions and refute (1) as far as technical expertise is concerned, it is impossible to identify experts and distinguish them from non-experts on issues involving values. Moreover, because of (2a), issues concerning values are, in the end, all issues—facts and values are always intertwined. Thus, (2b) transforms (2a) into a version of (1): one cannot know who the knowers are because facts and values are intertwined, and there are no moral experts. Again, this should make one suspicious of handing over extensive powers to those who claim to know.

An assessment of (2a) must distinguish between the logical and empirical levels. On a logical level, it is not the case that is-questions and ought-questions cannot be distinguished. Descriptive and causal characteristics – questions of how things are, of why things are as they are and of whether and how an intervention (e.g. the introduction of a new policy) has effects – are logically independent of questions of whether things ought to be like they are, how one ought to intervene and how one should assess the effects of an intervention. One can deduce

neither what one ought to do from what is nor what is from how things ought to be. Hence, in principle, facts and values can be distinguished.

However, policymaking involves both facts and values, of course, and they are often entangled. We could consider any policy field, but let's exemplify with policymaking that is clearly dependent on input from technical expertise, for example, the regulation of a certain toxin. Typically, toxin regulation policies aim to minimize the bad effects of the toxin in question. No doubt, discussing and choosing policies wisely in this case requires sophisticated technical knowledge of the toxin in question and its effects on health and the environment. However, to make political use of this technical knowledge, values must be introduced. The first question is, of course, which values to include in the analysis of effects (should only economic costs or benefits be included, or should the distribution of the effects of toxin exposure between groups also be included?). Other questions concern the more specific definitions of the values and standards involved (e.g. which indicators are relied on when consequences for health and the environment are measured?), including when something is to count as a bad effect (which social distributions of toxin exposure are bad, and which are acceptable?) and the priority of standards and ends (for economic reasons, should some bad effects on the environment be allowed?). Normative issues are also involved in the scientific-technical deliberations when it comes to conclusions about sufficient evidence, that is, when "enough" studies have been conducted to establish an effect. As Rudner showed in his classic 1953 article "The Scientist *Qua* Scientist Makes Value Judgments", non-epistemic values are included when the decision to accept a hypothesis requires that the seriousness of making a mistake be determined (see also Douglas 2009; Kitcher 2011). To return to our example: if some studies indicate that a substance has serious environmental effects, how many studies and what kind of studies are required before one can conclude that these indications are real, scientifically established effects?

However, the idea that things are "sometimes" or "often" intertwined does not imply that they are "always" or "necessarily" indistinguishable, and even if distinctions initially seem to be elusive, it may make sense to uphold them anyway after closer consideration. The aforementioned concerns thus transform (2a) into another version of (1) if and only if what has been put forward so far implies that facts and values are inevitably intertwined and indistinguishable and (2b)—that there is no moral expertise—is correct. With regard to the first, a radical thesis of the inseparability of is-questions and ought-questions seems hard to defend. In our example of toxin regulation, we would in the end come a long way with distinguishing factual from normative questions and "science" from "values", despite

uncertainties and hard cases. Clearly, what should count as the bad effects of toxic waste is a normative question. However, when the answer to this question is formulated and the decisions regarding proper values and standards are made, measuring effects seems like a relatively technical question for scientists. It is thus hard to see why one cannot talk of technical or scientific experts as a separate category. Hence, if there is no moral expertise—that is, (2b)—the implications of this must not be exaggerated because there seem to be distinguishable technical/factual questions that can be made into proper objects for scientific investigations.

The default position in the literature on the question of moral expertise seems to be that there is no such thing. In democratic theory, this position has been put forward by Robert Dahl (1989). According to Dahl (66), there is no moral knowledge, and hence no moral expertise, because there are no methods for demonstrating the intersubjective validity of moral judgements. However, he admits that moral questions cannot be reduced to “subjective” questions pertaining simply to different “tastes”; there is scope for “argument drawing on human reason and human experience” (67).

The question of whether there cannot be moral experts after all is then raised. The answer to this question depends on the answer to the meta-ethical questions of whether and how moral judgments can be justified (Gesang 2010; see also Hoffman 2012). If one subscribes to a strong non-cognitivist position, there can be no moral expertise. However, all accounts that consider questions about right and wrong, good and bad, to be possible objects of rational discourse open up, in effect, to the existence of moral expertise.

On this premise, it seems reasonable to conclude that “moral expertise” is “possible”—in a certain sense (Singer 1972, 117; see also Gesang 2010):

Someone familiar with moral concepts and with moral arguments, who has ample time to gather information and think about it, may reasonably be expected to reach a soundly based conclusion more often than someone who is unfamiliar with moral concepts and moral arguments and has little time.
(Singer 1972, 117)

To talk about moral experts along these lines does not thus imply that one regards non-experts as having inferior moral status. One can uphold equal concern and respect for all to be the fundamental norm while conceding that some are better informed and better at pursuing moral arguments consistently than others. In addition, moral experts in this sense do not necessarily

act in morally superior ways. The point is that they have knowledge of ethical theories and are better at reaching justified conclusions in moral affairs. Furthermore, one should avoid talking about moral expertise in terms of special “inner” capacities that some people possess and other people lack. Moral expertise is the competence to state and clarify moral questions and to provide justified answers, and this competence is developed by means of education and training. Finally, one can talk about moral expertise in more or less ambitious ways. On the one hand, there exist moral experts who conceptualize and elaborate on the meaning of involved norms, values and ends; who explicate the implications of pursuing this or that end or of defining this or that value in one way or another; who explore normative conflicts and the consequences of such conflicts; and so on. On the other hand, there exist moral experts who justify norms and political aims and argue for priorities and ways of balancing normative ideas and ideals. A “justice expert” may defend this or that as the appropriate metrics of distributive justice and then suggest a principle of just distribution—for example, of healthcare—or state this or that is a reasonable way to approach a conflict between rights.

In addition to their special competence in normative analysis, moral experts must have competencies that to a certain extent overlap with scientific expertise because they have to reason on the basis of relevant facts and take scientific theories in the actual domain into account (Hoffman 2012). Granted this, one is, however, once more confronted with on what grounds novices or non-experts are to trust (moral) experts. For example, how should they approach arguments based on highly complex theories of distributive justice?³ If they cannot assess them directly, they have to use the strategies for indirect identification of expertise suggested by Goldman. Using them, one is again dependent on trust in the epistemic communities to which the experts belong—be it, in this case, the community of moral and political philosophers or the more specialized epistemic communities connected to different policy areas. On what basis can one as a non-expert deem this or that community to be worthy of trust or not worthy of trust?

Mechanisms to Hold Experts to Account

In other words, the central question from an epistemic perspective is not whether there can be experts in certain fields, but how one can ensure that identified experts perform their

³ See Bertram (1997), who points to the tension between the democratic idea that a legitimate order should “be capable of explaining itself at the tribunal of each person’s understanding”, as Waldron (1987) explains it, and the technical complexity of arguments in normative political theory.

democratically entrusted tasks in an acceptable manner—and, preferably, in the best way possible. How is one to know that experts use their competencies in “the right way”? This is a variant of the principal–agent problem and concerns what we shall refer to as *the accountability of experts* engaged to consider a certain question within this field.

When turning to the question of accountability, we also address the worries raised in claims (3) and (4) that we have not addressed so far. Initially, there are good reasons for both worries: that experts can err and that they may be partial. Taking research in cognitive psychology into account, one must realize that expert judgements are more exposed to elementary fallacies than generally believed (Tversky and Kahneman 1974; Tetlock 2005; Kahneman 2012; for an overview, see Kirkebøen 2009). Experts themselves, however, tend to be self-confident, and for this reason, it can be wise to take their presentation of their expertise with a grain of salt (Posner 1999, chap. 3). There are also good reasons to worry about the risk of distorting personal interests. Moreover, experts may have pre-commitments—for example, pro- or anti-market, egalitarian or non-egalitarian—that make their investigations and judgements biased, and as numerous examiners of social science from Myrdal ([1930] 1953) onward have shown, their theoretical approaches may frame the problem at hand in such a way that some value options are tacitly favoured. In addition to all this, it is well known how expertise can serve “strategic” or “political” purposes (Boswell 2008). Not only may the experts themselves have biases, interests and pre-commitments, but also politicians and officials can be motivated by non-epistemic concerns, and use expertise selectively to consolidate organizational preferences or to justify predetermined policy decisions or to perform predominantly symbolic moves, that is, when recourse to knowledge is more about demonstrating competence and “epistemic authority” than about making substantive efforts to enlighten the issue or solve problems. However, from the fact that experts make mistakes and may be biased, and even less from the fact that policymakers who utilize expertise may have concerns other than “problem-solving” and “Enlightenment” in mind, one cannot draw the “populist” conclusion that laypersons are as likely to be right as experts. After all, experts know more than laypersons, and their judgements can be expected to be more qualified than that of non-experts (Sunstein 2002, chap. 3). What is needed, however, are measures to prevent, or at least minimize, fallacious reasoning and intrusion of non-epistemic interests and preferences. Different mechanisms for holding experts accountable may provide this.

These worries must be distinguished from the phenomenon Rawls (1993) calls “burdens of judgment”. Even experts who are using their competencies in “the right way” and

who are equally credible may reach different conclusions owing to sources of disagreement inherent in the (correct and conscientious) use of human reason (54).⁴ Such disagreement will be fully reasonable: it will appear whenever people are free to make use of human reason. Moreover, there is no general reason to believe that reasonable disagreements between “true” experts differ systematically from disagreements between reasonable non-experts or citizens because the “burdens of judgment” apply irrespective of cognitive asymmetries. Reasonable disagreement is then primarily an issue of political legitimacy, namely of how citizens should justify claims on the use of their collective political power to one another under conditions of reasonable disagreement, and not of accountability. The accountability question concerns whether a disagreement between experts is a case of reasonable disagreement or caused by things other than “burdens of judgment”, and how non-experts can sort out one type of disagreement from the other.

Mechanisms can be devised to ensure the accountability of experts at different levels, the existence of different targets and the connection to different kinds of fora (Molander 2016). Here we shall distinguish between three sets of mechanisms. One group of mechanisms targets expert *behaviour*. To this category belong the dos and don'ts of scientific communities aimed at guaranteeing the pursuit of truth through a fair competition between arguments. The adherence to such epistemic norms—spelled out, for example, by Merton ([1942] 1973), Habermas ([1972] 1984) and Tranøy (1976)—is presupposed when political authorities and citizens appeal to expert opinion. In the end, the latter have to rely on the functioning of epistemic communities—that is, the norms of inquiry are enforced through mutual scrutiny and criticism—but measures can also be taken. For one thing, investigation procedures can be spelled out in more detail in laws and guidelines—for example, expert advice and decisions should be based on knowledge provided by means of scientific methods where such knowledge is available and relevant, experts should behave in a deliberative way and deliver textual products where conclusions and proposals are based explicitly on arguments, all relevant background material as a rule should be made public for anyone to

⁴ Rawls lists six sources of reasonable disagreement. (1) Relevant facts in a case can be difficult to assess because they point in different directions. (2) Relevant considerations can be given different weight. (3) To a certain degree, one's concepts are indeterminate and vulnerable to hard cases. (4) Life experiences shape how one selects facts and how one weighs moral and political values. (5) Most often, there are normative considerations with different forces on all sides of a case, and an overall assessment of these considerations can be difficult. (6) Because not all possible positive values can be realized simultaneously, one must rank values, and for such rankings, one mostly lacks clear and uncontroversial criteria.

scrutinize and so on. Moreover, sloppy work by experts can be sanctioned. This raises controversial and complex issues of moral and legal responsibilities that are in need of separate consideration. Other measures should be less controversial, for example, procedures for reviewing experts' performance (see Holst and Tørnblad 2015) and for excluding putative experts with bad records or with a stake in the matter under consideration from reassignments.

A second group of mechanisms target the *judgements* of experts (cf. Walton 1989; Reiss 2008, 38 ff.). They hold experts accountable by putting their judgements under review in different fora. The most obvious forum for testing judgements and detecting fallacies and biases is the forum of peers: economic experts being questioned by other economic experts, contributions by legal experts being scrutinized by other legal experts and so on. However, in a process of democratic decision-making, the testing of judgements and arguments must also be extended for epistemic reasons to other relevant disciplines and other relevant expert fora, for example, to fora comprising bureaucrats and competent stakeholders, to the legislature and even to the public sphere at large. In all these fora, experts can be asked to account for critical assumptions, explain models used, specify their limits and present alternative models (for a list of demands, see Schlefer 2012, 280–281). Of special importance in holding experts accountable is to make demands on them to explain what they *do not know*. It is often observed that experts may fall victim to overconfidence. For example, they may lack insight into the evaluative, non-scientific dimensions of a problem. It is thus necessary to check that experts are aware of their specific area of competence and the limits of their competence and that they make their provisos explicit. The actual effectiveness of fora-checking expert judgements will, of course, depend on the epistemic qualities of the involved fora, including the persuasiveness of the layperson–expert problem in particular cases, and, once more, of epistemic communities' internal norms and perceptions. However, measures could also be taken, for example, to specify requirements for internal administrative coordination and public hearing procedures.

A third group of mechanisms target the *conditions* for expert inquiry and judgement. Epistemic self-constraint is closely related to the existence of cognitive diversity and an adequate intellectual division of labour. Expert reasoning alone is exposed to the “confirmation bias”, that is, the tendency to look only for arguments that confirm one's own ideas, and to engage in “reason-based choice”, that is, the tendency to pick the option for which reasons can be most easily gathered. This makes single-authored expert reports a high-risk endeavour, epistemically speaking. Deliberating groups are less prone to these fallacies, and they may also enlarge the pool of ideas and information and weed out bad arguments

(Mercier 2011). Yet the positive epistemic effects of deliberation are crucially dependent on diversity. Without diversity, deliberation may work in the opposite direction and create groupthink (Sunstein 2006; Sunstein and Hastie 2015). Hence, to organize expert work along team and deliberative lines and to provide for necessary diversity and exposure to criticism from the wider epistemic community are important ways of fostering epistemic modesty and improving the quality and conditions of expert inquiry and judgement. Crucially, cognitive diversity also involves cooperation between different disciplines and fields that are consciously brought in to enlighten a subject matter from different angles. This includes a cooperative division of labour between factual and normative analyses.

In other words, the extension of the obligation of experts to explain and justify their judgements to public fora can be justified from the perspective of cognitive diversity. However, as indicated, the epistemic outcomes of exchanges between experts and non-experts are ambiguous. There is evidence that non-experts pay less attention to the quality of arguments put forward by experts than by non-experts because they tend to believe that experts know what they are talking about. In addition, experts are often bad at stating arguments in a comprehensible way (Mercier 2011). Publicity may also reduce the quality of deliberation (Elster 1995; Chambers 2004; Meade and Stasavage 2008). This has spurred some to argue that deliberative processes among experts should be kept “confidential and shield[ed] [...] from external influences” (Lentsch and Weingart 2011, 366).⁵ Finally, when fora that include non-experts are mobilized, one is again confronted with the layperson–expert problem because non-experts—be they scientists on foreign ground, parliamentarians, officials or ordinary citizens—have only to a limited degree the competence that is needed to assess expert’ statements and justifications directly.

Ethical and Democratic Concerns

The mechanisms that have been introduced to hold experts accountable in an epistemic sense are also relevant for making the use of expertise compatible with the ethical and democratic functions of public deliberation referred to by Mansbridge et al. (2012). It is important to keep in mind that a main source of both worries is the epistemic asymmetry between experts and non-experts and that the challenge in this respect is the same as the epistemic worries about expertization, namely drawing from the rewards of expertise while reducing the potential deliberative costs, now in terms of disrespect and non-inclusion (14).

⁵ At the same time, one should be “as open and transparent about the information input and knowledge base as possible” (Lentsch and Weingart 2012, 364).

A major ethical worry is that experts may behave in a patronizing way. Experts should be experts and set aside “ignorance, emotional volatility, and myopia of the non-expert”, but this may also generate “disrespect for citizens’ contributions and even for citizens themselves” (Mansbridge et al. 2012, 14). Like non-experts, experts may suffer from and express group prejudices anchored in cultural stereotypes (against women, ethnic or sexual minorities, people with disabilities, etc.) that again bias their approach to certain issues and to arguments put forward by certain actors, experts or non-experts. Yet, even if the epistemic norms that we mentioned previously here are primarily aimed at protecting arguments and providing for a fair competition between arguments, they also imply a respect for persons as sources of arguments. To know the arguments, one must be prepared to listen to persons, irrespective of who they are. Consequently, experts cannot really live up to the norm of taking arguments seriously without taking persons seriously.⁶

However, even if epistemic norms and norms of civility to a certain extent overlap, they are also different and in possible tension. Taking arguments seriously means to take a stance on them, and too much politeness could cover up significant intellectual disagreements and disputes and reduce the quality of discourse. Consequently, granted that the primary normative justification for expert advice and decision-making in political processes is epistemic, respect codes in deliberations among experts would typically be less strict and less comprehensive than similar codes in, for example, parliamentary settings. However, an exclusive focus on the better argument may turn into ruthlessness and insensitivity and create an atmosphere of fear or shame rather than of mutuality and a cooperative search for truth. In interaction with laypersons, for example, in public debates, experts may encounter opinions that they consider ignorant and even ludicrous and have to take a stance while showing the persons uttering these opinions due respect as fellow and equal citizens. In this transition from a symmetric discourse with other experts to a non-symmetric discourse with non-experts, it becomes clear that the normativity of the expert role includes both epistemic and ethical demands (in the sense of Mansbridge et al. 2012).

The democratic worry is that expertization may threaten democracy itself by excluding ordinary citizens from processes of deliberation (Mansbridge et al. 2012, 14). The two aforementioned mechanisms targeting experts’ arguments and the conditions of experts’ reasoning are relevant here. Can the forum that holds experts to account be extended from the

⁶ See Helen Longino (2002, 128–135) on the compatibility of inequality in “cognitive authority” and equal “intellectual authority”, as well as Elizabeth Anderson (1995) on institutionalizing the democratic university.

forum of peers to the forum of citizens in such a way that expert knowledge contributes to making collective decision-making processes as “truth-sensitive” as possible, without significant loss in democratic qualities? According to Peter Weingart (2005, 53–54), “democratizing expertise” can be achieved (1) by taking relevant lay knowledge into account in the production of knowledge, (2) by giving laypeople access to expert knowledge, (3) by granting laypeople access to experts and (4) by allowing laypeople to have some influence on the selection of experts. All four ways can potentially enrich expert contributions epistemically, but there are also tensions. Including lay testimonies and lay knowledge can contribute to correcting expert biases and mistakes, but also result in undue and disproportional consideration of arguments that are irrelevant, obviously invalid or fleshed out more precisely in expert contributions. To make expert knowledge public for non-experts to scrutinize can improve on epistemic outcomes (compare the setup of deliberative polls; Fishkin 2009); flaws in expert reasoning can be identified, omissions detected, but due to epistemic asymmetries, lay monitoring is also a persistent source of “discourse failure” (Pincione and Tesón 2006). Similar considerations apply when laypersons are included in expert deliberations—through lay representatives in expert committees or by means of consultation (e.g. in focus groups, at citizen summits) or through crowdsourcing—and when they are involved in the selection of expert advisors or decision makers, be it directly (e.g. when parliaments vote on the composition of expert committees or review candidates for expert positions) or indirectly (e.g. when such selection processes are topics of public discourse, such as in the mass media). In these cases, the layperson–expert problem also occurs; optimally, democratic and epistemic concerns can go hand in hand when lay participation, consultation and influence increase relevant epistemic pluralism and contribute to stricter argumentative scrutiny. Finally, there is an important fifth way to democratize expertise, namely to take concerns of political representation into account in the selection of experts through gender or ethnic minority quotas, the balancing of ideological views and so on. In this case, epistemic asymmetry is not the major challenge, granted that the selected all qualify as experts in relevant domains. Rather, what is at stake is the extent to which different measures of political, social and cultural pluralism are also good proxies of epistemic pluralism.

Feasible yet Critical?

We have considered the expert problem as one of institutional design. Applicable normative political theory needs to be non-ideal, in the sense that it must take into account “the

constraints of contemporary politics” while steering away from “value creep: allowing one’s sense of what is of ultimate value to be dictated by one’s perception of what is politically feasible in the near term” (Swift and White 2008, 67). One test of whether a fair balance has been struck is whether proposed prescriptions could feasibly be envisaged to improve on best practice. If proposed prescriptions can do so, they cannot be dismissed as unworldly, as best practice already takes place, nor as trivial, as they add to the state of affairs and suggest something better. This final section will take some of the claims and proposals of the two foregoing sections through such a test by exploring an actual case of best practice policy advice regulation, namely the regulatory framework of the European Commission’s use of expertise.

Judgements of best practice are obviously never beyond controversy, but our case is a fair candidate. In the absence of a direct democratic mandate, “knowledge and expertise” are “key source(es) of Commission legitimacy” (Moodie 2016, 229). This makes the role and regulation of knowledge utilization a highly salient issue for the European Commission itself; other European Union (EU) institutions, not the least of which the European Parliament, and civil society have continually pushed for regulatory changes and advances from the outside. A combination of internal drives and external pressures has thus provided the Commission with a relatively sophisticated regulatory framework (white papers, reports, communications, action plans, guidelines, etc.), compared both to other international organizations and to EU member states (Moodie 2016). In our test, we shall focus on two of the expert accountability measures that we presented as central in our earlier outline, namely the requirement of investigatory procedures and merit controls and the requirement of cognitive diversity. To validate our discussion on the balancing of epistemic and other concerns, we shall concentrate on how the European Commission’s regulatory approach deals with democratic worries and demands of democratizing expertise.⁷

A fundamental observation that has also been highlighted in other studies (Metz 2015) is the European Commission’s explicit and repeated stress on epistemic parameters in its approach to expert advice. Expert advisors are to provide the Commission with “knowledge based” and even “excellence” in “policy advice”, “the best available knowledge”, “high level expertise”, “the right expertise at the right time” and “better quality decision-making” (European Commission 2001, 2002). Moreover, processual requirements for “expert

⁷ Our assessments are based on more extensive analyses published elsewhere (Holst and Moodie 2015; Holst and Tørnblad 2015). See in particular the overview of relevant documents and the section on findings in Holst and Moodie’s (2015, 42–48) study.

inquiries” and “scientific assessments” are spelled out quite minutely: when possible, investigations should be pursued in a “scientific” manner based on “rigorous methods for testing hypothetical explanations of natural or social facts and systems”; experts should generally and clearly “highlight the evidence (e.g. sources, references) upon which they base their advice, as well as any persisting uncertainty and divergent views”; and policymakers should strive for “impartiality” and “neutrality” in their take-up and avoid “just listening to one side of the argument or of particular groups getting privileged access” (European Commission 2002, 12). The same goes for procedures of expert selection, where primary concerns include achieving “scientific excellence”, as endorsed by “the judgement of peers”, and “taking account of indicators such as the number and impact of refereed publications” (European Commission 2002, 9). Generally, expert group “members shall be selected in a transparent manner” and “on the basis of clearly defined objective criteria”, and “departments shall maintain a record of the process including the terms of reference and the main contributions of different experts or groups of experts” (European Commission 2002, 12). Another concern is “to minimize the risk of vested interests distorting the advice”: experts are to “commit themselves to act independently and in the public interest” and shall be informed that they may be “excluded from the group or a specific meeting [...] should a conflict of interest arise” (European Commission 2010, 10).

As for epistemic pluralism (another decisive expert accountability measure), the Commission’s documents frequently emphasize the intimate relationship between “high quality policy advice under uncertainty” and cognitive diversity or “pluralism” among experts. When expert opinion cases and uncertainty and risks are persuasive, expert selection should take into account “differences in scientific approach”, both “mainstream and divergent views”. When relevant, it should also make sure that “different disciplines” and people with “different institutional affiliations” are included” (European Commission 2002, 9). Generally, “departments should cast their nets as widely as possible in seeking appropriate expertise”, and “fresh ideas and insight should be sought by including individuals outside the department’s habitual circle of contacts” (11).

Finally, as for the balancing of epistemic and democratic concerns, the Commission’s regulations include reference to at least four of the five ways of democratizing expertise that were previously outlined here. Lay knowledge— “practical knowledge”, “practical experience” and perspectives from “those with direct stakes in the policy issue”—should be included (European Commission 2002). Procedures of “transparency” and “public access” are required, and “the Commission should constantly seek ways to better publicize and explain its

use of expertise to interested parties and the public at large” (European Commission 2002, 10). Expert groups should include lay representatives to ensure “a balanced representation of areas of interests and areas of experience”: according to the European Commission, “Sometimes experts and representatives of interested parties are brought together in single groups”, or “they interact by way of workshops or other deliberative mechanisms” or “during open consultations” (2002, 6; 2009, 8). Lastly, expert selection must take into account political and representative concerns: expertise must be not only “multi-disciplinary” but also “multi-sectoral”; experts can be scientists, as well as civil servants or civil society representatives; and balanced representation is required with regard to nationality, geography and gender (European Commission 2002). Moreover, a central claim is that these democratizing measures increase decision quality and epistemic outcomes: Including lay knowledge and lay representatives, openness and pluralism “serve[s] a dual purpose by helping improve the quality of the policy outcome and at the same time enhancing the involvement of interested parties and the public at large” (European Commission 2002, 12). A primary message is that knowledge-based policymaking and enhanced democracy are simultaneously possible and desirable. Some unspecific remarks about “trade-offs” between providing “adequate input” and “swift decision-making” and the need for some “limits to openness” are, however, included (European Commission 2001, 2002).

What then does this round trip in Commission regulations tell us about the adequacy of the preceding sections’ expert accountability recommendations? First, it seems reasonable to conclude that they are feasible, or at least not clearly unfeasible. The spirit of the proposed accountability mechanisms and that of the already existing European Commission regulations are not so different: in this best practice case, our intervention cannot easily be dismissed as “utopian”, as implementation could seemingly involve tapping into already established regulatory practices.

At the same time, we believe our proposals are critical and add value, in various respects. First, the discussions presented in the previous sections bring new expert accountability issues to the table (the questions of whether and how to sanction experts who perform sloppily [or worse], the idea of including laypeople in the processes of selecting experts, etc.). Second, epistemic pluralism is brought in as a general condition for good outcomes and thus as something that should be valued not only in difficult, high-stakes cases that are visibly embedded in public controversy but also in normal cases. Third, our approach prioritizes epistemic pluralism, as well as other pluralisms that are evidently conducive to epistemic pluralism. In the Commission’s regulations, all pluralisms—be it pluralism of

scientific methods and disciplines, or variation in national background or differences in interests—are regarded as equally important when composing expert groups; therefore, they are put, and are assumed to be, on equal footing, epistemically speaking. Fourth, our discussions challenge the harmonizing picture of epistemic and democratic concerns always drawing in the same direction and conceptualize and elaborate more precisely the intuition—sporadically becoming visible even in the Commission documents—of the need to make “trade-offs”.

Finally, it must be underlined that the idea of this section has been to provide a *prima facie* test of the merits of our foregoing theorizing. A full-fledged assessment of the selected EU regulatory framework falls obviously beyond the scope of this paper. Such an assessment would have required the inclusion of a fuller set of indicators. Furthermore, and importantly, actual practice seldom mirrors formal regulations: regulations may look more advanced on paper than in practice, or vice versa, and good practice is not always codified. Closer inspection could thus increase feasibility but decrease our proposals’ critical edge, if the practice in our best practice case is better than it seems, or, more likely, if we are to believe critics (for overviews, see Metz 2015; Moodie 2016), decrease feasibility but add critical value, if the high standards of EU regulatory discourse are betrayed on the ground.

Coda

Our discussion has shown that some of the claims that critics of the political role of expertise typically make—that one cannot know who the experts are, that is- and ought-questions are inseparable and that there cannot be moral expertise—are not necessarily decisive. There are reasonable points to make both about who the experts are and about the relationship between facts and values. The real problem is a problem of social epistemology (Buchanan 2004): how non-experts can trust that putative experts are real experts when these non-experts are not themselves in an epistemic position to assess experts’ statements and justifications directly. Of key importance here is the institutionalization of accountability mechanisms that ensure putative experts’ expertise and their performance adhere to epistemic standards. However, even if such mechanisms are in place, a crucial problem for democratic theory remains: how to integrate and make optimal use of trustworthy expert knowledge in processes of democratic decision-making where all are treated with respect and of equal concern. This problem harkens back to the problem of epistemic asymmetries, which is non-circumventable and only to be mitigated; we have indicated an approach. This approach is in need of further

development and scrutiny, but our tentative testing suggests that it has both critical potential and applied qualities.

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