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Accountability

(No?) Accounting for expertise

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Attempts to alter the range of expertise represented on some US advisory committees have raised questions of accountability in the selection and deployment of expert advice. Governments seem sometimes to adopt the relativist position that all expertise is biased, and that political considerations may therefore determine the official selection of experts; at other times, they endorse the elitist view of expertise as superior knowledge. This paper argues instead that experts exercise a form of delegated authority and should thus be held to norms of transparency and deliberative adequacy that are central to democratic governance. This theoretical perspective should inform the practices of expert deliberation.

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READERS OF THE *Washington Post*, widely seen as the newspaper of record for US politics, were greeted on September 16, 2002 with the report that the Department of Health and Human Services (HHS)

> "had begun a broad restructuring of the scientific advisory committees that guide federal policy in areas such as patients' rights and public health, eliminating some committees that were coming to conclusions at odds with the president's views and in other cases replacing members with handpicked choices." (Weiss, 2002; see also Stolberg, 2002)

Among the reconstituted or disbanded committees were one that had recommended increased regulation of gene therapy, one that was reconsidering federal protection for research subjects, and one charged with reassessing the effects of environmental chemicals on human health. The so-called restructuring brought into the HHS advisory network several prominent scientists whose names had been intimately associated with regulated industries; scientists without such affiliations were among those let go.

This was not the first time that a new administration had tried to put its stamp on federal regulation by creatively manipulating the apparatus of expert advice. Soon after Ronald Reagan was elected president in 1980, the press disclosed a "hit list" of scientists whom staffers in the victorious Republican administration wished to block from future advisory appointments at the Environmental Protection Agency (see Jasanoff, 1990, page 89).

This blatant introduction of politics into an ostensibly neutral decisionmaking space proved controversial, although the lesser controversy was soon

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swallowed up in the greater one surrounding the instruments and purposes of deregulation in Reagan's first term in office. That a similar strategy toward expert advice has surfaced under President George W Bush, whose administration recalls the vision of the Reagan years in many respects, hardly seems surprising. In the immortal words allegedly uttered by the American baseball icon Yogi Berra, "It's *déjà vu* all over again."

Déjà vu perhaps, but mere familiarity should not immunize political developments against critical analysis. Indeed, when the cycles of politics recreate patterns of action that were once dismissed as politically inappropriate, we have all the more reason to ask what happened to the older norms (were they weakened or set aside?), and why past experiences do not seem to have led to present wisdom.

The issue of accountability looms especially large in this case. It can be broken down into three related questions. First, should governments be free to deploy expertise in any way that seems expedient or are there constraints on their power to do so, and, if so, on what theoretical grounds? Second, what role should the public, as the ultimate custodian of the norms of governmental accountability, have in monitoring the uses of expertise? Third, since accountability is a two-way street, demanding not only a responsible agent but also a vigilant principal, how can decisionmaking procedures be designed to facilitate the public's supervisory role?

The developments at HHS suggest that the answers to all three questions are contested or unclear. In a time when virtually every governmental action demands extensive expert inputs, this state of affairs is not encouraging.

The narrowing of expert opinion at HHS poses additional puzzles. To begin with, it cuts against the grain of America's own historical commitment to transparency in governmental decisionmaking. It also diverges from recent initiatives in the European Union (EU) and its member states to open up advisory processes to a wider range of inputs and perspectives: in short to democratize expertise (see, for example, Nowotny, pages 151–156 in this issue).

The contrast with Europe seems all the more telling if we regard what happened at HHS not as an isolated event but as part of a broader swing back toward a technocratic model of governance in the United States. Expressions of this shift include: a rise during the past decade in official discourses of 'risk assessment,' 'sound science' and 'evidence-based decisionmaking';[1] a retreat from precautionary approaches to regulation; an attempt to cut back on citizen participation in environmental decisions (*New York Times*, 2002); and, in the court system, a partial displacement of jury trials by judicial prescreening of scientific and technical evidence.[2]

Clearly, questions of expert accountability, if they matter at all on the western shores of the Atlantic, are not commanding the same level of political attention there as they are in the EU and many European countries. Exploring the reasons for this lack of parallelism would be a worthy task, but a detailed US–EU comparison cannot be undertaken within the constraints of this short paper.

Instead, I will focus on the American case, where I suggest that an uncritical and theoretically uninformed discourse of expertise has fostered both an instrumental attitude toward experts on the part of government and relatively weak demands for accountability from citizens. Reformulating the terms of the debate in the light of recent scholarship could lead to a deeper critique of, and a more serious engagement with, the expert's role in contemporary regulatory politics.

Two models of the 'expert' have historically vied for space in the US political imagination: the elitist and the relativist. Though founded on radically different epistemological assumptions, both can be seen as underwriting an instrumental mindset that treats expertise as a tool for advancing political ends. After briefly characterizing each model, I argue that neither has stood up well to sustained empirical scrutiny; hence, neither can support a robust long-term politics of expertise.

Deployed unreflectively, both the elitist and relativist views of expertise have a dampening effect on public deliberation, promoting extremes of alienation and skepticism, respectively. Both science and technology studies and democratic theory offer helpful resources for reconceptualizing the nature and function of expertise in ways that could reinvigorate politics and better serve the needs of technologically advanced societies.

In both theoretical frameworks, I argue, it makes sense to look at expertise as a form of delegated authority, similar to the delegations that legislatures make to administrative agencies. By allowing experts to act on their behalf, democratic publics do not give up the right to participate in decisions with a pronounced technical dimension: they only grant to experts a carefully circumscribed power to speak for them on matters requiring specialized judgment.

Among the rights the public does not give up under this theory is the right to ensure that experts are acting within the scope of their delegation. Whether through direct participation or through organized questioning, the public has both a right and a duty to ask experts and their governmental sponsors whether

appropriate knowledge is being deployed in the service of desired ends. This approach not only offers new resources for thinking about the relationship between experts and the publics they serve; it also provides reasons for more active public involvement in domains of technical decisionmaking.

Thick description: expertise in context

Writing a generation ago in *The Interpretation of Cultures*, Clifford Geertz (1973) urged anthropologists to undertake "thick descriptions" of the cultures they study. He followed the philosopher Gilbert Ryle in observing that social actions operate at many levels of meaning, which must be recovered and made apparent if the interpreter is to do justice to the cultures in which those actions play out.

Ryle's example, which Geertz made famous, was the act of winking. Only the most deficient of cultural representations would treat a wink as just a physical contraction of the eyelid. It is far more importantly a gesture of communication, designed to express humor, solidarity, complicity, self-deprecation, and a variety of other messages, all contingent on the context of the movement of that particular facial muscle. Unless these varied meanings are properly decoded, a wink remains just a random twitch; it eludes the viewer's comprehension.

If so simple a gesture as a wink is thick with meaning, then surely a complex social identity such as that of the 'expert' deserves much thicker description. Yet experts and expertise have traditionally been conceptualized in the thinnest of terms, scarcely doing justice to the complex domains within which these terms circulate and do their social work.

In American law, for example, an expert witness is regarded as a member of a professional elite — someone qualified by special knowledge, skills, experience, training or education to assist the court in finding the facts relevant to a case.[3] Court decisions to admit or exclude expert testimony correspondingly seek to maintain a sharp distinction between genuine and false expertise: one either is or is not an expert, just as one's claims of expertise either are or are not reliably founded. Such binary discourses leave little room for ambiguity or doubt, or for serious differences of opinion on the need for, and relevance of, particular expert judgments.

While legal and administrative processes often operate with a conception of expertise as universally valid knowledge, the political dynamics of expert decisionmaking suggests that politicians and people maintain a more relativizing attitude toward experts

They also have trouble accommodating more subtle findings from ethnography and sociology, for example, that expertise often does not preexist the disputes the expert is summoned to settle, but is contingently produced within the very context of disputation (Jasanoff, 1995; see also Goodwin, 1994). Expertise is not so much *found* as *made* in the process of litigation or other forms of technical decisionmaking.

What counts as expertise in many real life cases thus conforms to no transcendent criteria of logic or method, but frequently incorporates popular conceptions (and misconceptions) of relevance and reliability, and all too commonly reflects differences in the social and material positions of disputing parties and decisionmakers (see, in particular, Lynch and Jasanoff, 1998). Expertise in these respects is a product of politics and culture, and the role of expertise in specific contexts is thus a fit issue for political analysis and control.

While legal and administrative processes often operate with a conception of expertise as universally valid or professionally certified knowledge, the political dynamics of expert decisionmaking—particularly in the United States—suggests that politicians and people maintain a more relativizing attitude toward experts. Political practice, in other words, seems wedded to a tacit theory of expertise that is at odds with official understanding.

Experts are frequently caricatured in popular discourse as masters of the 'on the one hand, on the other hand' form of argumentation, hence as lacking political commitment and even moral integrity. This is a thin description indeed, but it appears to have won credence in many political circles. Politicians feel at liberty to draw on experts in instrumental fashion partly because they see experts as temporizers whose views are colored by subjective biases and who therefore cannot be counted on for disinterested opinions.

Expertise, on this view, becomes politics by other means. The HHS committee restructuring, to take one example, was premised on a barely concealed judgment that it is appropriate (or, perhaps more accurately, not inappropriate) for politics to dominate expertise rather than the reverse.

Empirical findings from the social studies of science and technology seem at first glance to lend support to these relativist and instrumental constructions of expertise. Studies of scientific knowledge-in-the-making have repeatedly stressed the contingency of much that we know. The methods by which scientists investigate nature are not given in any absolute sense, but reflect the influence of governing research paradigms, available instrumentation, disciplinary standards of evidence and proof, scientists' hopes of

economic and professional rewards, and wider social attitudes toward nature and human dignity.

Far from being neutral and apolitical, scientific research follows the preferences of those with the power to set research agendas and may incorporate the biases of gender, culture or nationality. Even the experimental method, viewed by many as science's most powerful device for producing truth, only yields dependable results if it is backed up by pre-existing, negotiated standards of what counts as valid experimentation in a given scientific field (Collins, 1985).

Not surprisingly, then, science invoked to support policy tends to unravel under the stresses of politics: those wishing to question a given scientific interpretation can generally find errors, hidden biases or subjective judgments that undercut their opponents' claims to truth and objectivity. Under these conditions, it is difficult for science, or indeed any form of expert knowledge, to achieve the "social robustness" (Nowotny *et al*, 2001) that would set it above politics.

Yet does the vulnerability of knowledge claims in the political domain imply that all claims can be treated as equal and, in this way, absolve governments of the need to account to wider publics for their uses of expertise? To return to our initial question, can governmental actors choose at will among available expert viewpoints, provided only that their advisers display acceptable professional credentials?

Neither democratic theory nor science and technology studies supports such simplistic conclusions. Rather, both suggest that expertise has legitimacy only when it is exercised in ways that make clear its contingent, negotiated character and leave the door open to critical discussion. In other words, expertise, like other forms of democratically delegated power, is entitled to respect only when it conforms to norms of transparency and deliberative adequacy. Let us briefly elaborate on these points.

When expertise is not enough

For much of the previous century, the job of the expert was conceived as "speaking truth to power." (Price, 1965) As long as this view prevailed, the notion of accountability was not seen as highly germane to expert advisory processes. If experts commanded the high ground of the best available knowledge, then almost by definition there was little that non-experts could hope to add to the experts' deliberations. Firm lines could be drawn between truth and power, between risk assessment and risk management,[4] and between analysis and deliberation. In each couplet, the first component was appropriately left to experts; the second was where politics and accountability clicked in.

However, the view of the disinterested expert, standing apart from values and preferences, has all but eroded over the past few decades. Experts, we have begun to realize, do not know 'best' according to some simple, linear scale of assessment. Their knowledge is limited in ways that need to be examined, critiqued and, if necessary, corrected for in the interests of democratic decisionmaking.

It is by now widely accepted that expert judgments need to be supplemented by other inputs under conditions of uncertainty. Alvin Weinberg's well-known essay on science and trans-science recognized as long ago as 1972 that science alone cannot adequately answer policy-relevant questions when the facts are confused, contradictory or impossible to determine (Weinberg, 1972). Silvio Funtowicz and Jerome Ravetz (1992) posited the need for "extended peer review" — that is, greater participation by non-experts in the very processes of knowledge-making — when high uncertainty is joined with high political salience.

Britain's long and painful struggle to manage the consequences of the BSE crisis ('mad cow disease') demonstrated the need to expose expert assessments of the probability of catastrophic events to wider technical and political scrutiny. In that case, a closed and narrowly constituted expert committee dismissed the likelihood of interspecies transfer of a poorly understood pathogenic agent as minimal; this judgment not only proved to be incorrect but caused enormous economic and political damage when it was found to be false. Several advisory committees formed in the shadow of the BSE crisis show a determination on the part of the British government to involve a broader range of expertise in decisions concerning health, safety and the environment.

It may be tempting to conclude, by contrast, that certainty or a consensus among experts reduces the need for accountability to society as a whole. Yet, this position, too, has been shown to be flawed. Experts arrive at a consensus in part by demarcating, or framing, the domains that they consider relevant to the problem at hand, or simply as tractable to analysis. What lies within the perimeter of expert competence tends to be labeled 'science' or 'objective' knowledge; what lies outside is variously designated as values, policy or politics.

Yet, the very act of performing this 'boundary work' is laden with value judgments and reflects the limits of the experts' knowledge, training and imagination (Irwin and Wynne, 1996; see also Jasanoff, 1990). Professional and disciplinary discourses, for example, may enable more rigorous analysis of issues within the designated frame, but they may also systematically shut out some significant perspectives, preventing recognition of problems that cannot easily be formulated in disciplinary terms (Winner, 1986).

Embedded within technical analyses, moreover, are often untested models of human agency and behavior that do not become apparent unless sharply different points of view are brought into the mix. The boundaries drawn by experts, and the resulting analytic frames, therefore need to be continually interrogated; otherwise experts are in danger of overextending their capacities (as they did in the BSE

case) or overlooking potentially crucial inputs from interested and affected parties.[5]

Bringing technology into the discussion only reinforces these conclusions. While expert knowledge has often been equated with scientific knowledge, in reality most of the governance problems of contemporary societies have more to do with technology's faults, failings and hidden externalities. The recent theorization of technology as either networks or systems calls attention to the dispersed character of technological knowledge and competence (see, for instance, Bijker *et al*, 1987).

One cannot point to a single node in a complex network and say, 'Expertise lodges *there*.' This implies, for example, that the safety of genetically modified crops cannot be assessed by the biological community alone, even if it is expanded beyond molecular biology to include medical and environmental scientists; relevant expertise also rests with farmers, food producers, supermarkets, consumers, and regulators, to name other important nodes in the network of food production. To proceed without paying attention to these diverse perspectives is to mistake a partial vision of the issue for the whole.

Questioning expertise

The concept of expertise, I have argued thus far, needs to be diversified and opened up to a wider range of views than it has been in the past. As already noted, support for this position has been accumulating in recent years, not only in the scholarly literature but also in the reports and activities of governmental and quasi-governmental agencies. Against this backdrop, the technocratic turn in US policy stands out as something of an anomaly, because it still seems to be referring back to an outmoded view of expertise as certified, elite knowledge and judgment.

The slanting of expertise toward particular political ends, as in the HHS committee restructuring, presents a different but equally thorny puzzle. In this case, it appears almost as if the substance of expert claims has lost meaning, and with it the power to constrain governmental action; the formal process of expert consultation is all that the state sees as necessary. This 'anything goes' attitude is precisely what some have characterized as relativism and sometimes attributed to work in science and technology studies.

Yet, a careful reading of that work indicates that a radically relativizing posture is inconsistent with current understandings of the nature of expert judgment.[6] Although experts may be able to illuminate only selectively framed and bounded aspects of reality, their capacity to create meaningful representations of that reality is not in doubt. The quality and reliability of the representations, however, are achieved within particular contexts and depend on negotiation among competing judgment calls.

Faced with the problem of estimating the cancer risk from low-level exposure to toxics, for instance, one expert may assert that a linear dose-response curve is appropriate, while another sees the likely curve as non-linear. This does not mean that both opinions are equivalent and that either would do equally well for regulatory purposes. It does mean that a bounded but candid deliberation among the holders of divergent viewpoints could lead to a useful airing of the underlying principles, a sharpening of analysis, a more accountable exercise of judgment, and eventually a better assessment.

Sociological studies of scientists at work strengthen this conclusion. Experts who are closest to a particular area of practice appear best equipped to spot the weaknesses and uncertainties of claims that fall within their field of vision.[7] Inside their own domains, experts impose on each other a degree of critical peer scrutiny that society can ill afford to do without. By contrast, their ability to look outside the frames of their discourse may be constrained by many factors: disciplinary rigor is often purchased at the price of imaginative narrowness.

Perhaps the best way to conceive of expert bodies, then, is as a mini-republic of ideas, in which trustworthy governance requires a multiplicity of views to be represented, or at least given some chance to express themselves. Non-representative expert groups, no less than non-representative governments, can scarcely claim to speak with authority for the complex territories they seek to manage. It is important, then, for expert deliberations to include not only the full range of views that bear on the technical issues at hand, but also voices that can question the disciplinary assumptions and prior issue-framings of the experts being consulted.

Conclusion

In today's complex societies, there is hardly a move we can make without relying on experts. We count on knowledgeable others to have thought more carefully, and responsibly, than any of us, as individual citizens, could possibly hope to do about the safety of our transportation systems, the efficacy of our health-care providers, the quality of our education,

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the health of our environment, the security of our cities and nations, the viability of our economic institutions, and the continued vitality of our laws. Expertise and democracy are no longer adversarial concepts, if they ever were: instead, expertise is almost the foundation stone on which the functioning of modern democracies has come to rest.

If expertise is so intimately bound up with democracy and the welfare of citizens, then we should not be surprised to find political questions and problems swirling around this ever more important instrument of governance. I have suggested that some of the odd twists and turns we observe in the contemporary politics of expertise flow from a refusal to think systematically or theoretically about the changing role of experts and expertise in our legal and administrative systems. Too often still, experts are seen as individuals possessing special skills or superior knowledge applicable to predetermined domains of decisionmaking; the experts' political power to define the issues and select the very terms of deliberation has received too little notice.

Addressing this analytic deficit requires us to import notions of delegation and democratic representation into the very heart of expert debates. Under a theory of delegation, experts should be seen as authorized to act only on behalf of their public constituencies and only within parameters that are continually open to review.

Equally, citizens need to realize that governmental experts are there to act on behalf of the common good rather than as spokespersons of some transcendental scientific authority. In turn, this means that accountability, both internal to peers and external to publics, must become an integral part of the practices of expert deliberation. High time, too, as we press forward into the century of the informed, competent, and ever more emancipated global expert-citizen.

Notes

1. One manifestation is the US decision in May 2003 to bring a case in the World Trade Organization challenging the EU moratorium on imports of genetically modified foods. This case directly pits US 'risk based' regulatory approaches against the European precautionary approach.
2. This move was triggered by a 1993 Supreme Court decision and reinforced by two subsequent decisions of the same court. The initiating decision was *Daubert v Merrell Dow Pharmaceuticals, Inc*, 509 U.S. 579 (1993).
3. See Rule 702, Federal Rules of Evidence.
4. For a canonical work endorsing this position, see NRC (1983).
5. Such interrogation was a prime recommendation of a committee of the US National Research Council (see Stern and Fineberg, 1996).
6. For a recent, strongly articulated statement of this position, see Collins and Evans (2002). Collins and Evans wish to restore a meaningful boundary between domains of lay and expert competence, and they propose that lay knowledge should be included in expert decisionmaking only when it is able to contribute fruitfully to expert understanding. Though carefully worked out, their views pay insufficient attention to prior framings that may unwittingly exclude important democratic inputs from public decisions.
7. Donald MacKenzie (1990) referred to this phenomenon in his discussion of the "certainty trough".

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