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**SOCIAL RISK, POLITICAL RATIONALITY,
AND OFFICIAL RESPONSIBILITY:
RISK MANAGEMENT IN CONTEXT**

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Abstract

This paper reviews the evolving literature on social risk and procedures for risk management in government. In this evolution, the dual information flows – from science into government for purposes of policy formation, and from government into communication channels for purposes of public education – have both been transformed into two-way flows and indeed integrated analytic-deliberative processes. But beyond information flows for purposes of mutual understanding of social risks among scientists, government, and stakeholders, there is a need to recognize growing public expectations for open and transparent participatory processes that lead toward shared decision making. These expectations impose a wide range of potentially conflicting duties and obligations on public servants and public sector managers in dealing with social risks.

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Introduction

Some argue that it is not the task of government to protect the public against risk in circumstances where the individual can accept or avoid risk by making his or her own informed choice. Where the hazard is transparent and one that the individual can readily avoid, this argument has force. Most people believe, however, that government has an important role to play in reducing the extent to which the consumer is exposed to hazard ... The problem is not an easy one. Government does not set out to achieve zero risk, but to reduce risk to a level which should be acceptable to the reasonable consumer. The individual consumer wishes to be satisfied that the Government has drawn the line in the right place.¹

Whether we are concerned with the generation of wealth, the prosecution of wars, or the safety of water, outcomes depend on complex systems involving many institutions and the conduct of many people, in a context of pervasive uncertainty. Individuals interact within institutions and organizational structures; they act purposively, in their own perceived self-interest, in the context of a variety of moral codes and cultural traditions. Some individuals exercise discretion to take action on behalf of others. Safety, effectiveness, and success depend on wide acceptance and understanding of bodies of principles, policies, and procedures, viewed as legitimate, within which individual and collective decisions can be made – on the basis of contested and inadequate evidence – about action that poses risks to known or unknown individuals, and about the distribution of the costs and burdens of those risks. How can such decisions be made responsibly in a public sector setting? Can they be both responsive to the expressed concerns of particular individuals and groups and still responsible in light of some broader public interest? What actions or processes might ensure that contested decisions will stick, even in the face of adverse outcomes for some participants?

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This paper has been prepared for discussion purposes only and does not represent the findings or recommendations of the Commissioner.

¹ United Kingdom, 2000, *The BSE Inquiry: The Inquiry into BSE and Variant CJD in the United Kingdom* [online], [cited January 15, 2001], <www.bseinquiry.gov.uk/report/volume1/chapter14.htm>, paras 1291, 1293.

For brevity and economy, this paper starts by reference to three short papers that I have published previously. The first draws attention to a number of now well-known puzzles and dilemmas that emerged in the 1970s around the issue of public decisions in the face of risk.² The second³ is an edited version of a speech based on a survey⁴ of a rapidly expanding literature, and attempts to sketch some guidelines for public servants committed to act in the face of these puzzles and dilemmas. I originally delivered the third paper as a keynote address to the Association of Public Executives (APEX) in Ottawa; it elaborates these guidelines but also expresses concern about the growing impact of an audit culture on the exercise of the discretion necessary for responsible innovation and risk taking in the public sector.⁵

Taken together, these papers may provide a reasonable summary of thinking on this subject in Canada in the mid-1980s. Since then, however, the key policy questions have been substantially reframed in several respects, and indeed the context for judgment and decision in the public sector has been transformed. No full review of such a vast topic is possible in the space of a single paper, of course; this paper might best be viewed simply as a start toward a guide to a large literature.

The first of these articles, appearing in the second issue of the new *Policy Options* magazine, called for better social debate around issues of risk. It began by noting that comparative risk estimation on a life-cycle basis, though it might be, from an analytical perspective, the only rational way to proceed in assessing new technologies or potentially hazardous development proposals, had proven hugely controversial.

There were several elements to the controversy, which arose from reaction to the growing public enthusiasm for what was termed the “new regulation,” having to do with health, safety, and environmental concerns rather than with markets and monopolies.

² R. Dobell, 1980, “The arithmetic of risk,” *Policy Options*, vol. 1, no. 2, p. 53.

³ R. Dobell, 1986, “The public servant as God: Taking risks with the public,” *Canadian Public Administration*, vol. 29, no. 4, pp. 601–17.

⁴ R. Dobell and T. Parson, 1986b, “Collective decisions involving risk: A survey of the literature,” IRPP Working Paper (Halifax: Institute for Research on Public Policy).

⁵ R. Dobell, 1989, “Fresh thoughts in fat city: Innovation in the federal public service,” Keynote address to APEX Innovation Symposium, Ottawa, January 19. Published in edited form as “The public administrator: God? or entrepreneur? Or are they the same in the public service?” 1989, *American Review of Public Administration*, vol. 19, no. 1, p. 1.

- The overall scale of regulatory intervention was said to be excessive. Noting that aggressive standard setting impinges adversely on economic growth, Aaron Wildavsky, among others, argued forcefully that overall standards of health and safety suffer as a result.⁶ This argument continues to be central to one pole of the continuing risk debate; it has been pursued in, for example, the work of Leiss and Chociolko.⁷ Ultimately, of course, it has to do with the role and scope of government, and the balance between individual responsibility and socially assumed responsibility.
- Regardless of the overall scale of intervention and investment to address hazards or reduce risks, the composition of that effort seems badly distorted and strongly inconsistent. Lives that could be saved by a simple reallocation of resources and effort continue to be put at risk as a result of apparently perverse public decisions. Expenditures incurred to correct particular outcomes or to treat specific individuals adversely affected as a result of exposure to risk far outweigh the expenditures advanced to prevent or reduce these statistical risks to anonymous citizens or groups in the first place.
- As a result of such arguments, central agencies in governments moved, through the late 1970s and early 1980s, to restrain regulatory initiatives through requirements for appraisal of socio-economic impacts and the like, insisting that such initiatives must be subject to prior scrutiny and review by industries affected. (This concern to reduce the burden of regulation continues to the present in efforts to promote regulatory efficiency, responsive regulation, or merely ‘modern government.’)

The 1980 article suggested that this administrative response is insufficient, however, and argued that a better compromise between analysis and politics is essential in the debate around social risks. The 1980s and 1990s saw much further development of this argument. Indeed, this present paper concludes that the story must go beyond questions simply of regulatory impact assessment, and indeed conventional public education and consultation. It argues that deliberative processes and participatory mechanisms are the foundations for politically accountable decisions on social risks. The outline of the argument can be sketched as follows.

⁶ A. Wildavsky, 1980, “Wealthier is healthier,” *Regulation Magazine*, vol. 55, p. 10; A. Wildavsky, 1988, *Searching for Safety* (New Brunswick, N.J.: Transaction Publishers).

⁷ W. Leiss and C. Chociolko, 1994, *Risk and Responsibility* (Montreal and Kingston: McGill-Queen’s University Press).

The need for better public debate through better integration of analysis and deliberation in policy formation arises from some clearly apparent difficulties.

- People seem generally to be rather poor decision analysts. We do not deal well with probabilities, particularly with small probabilities, and we insist on being distracted by what seem to statisticians to be irrelevant features of consequences or outcomes (including features not of the outcomes themselves but of the processes by which decisions about them were made).
- The result is that rankings of risk problems show dramatic differences between how experts and the general public rate the priority these problems should receive from government.
- In particular, as noted above, statistical lives are weighted inadequately against individual lives when it comes to the allocation of public resources or indeed to collective assignments of risky duties.

Individuals, of course, have a right to their views. But it seems debatable whether social decisions should reflect these personal failings in reasoning. One might expect the experts appointed in the public service as agents to serve the interests of citizens to do better. One might argue for improvement in at least three respects: greater reliance on individual responsibility where possible; better risk assessment; and fuller risk spreading through greater use of insurance schemes or contracts with payoffs contingent on particular outcomes to address the distribution of benefits and burdens in decisions that entail assuming or assigning risk.

Such an approach emphasizes the responsibility of the public servant to address the utilitarian or consequential considerations – that is, to do the calculations to determine where the public interest might rest in the outcomes. But there are fundamental questions of rights and procedures to be considered as well.⁸ And these questions arise in a setting where governments are being pressed to be more innovative and entrepreneurial, and to assume more risks while dealing with more risks.⁹ Ironically, at the same time, the drive toward greater scrutiny

⁸ R.M. Dworkin, 1981, “Principle, policy, procedure,” in C.F.H. Tapper, ed., *Crime, Proof and Punishment: Essays in Memory of Sir Rupert Cross* (London: Butterworths), p. 193; E.H. Kluge, 1986, “What is a human life worth?” John W. Langford, ed., *Fear and Ferment: Public Sector Management Today* (Halifax: Institute for Research on Public Policy), p. 109.

⁹ U. Beck, 1992, *Risk Society: Towards a New Modernity* (London: Sipe).

and “checking” described by Power is also gathering strength.¹⁰ In that setting, my 1989 address to APEX attempts to set the consequential calculations in a broader context of rights-based considerations.

Still, no matter how rights are addressed, an underlying question remains: How can governments concerned with statistical risks arrive at decisions that are acceptable to and command the support of individuals concerned with risks to identified people or groups? The fundamental puzzle outlined in the 1980 paper still poses itself as the core question: Why should a government in Ottawa and a father concerned about his family agree on proposed action in the face of risk? If they don’t agree, why should the father acquiesce in the government’s decision?

The remainder of this paper sketches some further updates to this story, concluding that the answer will be found only in the full deliberative processes discussed below. In pursuing such deliberative processes, however, some important questions of practicality are encountered.

- Openness and transparency are crucial to trust, legitimacy, and acceptance of outcomes. But how can the process be open if public servants, as a result of loyalties to their ministers and a responsibility to ensure an orderly debate, led by their ministers, are precluded from speaking in public about their contested interpretations of incomplete or conflicting evidence?
- The nature and extent of participation are crucial, but how do we ensure the legitimacy, representativeness, and accountability of all the participants? How do we ensure that consultation is exhaustive yet timely? And, indeed, how do we preserve ministerial accountability through innumerable processes of consultation and shared decision making?
- Finally, how are we to come to closure when the ground continues to shift, when there is no sure point of equilibrium among all the values and rights that contend in the balance?

In this paper, we begin with the literature bearing on the problem of finding and justifying an appropriate balance, but finish with consideration of the much harder task of finding support, of assuring a skeptical public that the balance has been struck in the right place. In the end, providing this assurance proves the more fundamental challenge.

¹⁰ M. Power, 1997, *The Audit Society: Rituals of Verification* (Oxford: Oxford University Press).

The perspective adopted throughout this paper is that of the public servant attempting to make sense of his or her responsibilities in light of many and conflicting pressures. In the 1986 paper, I argued that the public servant cannot avoid playing God in decisions that impose risks on a public who are not present to be consulted.¹¹ I will now attempt to divide the public servant's role into distinct responsibilities, in light of the literature that has accumulated since that time.

The argument here initially envisages three distinct roles for the public official – as analyst, agent, and double agent.

- As analyst, the public servant works alone, calculating the public interest on the evidence, including what can be inferred about values, preferences, and welfare from market behaviour and other observations, or from what is expressed explicitly by citizens through polls or surveys.
- As agent (or caseworker), the public servant looks outward, accountable to clients and citizens individually.
- As double agent, the public servant seeks also to serve a general public interest. He or she looks upward to systemic goals and hierarchical superiors and is accountable for action within prescribed policies, rules, and guidelines, while also looking outward to clients and being accountable for the exercise of discretion in the client's interest in changing individual circumstances.

Section 4 of the paper examines concepts of responsibility and blame arising from the exercise of discretion and judgment in such circumstances (the anonymous public servant as scapegoat?) and examines possible guidelines as to forms of conduct that might be judged to display 'due diligence.' This leads to recognition that the public servant is only one actor in large and complex systems, and that his or her agency and discretion are always constrained as a result.

Depending on the features with which we endow these systems, we might then see the public servant as communicator, convenor, or co-manager (as outlined in sections 5, 6, and 7 respectively).

¹¹ R. Dobell, 1986, "The public servant as God: Taking risks with the public," in Langford, ed., *Fear and Ferment*, p. 93.

1 The Rational Public Servant as Analyst

We place infinite value on our lives in rhetoric, and abuse our prospects for survival with a daily diet of questionable habits and dangerous activities.¹²

Confronting hazards, dealing with uncertainty and risk, and balancing probabilities and consequences are activities that may be approached through rational analysis or viewed as social responses. In dealing with or thinking about hazards (that is, sources of potential adverse outcomes, or dangers), a well-known standard analytical approach has been developed that entails taking into account both the *likelihood* of such adverse outcomes and their *consequences*. In this approach, risk is represented as some function of the probability or likelihood of an outcome and the magnitude or desirability of its consequences. A highly developed body of theory prescribes procedures for the way individuals should refine subjective estimates of the probability of particular outcomes in light of new information, and the way they should weight the consequences associated with such outcomes in light of their own preferences.¹³

A vast literature, however, has established clearly that people do not normally follow the procedures laid out by decision theorists or statisticians for handling probabilities and indeed seem predictably to pursue a rather orderly and consistent structure of departures from such theory. An elegant and fruitful body of theory has also evolved around this subject.¹⁴

Conclusions that flow from this work emphasize that the actions people will take when faced with a decision involving risk will depend sensitively upon the way in which the problem is framed and the process by which a decision is to be made. Decisions involving highly unlikely events (very low probability) but offering the possibility of highly adverse outcomes (high negative payoff) are particularly likely to be handled in what appears to be an inconsistent or irrational manner. Estimates of probabilities in these circumstances will be 'sticky.' People will be slow to change their minds in light of new evidence or experience, and unlikely to distinguish differences below some threshold.

¹² Dobell, 1980, p. 58.

¹³ H. Raiffa, 1968, *Decision Analysis: Introductory Lectures on Choices under Uncertainty* (Reading, Mass.: Addison-Wesley).

¹⁴ D. Kahneman and A. Tversky, 1979, "Prospect theory: An analysis of decision under risk," *Econometrica*, vol. 47, p. 263; D. Kahneman, P. Slovic, and A. Tversky, eds., 1982, *Judgment under Uncertainty: Heuristics and Biases* (Cambridge: Cambridge University Press).

At the same time, another vast literature has confirmed that people respond to many facets of an outcome; monetary or other numerical measures of the magnitudes of consequences are by no means the only considerations that matter to people. The literature on risk perception captures various dimensions of the consequences considered relevant by people or groups.¹⁵

The puzzles and paradoxes reported in this now widely familiar literature offer considerable entertainment, but in the context of individual decisions they offer no profound problem. Individuals acting on their own account are free to risk their resources according to their own calculations. One can attempt to counsel them, and to demonstrate that, in light of their own objectives, behaviour more in accord with the theory and normative framework showing how decisions should, for best results, be made would better serve their purposes. And in matters of financial management, closer in structure to the gambling activities that were the origins of the theory, it can be argued that individual behaviour does come more into line with the normative prescriptions. On financial markets, where millions of such decisions are aggregated, it does appear that significant inconsistencies are quickly eliminated.

The situation is different for public servants or others charged with making isolated large decisions on behalf of groups or communities. In such a setting, two so-called agency problems arise. The first is the task of the agent in exercising expertise to serve the true interests of the principal, given only some necessarily incomplete instruction from the principal. The second is the problem for the principal in monitoring whether the expertise of the agent truly is being directed fully toward serving the interests of the principal as agreed.

Nevertheless, the work of evidence-based consequential analysis for risk management purposes does routinely go on in government. To see the general nature of the approach recommended for the dedicated and impartial agent, we can refer quickly to what has by now become accepted procedure, in a systematic, rational framework, for dealing in a public sector context with a risk management problem.¹⁶ This approach entails a series of steps, from *risk assessment* (hazard

¹⁵ P. Slovic, J.H. Flynn, and M. Layman, 1991, "Perceived risk, trust, and the politics of nuclear waste," *Science*, vol. 254, p. 1603.

¹⁶ National Academy of Public Administration, 1995, *Setting Priorities, Getting Results: A New Direction for the EPA*. Washington, D.C.: National Academy of Public Administration. P.C. Stern and H.V. Fineberg, eds., 1996, *Understanding Risk: Informing Decisions in a Democratic Society* (Washington, D.C.: National Academy Press), chapters 1 and 2.

identification, exposure estimates, magnitudes of consequence) to *risk characterization* (a summary of the preceding estimates) to *risk management*, combining the risk characterization summaries with considerations of possible options for response to arrive at a decision on government policy or regulatory action. In the course of arriving at risk management decisions, an evaluation process or risk-benefit (or risk-risk) analysis may be undertaken to compare the magnitudes (and ultimately desirability) of the consequences associated with each response option. References to analytical techniques are given in my 1986 paper with Parson, "Collective Decisions Involving Risk."

Rational action to mitigate risks or redistribute costs is possible. Options to improve the decision-making environment must also be considered. Improvements in information flow (extending to what we now call knowledge management), synthesis of 'many ways of knowing' (including integration of traditional knowledge with scientific evidence), and machinery for visualization in risk communication all offer possibilities. Better procedures, better contracting environments, extension of instruments to include greater flexibility, and broader provisions for contingencies offer other avenues. Improved understanding of the significance of evidence, the logic of hypothesis testing, and the importance of precautionary principles promises better application of standard reasoning processes. Procedures for consultation, deliberation, and conflict resolution can themselves improve the rational foundations for decision purposes, as Leiss and Chociolko, for example, emphasize.¹⁷ And opportunities for delegation, subsidiarity, and devolution of authority within large or hierarchical organizations offer possibilities for better linkage of policy intentions to the concrete circumstances of decisions in a varied, changing environment. In short, the machinery of adaptive management offers possibilities for improved risk management and ongoing decision making.

A fundamental dilemma remains: the perceptions and preferences of the public to be served by the public servant as their agent in a democracy appear to lead often to priorities and actions that differ dramatically from the perceptions and priorities of experts who base their advice on the scientific examination of likelihoods and consequences.

¹⁷Leiss and Chociolko, 1994.

2 The Responsive Public Servant as Agent

The right to be heard from, and the right to be told why ... express the elementary idea that to be a person rather than a thing is at least to be consulted about what is done with one.¹⁸

The idealized rational public servant of the previous section presumably consults some revealed or inferred social welfare function to determine what is in the interests of the representative citizen he or she serves. But outside the confines of the standard economic model, the representative citizen is also an autonomous rights-bearing individual, with perhaps an overriding and growing concern for fairness.

According to some interpretations of the rights-based school, the individual is paramount and the overriding value of human life that is at the core of all our social institutions demands that all proxy decision making by public servants should be based on what has been termed a deontological, rather than utilitarian, ethic. Accordingly, all decisions involving risk must be made by balancing the rights of individuals, with rights to life and safety taking precedence over pragmatic considerations such as economic benefits, no matter how widely such benefits might be distributed. By this reasoning, the public servant should never be permitted to take decisions that will subject some or all members of the public to involuntary risk – unless it can be shown to be done in the interests of those affected, in a manner they would willingly accept.

The basic principle is that people are individuals with inherent rights, and not units of calculation. Eike Kluge, a philosopher who has written extensively in medical ethics, has suggested that we can make collective decisions appropriately, without relying on cost-benefit analysis, by recognizing the autonomy of individuals, with the public servant acting simply as a proxy decision maker administering, in effect, their rights.¹⁹ The key is to recognize that people are often prepared to trade rights or take risks in exchange for economic benefit and that they are obviously free to do so, on their own behalf. The public servant acting as agent on their behalf presumably would also be empowered to do so. Thus the principle of informed consent becomes central, as a fundamental principle of due process or natural justice.²⁰

¹⁸ Laurence Tribe, 1978, *American Constitutional Law* (Mineola, N.Y.: Foundation Press), pp. 503–4.

¹⁹ Kluge.

²⁰ The requirements of natural justice may also be understood substantively, as stipulating procedures justified because they lead to better substantive consequences, or intrinsically, as something to

Undoubtedly there exists some individual right (as a matter of principle, not policy) not to be exposed involuntarily, without informed consent, to increased risk of direct harm. But that right cannot be respected in individual cases at any social cost, lest an increase in aggregate statistical risk feed back around to leave the individual exposed on balance to greater, not less, risk of harm. How then shall individual rights be balanced against social costs? How is the public to be assured that government, as the agent of the citizen, has found the balance at the appropriate place, one that offers an acceptable risk to the individual?

3 The Responsible Public Servant as Double Agent

The second principle appeals to the fairness of abiding by open commitments [that were] fair when adopted.²¹

It is widely recognized that fundamental rights are subject to restrictions that may be justified in a free and democratic society. Individual rights can be overridden by a compelling public policy purpose, as in the case of the privacy rights of pedophiles or the confidentiality provisions of solicitor-client privilege. It is also taken for granted that the responsibility of the public servant is to serve the public interest. How is that public interest to be discerned, behind all the particular interests of individual clients or groups?

It is possible to find a clue by looking further into the questions of procedure just mentioned above. The observation of Tribe quoted in section 2 actually reads, more fully, “Both the right to be heard from, and the right to be told why, are analytically distinct from the right to secure a different outcome; these rights to interchange express the elementary idea that to be a *person* rather than a *thing* is at least to be *consulted* about what is done with one.”²²

In the essay quoted above, R.M. Dworkin looks at this balancing of fundamental rights with public policy imperatives through the determination of procedural rules for making discretionary judgments within administrative agencies. He suggests two principles of fair play in government.

which people are entitled when the apparatus of the state singles them out; here the concern is with the latter dimension.

²¹ Dworkin, p. 206.

²² Tribe, 1978, pp. 503–4.

First, any political decision must treat all citizens as equals, that is, as equally entitled to concern and respect ... Second, if a political decision is taken and announced that respects equality as demanded by the first principle, then a later enforcement of that decision is not a fresh political decision that must also be equal in its impact in that way. The second principle appeals to the fairness of abiding by open commitments [that were] fair when adopted.²³

Dworkin's analysis suggests the necessity, in other words, of public policy decisions based on open, announced processes, fixed in advance, that embody an equal concern for the moral harm imposed on any individual and do not offer greater access to, or greater emphasis on the consent of, those in favour for any reason, whether as a result of contributing to campaigns or participating in fundraising dinners or electing the right brand of MP. More crucially, it emphasizes the need for credibility and trust in these processes, and for the resulting decisions to be accepted as legitimate.

More specifically, the 1978 monograph by Calabresi and Bobbitt dealing with what they call "tragic choices" highlights the distinctions between "first order" decisions on policy and resource allocation, with implications for statistically determined groups of unknown individuals on one hand, and the "second order" administrative decisions that allocate scarce and crucial resources among identifiable individuals, with consequent implications for life or death for these individuals, on the other.²⁴ Setting out a theme that appears to be echoed by Mouffe at a more general level,²⁵ they suggest that the genius of the social process is to deal with such challenges – challenges that entail recognizing fundamental but irreconcilable values – according to a mechanism of continuing change and rebalancing. Such a continuing dynamic adaptation makes it possible to live with conflicting fundamental values without permanently surrendering allegiance to any, and thus enables the system to continue to command the loyalty of the community as a whole.

It should also be noted that the legislation that is the starting point for defining the mandates and authorities under which public servants work – the mandates that authorize their actions – often reflects this inherent tension, a tension that sometimes goes beyond ambiguity into contradiction and dissonance.

²³ Dworkin, p. 206.

²⁴ G. Calabresi and P. Bobbitt, 1978, *Tragic Choices* (New York: Norton).

²⁵ C. Mouffe, 2000, *The Democratic Paradox* (London and New York: Verso).

This ambiguity is inevitable, if not intentional. Espousing a range of relevant fundamental values, ambiguous legislation leaves the discretion as to their realization in specific circumstances to public servants, judges, and other practitioners. Within a general formulation, the legislature may leave room to accommodate a wide variety of individual circumstances. In the implementation, however, the articulation of policy and mandates begins to restrict that variety and bind the discretion that can be brought to bear. (In addition, the growth of a pervasive audit culture creates a climate of blaming that may induce a chilling self-censorship, limiting further the exercise of individual discretion.) The result is insufficient flexibility in the system to respond to varied and changing individual circumstances; outcomes are constrained and performance suffers.

The nature of these systemic challenges to decision making in large organizations has been clarified through recognition of their multi-level nature. It has been recognized that some measure of proportionality is essential. The trade-off between procedural guarantees of rights and the economic costs of the procedural protections involved has to be made. The issue becomes how such trade-offs can be made once, legitimately, at the outset, and then respected, not reopened in subsequent realizations of similar general questions in repeated individual cases.

This insight is not new. In many ways it simply returns us to the conceptual distinction between politics and administration, or between norm-making activities and norm-using activities. It also reflects the distinction between the making of rules and the application of rules through an exercise of interpretation and discretion, or between the goals or values that can be traded off one against another as a matter of policy judgment and the rules or constraints that must be respected in choosing appropriate means to the prescribed ends. All of these distinctions must be considered in carrying out the duties of office (more consequential because the responsibility of the agent is in the end to serve the principal). But the first-order (systemic) allocations are broad issues of policy, whereas the subsequent decisions are adjudications of individual claims. These latter must work within the procedures and balances established in the first order (majoritarian) decisions and develop principled interpretations in the varied factual context of individual circumstances.

Thus the norms are set at a more abstract, senior level in the public system and are linked through procedural guidelines or rules to action within those norms by agents addressing concrete cases. These agents might very possibly be

independent contractors external to the organization or public system itself, and hence responsive to yet other norms or organizational cultures. The exercise of discretion by such agents, in order to achieve, in a changing environment, within shifting norms, the intent of policies is the key link in the chain. The review of resulting action – by hierarchical superiors, auditors, courts, media, clients, and citizens – offers the flashpoint for public controversy.

How then are we to make sense of this complicated and puzzling setting? We have seen that on one hand the public servant must attempt to act in the interests of a society that appears increasingly divided, increasingly conscious of entitlements, and (rightly or wrongly) increasingly oriented toward apprehensions of risk. The public servant must discern a public interest that is differently perceived by many different interests emphasizing many different values. This public interest is pursued through a range of mechanisms or institutions reflecting different visions of democracy and politics, in which change seems to be the only certainty.

On the other hand, the public servant is charged to act as agent for individuals who pursue an individual concern, not a group interest or a collective optimum. There is an important literature that attempts to bridge this gap by focusing on a concept of longer-term enlightened self-interest. But in the end, parents, for example, do not act from the Rawlsian original position, behind a 'veil of ignorance.' They are acutely conscious that the outcomes from the processes they select and the decisions they take involve more than anonymous citizens or statistical lives. The people on whom they visit the risks of greatest concern are their own children, and the concept of a public good or a collective optimum may not be persuasive in overriding a parent's personal balance of risk versus regret. Incentives to participate in an immunization program, for example, may not seem to some parents to be worth the risk. The case for the exercise of state authority to overcome the barriers to cooperative action in order to achieve a social outcome that is better in an aggregate statistical sense for all may seem strong in such a case.

Linking the aggregate, abstract social commitments and decisions of policy and principle, on the one hand, and the concrete operational decisions dispensing justice or delivering services to people, on the other, are regulatory decisions, rule-making activities, and standard-setting judgments that entail a long chain of implementation negotiations and bargains. This whole system is challenged by different forces and barriers at various stages.

- At the operating or delivery level, where the tasks are those of monitoring, reporting, operational action, review, audit, and enforcement, decisions are perhaps primarily consequential, based on technical evidence, because principles are agreed and procedures are well established. The challenges are those of maintaining a professional duty of care. The system here hinges on personal commitment and compliance.
- At the level of standard-setting, judgments turn on issues of interpretation and contested understandings of the balance in calculations of value for money, or of the trade-off between risk and competitiveness, for example. The increasing complexities of rights-claiming activities create growing challenges in these judgments.²⁶
- At the more aggregate level of choice of governing instruments, judgments are coloured by ideological differences, by debates as to the relative merits of more explicit regulation as opposed to the freedom to exercise greater discretion in selecting the best means to pursue agreed (measurable) objectives.
- And finally, at the level of principle, conflicting values contend in the judgments by which principles are balanced against each other and are traded against resource implications in a series of policy decisions that can only be made in some political setting in accord with some principles of majoritarian or democratic decision.

Thus, as one moves down the implementation chain, the decisions can become more consequential and utilitarian, because principles and procedures are more agreed upon and entrenched. As one moves back up the chain, increasingly the issues become competitions in interpretation of principles, then in adjustment or rephrasing of principles and procedures. Ultimately a rebalancing of principles against resources and a changing sense of public purpose occurs. At issue here, at this most general stage, are questions of core institutions.

But the key point, as emphasized above, is that those issues cannot be contested at every transaction. The system can work only if the vast majority of operating decisions are taken within the technical and professional competence of

²⁶ C. McMullan and J. Eyles, 1999, "Risky business: An analysis of claimmaking in the development of an Ontario drinking water objective for tritium," *Social Problems*, vol. 46, no. 2, p. 294.

responsible public servants or their contracted agents. Except in dramatically unusual circumstances, the responsibility for action must be simply the mundane duty to do one's job. (This is the simple logic behind the expanding search for market principles or quasi-market mechanisms to guide ongoing decentralized decisions in regulation and delivery.)

It is crucial to establish some acceptance of the proposition that a process that comes out of agreed procedures should be accepted as fair, even if unfortunate outcomes arise. In a complex system, with decisions taken in the face of profound uncertainty, 'normal accidents' in operations and 'normal mistakes' in decisions will inevitably occur.

This reality suggests a need for a system that is more relaxed in its reviews and its judgments after the fact and more demanding beforehand in its scrutiny of decisions and in its insistence on underlying consensus. The criteria brought to bear in scrutiny of individual decisions by individual agents can only be so demanding. Expectations of a duty of care and of a standard of prudent conduct are reasonable; expectations of omniscience are not. One can expect responsibility, commitment to the goals and covenants of the organization, and a professional ethos of performance.²⁷ Meeting such expectations suggests a renewed emphasis on education and discourse within the public service and across public-private partnerships, as well as persuasive argumentation and continuing discourse with the individual clients and groups served through ongoing operational decisions. (This emphasis leads on to two other burgeoning literatures that cannot be reviewed here, one that deals with the challenges of eliciting compliance and cooperation, the other that examines the efficacy of computer-supported decision processes and the potential for computer-mediated deliberation.)

Such an argument implies a need for a greater focus on the larger decisions – a focus on political accountability rather than on constant 'excessive checking' through audit or judicial or other reviews of administrative decisions. It perhaps also suggests a precautionary approach that argues against reliance on large and complex interdependent technologies that create vulnerabilities in both industrial production systems and social control mechanisms.

In the end, we still return to the problem of the public servant faced with obligations to respect the rule of law and the rights of individuals, accountable

²⁷ J.S. Bowman, 2000, "Towards a professional ethos: From regulatory to reflective codes," *International Review of Administrative Sciences*, vol. 66, no. 4, p. 673.

to individual citizens within a deontological frame, and at the same time facing a duty to pursue the public interest calculated in light of the outcomes emerging from decisions mediated through a complex system. Within this system, the public servant, as both agent and expert, must attempt to marshal the evidence, to see through the feedbacks and indirect linkages and impacts in a system that the principals perceive differently, and ultimately to convince them of the persuasiveness of that analysis.

At the same time, there is a concern that the responsiveness of this overall (first order) framework to changed public sensitivities may in fact be very limited; institutional rigidities may block necessary change or essential adjustments to the balance previously established. World Trade Organization (WTO) dispute resolution processes and tribunals that insist on designating as side issues the questions of rights to which the public now attaches essential importance offer one interesting example. The emphasis on product characteristics to the exclusion of process concerns illustrates the hangover of outmoded habits of thought. Whereas current public concerns with fairness and procedure emphasize process and means, the current WTO practice of focusing on ends and eschewing examination of the acceptability of means runs directly counter to that emphasis.

The issue of compliance and incentives to encourage compliance is crucial here. The specific incidence of a drunken skipper or lax handling procedures or forged certificates cannot be predicted, but the possibility – indeed inevitability – of some such event should be anticipated by institutional design. Moral commitment matters more than formal accountability mechanisms. We may be drifting toward an audit society, but the importance of social or cultural capital in sustaining personal efforts at internalizing the formal apparatus of external inspection remains fundamental.

Implementation may thus tend toward greater discretion (at the cost of greater ambiguity in the initial mandates) or toward greater precision in monitoring adherence to more specific rules and line-item controls (as with the now greatly increased audit scrutiny at Human Resources Development Canada) at the expense of variety and potential for effectiveness in matching action to circumstances. (This distinction explains why legal processes leave discretion as to the facts to the trial judge, while higher courts concern themselves with procedure and interpretation.) It is also this imperative for interpretation of mandates, in a manner fitting the facts on the ground, that leads to the dilemmas of performance practice and to the problem of excessive fidelity to the text and the line items.

We have learned, through painful experience, that to assess risks accurately it is essential to know the concrete details of the settings and the contexts – physical, organizational, and cultural – in which the processes governing hazards take place. In their foreword to Beck's *Risk Society: Towards a New Modernity*, Lash and Wynne note that it is not the theoretical but the real conditions and systems that have to be observed and taken into account in assessing risks.²⁸ Naive models of how regulations are observed, how standards are (thought to be) achieved, or how toxins are (thought to be) handled will provide misleadingly low estimates of risks if in fact the real world is messier in its habits, less stringent in following rules, and so on. (Lord Phillips, in the report of the British bovine spongiform encephalopathy [BSE] inquiry, emphasizes, for example, the important lesson that flows from less than full enforcement and compliance with regulations on handling of cattle feed.)²⁹

Out of all this the public servant may arrive at the elements of a recipe to follow in making decisions on behalf of individuals, but in the public interest. The above discussion suggests the following of such a decision:

- It must be principled. A core layer of individual human rights (requirements of natural justice) must be respected.
- It must meet social tests of procedure. An additional layer of traditional understandings of acceptable actions or means must be considered.
- Within these constraints, it must be substantively justifiable. It should be a calculated decision, based on a consequential, utilitarian approach that balances individual rights against social welfare and takes into account options for risk reduction and for dealing with distributional concerns. (Mitigation options leading to greater diversity, slack, or resilience may or may not be available to reduce absolute risks at an acceptable cost, but market mechanisms or other institutional arrangements may still permit a spreading or redistribution of the burden of risk – through insurance, direct or indirect compensation, or other linkages.)
- In a situation where there appear to be fundamental conflicts among these precepts, it must meet a final test of personal responsibility: does the decision yield a settled moral equilibrium for the decision maker?

²⁸ Scott Lash and Brian Wynne, 1992, “Foreword” to Beck, 1992.

²⁹ United Kingdom, 2000.

At the same time, the concern I expressed in my 1989 paper about the impact of an audit society in limiting precisely that discretion needed for responsive government has become even more relevant now.

4 The Silent Public Servant as Scapegoat?

These tensions between business and the elimination of risks ... range across all areas of social action ... Politicians and politics release pressure by holding individuals and not systems responsible for the accidents and damage.³⁰

With so much discretion to be exercised, the question of whether it is being exercised well is bound to arise. In an uncertain world, however, how can we answer this question? What might we mean by a 'good' decision? Should we reward a good outcome, which might have occurred simply by luck, or insist on 'good' thinking, dependent on individual interpretations of incomplete information available at the time of decision, in ignorance of relevant outcomes?

In large, complex institutional, social, and natural systems, the attribution problem is formidable. But beyond lies the further challenge of free will and determinism. Is there indeed so much discretion? Within the confines and constraints of organizational rules and procedures and systemic accountability mechanisms, how much scope for discretion and agency might a public servant truly possess? For what can a public servant properly be held responsible, accountable, or blameworthy?

In a society torn between exhortations to pursue entrepreneurial risk-embracing, results-based management and growing apprehensions of audit anxieties, questions of responsibility and blame are extremely difficult. Mary Douglas, in her book *Risk and Blame*, suggests some of the deep cultural underpinnings that shape allegiances to institutional forms on the basis of their differing norms and accountability mechanisms.³¹ Schafer explores more immediate questions in the more specific context of recent Canadian experience with commissions of inquiry.³²

³⁰ Beck.

³¹ M. Douglas, *Risk and Blame* (New York: Routledge Press).

³² A. Schafer, 1999, "A wink and a nod: A conceptual map of responsibility and accountability in bureaucratic organizations," *Canadian Public Administration*, vol. 42, no. 1, p. 5.

One overriding general point perhaps deserves comment with regard to the challenges faced in designing institutional arrangements to ensure, for example, a safe water system for the future. That is the emergence of what Power has called the audit society with its attendant “pathology of excessive checking.”³³ In his preface to the 1999 paperback edition, Power suggests that “we are in the middle of a huge and unavoidable social experiment” that has to do with changing social views as to the organization of trust in developed societies, and the cultural and economic authority granted to people who call themselves auditors. Part of this experiment (embracing a swing toward “New Public Management” with responsive regulation and quality assurance) entails much greater emphasis on internal self-inspection by corporations and other organizations, and the evolution of governance mechanisms toward simply checking on their own internal systems – a motif of “control of control.” Quoting Walsh, Power suggests that “since performance cannot be demonstrated, the nature of the management system becomes, itself, the mark of effectiveness.”³⁴

Another question of organizational design arises here, with one practical consideration being the problem of horizontal integration or coordination. In a variety of settings, the concern for an identified lead agency has been stressed. The Phillips report into the BSE issue in the United Kingdom raised the question of a single science lead.³⁵ In a report of the auditor general of British Columbia into water quality, the key recommendation was that a lead agency be visibly responsible, though the government response to the report suggested that effective coordination of different agencies with distinct responsibilities was, at least at the time, the preferred strategy.³⁶

These observations suggest that two classes of hard problems will be encountered in seeking an institutional setting within which good decisions can responsibly be made by public servants and others working to fulfill a public mandate. The first is the problem of finding the right balance in agonizing decisions (where to draw the line) in the face of overwhelming analytical difficulties, including profound uncertainty and lack of knowledge. The other is the problem of establishing justification in the face of the incentives characteristic of an audit society (how to assure others that the line was drawn in the right place).

³³ M. Power, 1997.

³⁴ K. Walsh, 1995, “Quality through markets: The new public service management,” in A. Wilkinson and H. Willmott, eds., *Making Quality Critical* (London: Routledge), p. 59.

³⁵ United Kingdom, 2000, vol. 1, ch. 14.

³⁶ British Columbia, Office of the Auditor General, 1998/99, *Protecting Drinking-Water Sources*, Report 5 (Victoria, B.C.: Office of the Auditor General).

5 The Consultative Public Servant as Communicator

But systematically neglecting a responsibility to initiate conversations about risk ... may well be the most serious failing of all in the domain of risk communication practices ... It is up to the risk communication practitioner to take the time and trouble to construct a fair and understandable representation of both the relevant science and its meaning for the choice of policy options.³⁷

The public's view of the role of the public servant has evolved significantly over the past three decades. In the earlier period, his or her task was simply to explain to an emotional and irrational public the dispassionate logic of expert views of risk assessment and risk characterization, and the unavoidable necessity of the risk management decisions flowing from those expert assessments. Now the task is recognized to include responsibility for a two-way flow of evidence, beliefs, and perceptions, with public servants expected to listen and learn in public hearings as well as in expert panels. Powell and Leiss make the case most strongly. Much documentation is accumulating in governments (see Annex 2) to offer public servants guidance on the task, which may be viewed as the logical implementation of the precepts of Lawrence Tribe, cited above, on the right of all members of the public to be consulted on what is to be done in distributing risks that may fall on them.

Policy analysts and public officials must recognize that they are working in a constantly shifting battlefield, where there is neither certitude nor light, but where there is continuing pressure for change from wherever we currently are in that balance. In the end, the public servant serves a community through institutions that must display continuing allegiance to many contending and fundamentally conflicting values. Consumers, as citizens, will always be divided on whether the balance has been found in the right place, and parents will continue to differ with governments in deciding on the balance of risks to their own children. But in an environment of repeated interaction, consideration of longer-term self-interest may still lead to a cooperative social optimum in which adverse outcomes can be accepted as a legitimate consequence of a fair process.

Society must press for openness, not just as an ideal, but as the only practical option for the conduct of public business in the domain of risk regulation, even in the face of the practical concerns outlined below.

³⁷ D. Powell and W. Leiss, 1997, *Mad Cows and Mother's Milk: The Perils of Poor Risk Communication* (Montreal and Kingston: McGill-Queen's University Press), pp. 34, 223.

- There are many mechanisms (parliamentary and media-based) that selectively amplify isolated warning signals out of context. The problem of selective reporting, or communication ‘out of context,’ is particularly acute when civil society organizations attempt to confront corporate hierarchies. Both have strong individual interests, but none of the overarching accountabilities of the public servant in a democratic setting.
- Consequently serious problems of premature disclosure may occur. The concern for an irrational public reaction in such circumstances may raise agonizing dilemmas for public servants – particularly those charged with undertaking the science or marshalling the evidence about potential risks – in deciding whether speaking out publicly is essential to a more informed debate on fundamental decisions.

The issue of openness has a long history in the literature on public administration in Canada, but remains a dilemma. In the case of political rights of public servants, court decisions have clarified the boundaries and tests.³⁸ The decision of the Supreme Court of Canada in the so-called *Fraser* case established clearly the restrictions on the right of a public servant to criticize government decisions, those restrictions flowing from the overriding public interest in ensuring continued public confidence in the neutrality and impartiality of the public service.³⁹ On the other hand, more recently and more directly relevant, the decision of the Federal Court of Canada in the cases of *Chopra* and *Haydon* (established that the right of a public servant to free expression may take priority over a duty of loyalty to the employer in a situation where a threat to public health may be involved and where the public servant is speaking from a position of authoritative expertise.⁴⁰ It is better perhaps to phrase this decision as recognizing that the public servant possesses not a personal right to free expression but a duty to speak out that trumps a duty of loyalty to the employer in situations where public health or safety may be threatened. (Canada’s temporary ban on the import of beef products from Brazil in early 2001 raises the question whether the same right to free expression of opinion extends to situations where the public servant is not speaking from a position of expert or

³⁸ *Osborne v. Canada (Treasury Board)*, [1991] 2 SCR 69.

³⁹ *Fraser v. Canada (Public Service Staff Relations Board)*, [1985] 2 SCR 455, aff’g [1983], 1 FC 372 (CA).

⁴⁰ *Chopra v. Canada (Treasury Board)*, [1999] FCJ No. 835 (FCTD); *Haydon v. Canada*, [2000] 2FC 82 (FCTD).

informed knowledge. Similar controversies have long dogged other departments of the federal government. See for example, Hutchings, Walters, and Haedrich for a review of concerns about practices in Fisheries and Oceans Canada regarding large issues of ecological risk.)⁴¹

In offering guidance on the responsibilities of public servants in relation to parliamentary committees, the Privy Council Office has suggested that public servants owe their loyalty to and are accountable to their minister, and that their loyalty to the public and to Parliament is expressed through their accountability to the minister and the minister's accountability in turn to the House.⁴² Whether all observers would consider this advice now fully in accord with beliefs and conventions in Canada, or with evolving views of democracy, is open to question (see Annex 3).

The only solution to either of these problems, it seems, is to deal with issues of trust, confidence, credibility, and legitimacy directly, head on. Openness and transparency mean not withholding awkward evidence, despite potential short-term embarrassment. In a climate where the public perceives an absence of symmetry and fairness in the way different forms of evidence, knowledge, and interests are heard, acknowledged, and finally balanced, only a conscious commitment to openness and disclosure in a deliberative setting seems to offer a way forward.⁴³

⁴¹ J.A. Hutchings, C. Walters, and R.L. Haedrich, 1997, "Is scientific inquiry incompatible with government information control?" *Canadian Journal of Fisheries and Aquatic Sciences*, vol. 54, p. 1198.

⁴² Canada, Privy Council Office, 1990, *Notes on the Responsibilities of Public Servants in Relation to Parliamentary Committees* (Ottawa: Privy Council Office).

⁴³ On this point the recent warnings of the Royal Society of Canada Expert Scientific Panel Report on the Future of Food Biotechnology are important. The appeal to protection for confidential business information should not be permitted to stand in the way of the degree of openness essential to satisfy all concerned that standards of scientific procedure have been fully observed in the assessment of evidence going into regulatory decisions. Corporations seeking regulatory approval of products – the right to sell in a protected market with government-guaranteed rights – are seeking a privilege while offering only a limited liability. Corporations seeking such privilege should be required as a condition to ensure not only that the information to carry out the scientific assessment is accessible, but also that the information necessary to provide the consumer with the foundation on which an informed choice can be made is also accessible. For the reasons outlined by the panel, one may choose not to insist on mandatory labelling, but the accessibility of the information on which voluntary labelling could be built should surely be mandatory.

6 The Deliberative Public Servant as Convenor

For some of society's most important risk issues, however, a broad and extensive analytic-deliberative process can lead to better informed and more widely acceptable decisions.⁴⁴

The case for participation rests on three rationales – normative (intrinsic), substantive (consequential), and instrumental (pragmatic). The normative rationale speaks for itself, as emphasized in section 2 (above): citizens in a society are autonomous entities bearing inherent rights that must be respected in bureaucratic procedure as a matter of natural justice. The substantive rationale recognizes that through extensive participation the body of evidence relevant to a decision can be extended and its interpretation improved; understanding too can be broadened. The instrumental rationale suggests that with broader understanding and a more widely shared sense of ownership of analysis and decision making, the resulting decisions are more likely to be accepted and supported, even in the face of adverse outcomes. The broader deliberative processes advocated in the 1996 National Academy of Sciences report build, Stern and Fineberg argue, the sense of legitimacy on which continuing social support will rest.

The aim of risk characterization, and therefore of the analytic-deliberative process on which it is based, is to describe a potentially hazardous situation in as accurate, thorough and decision-relevant a manner as possible, addressing the significant concerns of the interested and affected parties, and to make this information understandable and accessible to public officials and to the parties. Although risk characterizations are often completed for the benefit only of an organization's decision-maker, it is important to recognize that various other parties use them when they exercise their rights to participate in the decision, either before or after the organization acts.⁴⁵

It is an interesting question whether the right to participate in the decision may extend to efforts to amend or thwart adoption or implementation at any later stage.

⁴⁴ P.C. Stern and H.V. Fineberg, eds., 1996, *Understanding Risk: Informing Decisions in a Democratic Society* (Washington, D.C.: National Academy Press), p. 155.

⁴⁵ *Ibid.*, p. 156

The quotation from the Phillips inquiry into the BSE controversy in the United Kingdom with which this paper began poses four distinct challenges. How shall we find the balance between individual responsibility and collective decision in the face of uncertainty and risk? For those risks that we choose to address through collective decision making, how shall we find the balance among risks and benefits directly imposed or promised on the one hand, or assumed by default through reduced economic returns on the other? How shall the individual consumer be assured that this balance has been found in the right place with respect to individual outcomes? And finally, how shall we ensure that the community finds acceptable and will continue to support the procedures and decision processes that yield these outcomes?

Majone writes:

According to social psychologists, learning is the dominant form in which rationality exhibits itself in situations of great cognitive complexity. This suggests that the rationality of public policy-making depends more on improving the learning capacity of the various organs of public deliberation than on maximizing the achievement of particular goals.

It is not the task of analysts to resolve fundamental disagreements about evaluative criteria and standards of accountability; only the political process can do that. However, analysts can contribute to societal learning by refining the standards of appraisal of public programs and by encouraging a more sophisticated understanding of public policies than is possible from a single perspective. The need today is less to develop “objective” measures of outcomes – the traditional aim of evaluation research – than to facilitate a wide-ranging dialogue among advocates of different criteria.⁴⁶

⁴⁶ G. Majone, 1989, *Evidence, Argument and Persuasion in the Policy Process* (New Haven: Yale University Press), p. 183.

7 The Participatory Public Servant as Co-Manager

The main justification of advocacy and persuasion in democratic policy-making is their function in a continuous process of mutual learning through discourse.⁴⁷

The above discussion leads to the goal of risk characterization founded on an integrated analytic-deliberative process. But it is important to note that this is still risk characterization – it is aimed at achieving a mutual understanding of the nature and significant features of a hazard, and of the possible interplay between probabilities and outcomes inherent in that hazard. The process is one of communicative action to achieve a shared understanding. But such understanding need not lead directly to agreement on action. Responsibility for action still rests somewhere else. Participation in understanding and characterizing a problem need not mean participation in decision making around a response to that problem, or in shaping the structure and framework for institutions and procedures charged with addressing such problems on a continuing basis.

The question of participatory or shared decision making remains to be addressed. Here another vast literature exists, much of which suggests a need to move beyond expert panels only into full citizen-based juries and deliberative processes. Whether such processes can yield enough understanding, broadly enough distributed, to ensure the legitimacy and acceptance necessary to enable contested decisions to stick remains the outstanding question.

But even the best of such procedures is unlikely to yield full and clear-cut community consensus around required action. The public servant still has an obligation to act responsibly as an agent of the public in discerning how citizens would choose to exercise their rights (not simply what values they would bring to assessment of outcomes) in electing what risks they wish to assume. And the situation becomes more complex in the face of increasing globalism.⁴⁸ Even if a local referendum were to yield consensus on a local regulatory, siting or standard-setting decision, many distant interests now claim to speak for other values, other rights. (Christopher Stone has proposed formal appointment of such ‘guardians’ in some international court proceedings, and offered some

⁴⁷ Ibid., p. 41.

⁴⁸ J.S. Nye and J.D. Donahue, eds., 2000, *Governance in a Globalizing World* (Washington, D.C.: Brookings Institution Press).

examples.⁴⁹ Less formal interventions by foreign environmental organizations purporting to act on behalf of seal pups or salmon, or even habitat itself, are familiar fare in contemporary land use or resource management controversies in Canada.) Voices that speak for interests or rights-bearing entities not present or otherwise represented in local deliberation seem now to be increasingly recognized as legitimate influences in decisions with substantial spillovers from and into complex global systems,⁵⁰ but their presence is nevertheless also increasingly questioned by local residents.

The analytical machinery and understanding needed to assemble relevant evidence and elicit complex preferences in multi-attribute, multi-objective calculations have expanded dramatically over the last few decades. But also the analytical approach to risk-benefit analysis itself has evolved to reflect a broader view of the flow of evidence and knowledge into policy. And the limitations have become more openly acknowledged. Malleable methodology has been recognized as a weak support for collective decisions involving contested values.

In the end, the nuances of the analysis matter little in the context of profound uncertainty, indeterminacy, or ignorance in which the most controversial decisions must be taken. For these, the issue of process has become critical; the demand for voice, the insistence on a right to offer informed consent, has become a demand for participation in the process of analysis and decision. What was previously viewed as an obligation on governments to pursue effective risk communication, to translate scientific results effectively into an appreciation of the uncertainty and the consequences, has become instead a demand for, and expectation of, two-way interaction. The issue is not risk communication; it is assured and full participation in a deliberative process leading to a shared decision.

We have learned that the acceptability of the risks flowing from a collective decision will hinge crucially not just on the nature of the consequences, but also, critically, on the distribution of the burdens and costs of the risks assumed and the perceived fairness of that distribution. One could say that the earlier analysis, confined to examination of aggregate magnitudes, the mean of a distribution of possible risks, has been broadened to consider the spread or

⁴⁹ Christopher Stone, 1993, *The Gnat Is Older than Man* (Princeton: Princeton University Press), pp. 83–8.

⁵⁰ E.B. Weiss, 1992, "Intergenerational equity: A legal framework for global environmental change," in E.B. Weiss, ed., *Environmental Change and International Law: New Challenges and Dimensions* (Tokyo: UNU Press), ch. 12.

diffusion of those risks, along with the skewedness or polarization of that distribution.

Even beyond the perceived lack of fairness associated with possible asymmetries or imbalances in the distribution of costs and benefits, there is concern for the process by which the decisions about that distribution are developed. The conduct of the process must appear to fall within agreed rules of procedure. The major concern is the perceived balance of voices and influence in the decision process. If the public perceives that all voices have been reasonably heard, a decision will probably stick, even in the face of individual adverse outcomes.

We have learned also that concern for a lack of fairness in the distribution of risks and benefits may lead to fundamental resistance to accepting such risks, even in the face of large promised benefits. One reason surely lies in the perceived unfairness of corporate managers pursuing a shareholder interest backed by a shield of limited financial liability. Corporate sponsors of risky technologies or risky developments ask individuals to put themselves at potential personal risk, but are themselves – unlike the Names in the original Lloyd’s of London – unwilling to accept comparable personal responsibility. The lessons of incidents like the Bhopal disaster, where corporations appeal to bankruptcy protection when their ventures lead to adverse outcomes, are not lost on those who oppose projects that offer high probability of large aggregate benefits but little assurance that those benefits will be shared by those on whom the low probability of large adverse consequences rests.

We come down to two conflicting postures, or cultures, in approach to these problems.⁵¹ One culture embraces the aggregate benefits achieved through economic growth and emphasizes the economic costs of excessive regulation that entails forgoing those benefits. The other culture emphasizes individual risks and the rights threatened by their involuntary imposition; it focuses on the potential of serious unanticipated consequences and vulnerabilities associated with large-scale intervention in complex natural systems, and on concern with human or environmental health impacts rather than economic gains. We know, of course, that economic status is among the key determinants of population

⁵¹ M. Douglas and A. Wildavsky, 1982, *Risk and Culture* (Berkeley: University of California Press); Douglas; J. Tansey and T. O’Riordan, 1999, “Cultural theory and risk: A review,” *Health, Risk & Society*, vol. 1, no. 1, p. 71; J. Tansey, 2000, “Risk as politics, culture as power” [manuscript], *Journal of Risk Research*, forthcoming, 2002.

health and well-being; we know also that the process by which aggregate economic gains trickle down to populations at risk from economic activity are not reliable, so that individual benefits realized may not match the individual risks imposed.

We could imagine pursuing the necessary balancing requirements by attempting a valuation of the risks and benefits, thus finding a social risk-cost-benefit analysis that leads to a comparison of estimated aggregate benefits and costs in economic terms. Or, alternatively, we could imagine attempting to work past estimates of the distribution of economic benefits to develop estimates of the resulting impacts on determinants of environmental and human health, and thus ultimately achieve a risk-risk comparison (recognizing, as just noted, that economic benefits in general bring improved standards of health and well-being). But in either case the linkages are complex, contested, and perhaps ultimately unknowable. The calculations entailed in either balancing process are heroic indeed.

8 Concluding Observations

Do I contradict myself?

Very well then, I contradict myself.

I am large; I contain multitudes.

– Walt Whitman, *Leaves of Grass*

This paper asks how people working in complex systems and inter-agency networks might be better able to ensure public safety in a changing and profoundly uncertain world of whose dynamics we are in many ways simply ignorant. A great deal has been learned about the arithmetic and social dynamics of risk in recent decades. Much of this learning might be characterized (adapting Kymlicka's expression) as 'science in the vernacular' – lessons of practical common sense but deep philosophical foundations.

In this paper, I have explored several dimensions of the reframing and contextualization that underlie present attitudes toward what Leiss has labelled risk issue management.

- Fundamentally, the key issues centre not so much on decision in the face of risk, where the probabilities of outcomes or the distribution of risks can be estimated with some confidence, but rather on decisions in settings of profound uncertainty, indeterminacy, or outright ignorance.

- In response to this reframing of the issue, a precautionary approach has been formulated and advocated as a basic feature in the weighing of evidence and balancing of risks (see Annex 1).
- A principle of informed consent, identified as an essential precondition to action by public officials, has been more expansively interpreted. The right of individuals to be consulted in matters of imposed risk and not to have risks imposed involuntarily has become entrenched as a central feature of public decisions under uncertainty.
- Following on the above, it is recognized that many dimensions of the consequences flowing from decisions are relevant in assessing the seriousness with which they are viewed. What were earlier viewed as 'irrational' public perceptions have become accepted by experts and governments as relevant information about the magnitude and significance of these consequences. Furthermore, beyond the consequences themselves, features of the process by which decisions are made are themselves determinants of the acceptability of the outcomes.
- The interpretation of what is needed for effective risk communication has been broadened beyond a simple task for government of translation or communication to an interested public, into a two-way process by which officials listen carefully to public perceptions of consequences and procedural requirements, and indeed carry these perceptions into the framing of questions and terms of reference for science advisory processes.
- The concept of risk communication itself has to give way to the recognition of need for a full analytic-deliberative process that integrates the contributions of science into policy with a process of public deliberation. This development, in turn, is influenced by discourse theory, concepts of communicative action, and other elements of critical social theory that have shaped thinking in the postmodern context.
- Procedures such as science courts, citizen juries, and consensus conferences have been elaborated and tested in a variety of settings.
- The evolving public understanding of values, norms, and procedural imperatives has given rise to a need for a new understanding of the duties of public servants and to a flowering of new documentation and guidance

for public servants on procedures for risk management and regulation. (See Annex 2.)

- Issues of trust, legitimacy, credibility, and confidence have emerged as central to any continuing process.
- It is widely recognized that such trust and credibility require unprecedented openness and transparency, to an extent that demands new guidance for public servants on the matter of the right to personal free expression as balanced against the duty of loyalty to a minister or a department.

We might conclude that, to be effective, any society, system, organizational structure, or single individual must learn to live with and manage inherent and ineradicable tensions and contradictions in objectives and values. Living with irreducible uncertainty in some cases and with inescapable risk in many, and accepting that we do in fact trade off principle against practicality, and rights against resources, pragmatically, all the time, are inescapable realities.

In this setting of contested values and conflicting principles the public service is indeed the locus of permanent and in some sense fundamentally unresolvable continuing problems. Hence implementation in the public service, or review and adjustment in the judicial system, must continually be striking a balance in individual transactions or cases. If there were not fundamental values in conflict, there would be no need for legislation or judgments; transactions could be sorted out in isolation, as they are in well-functioning markets.

We have learned that it is counterproductive to seek that balance in general, to seek equilibrium, or a settled 'third way.' As a society, we try to entrench basic values that are simply not attainable simultaneously on a continuing basis. So we have to ensure somehow that the exercise of individual discretion in transactions occurs in the context of social mechanisms that find balance in ongoing relationships, integrated somehow over time. The successful organization must command the loyalty and trust of its participants and agents; it must ensure compliance at the scale of individual action guided by individual moral codes. To accomplish these goals, it must respect the range of fundamental values held by individual members of the society.

This can be done only by respecting those values in the large decisions of the society. The need is for mechanisms that enable the discourse around and the

fighting for all these basic values to continue in a manner sufficiently respectful to be sustainable indefinitely. Unending discourse, deliberation, and democracy, not technical determinations that can stand on their own merits forever, will necessarily constitute a large part of the solution.

Judgments involving choice in the face of uncertainty and risk cannot be considered technical issues only, or be settled by calculation only. The implication is that governments should not try to make the value judgments involved in a technical matter. The Euclidean/Cartesian injunction “Let us calculate” must give way finally to a Habermasian invitation, “Come, let us reason together.” This move of course does not lead us to any settled third way, but it perhaps offers confidence in a continued process of adaptation and adjustment based on a common long-term interest.

Fundamentally, the lesson is that to disguise an essentially value-laden political choice as a technical and scientific issue is not only dishonest but impractical. In the fields of concern here, it has become widely recognized that the scientific procedures and the analytical components of the work are too malleable. A wide range of actions might be warranted by various plausible readings of inevitably partial and suggestive evidence. Computations can be structured to reflect many political postures and many economic interests. These realities are no longer much contested, even though the appeal to ‘sound science’ continues to dominate much public debate.

From this review, then, emerges an image of continuing interaction of evolving individual beliefs and behaviour coordinated through evolving institutional structures and norms. In the policy process, contending principles (or rights) are balanced against each other and against the reality of limited resources. From this balancing act emerge procedures, rules, and a basic institutional structure intended to be applicable across the whole society. Within these, the separate traditions and cultures of a multinational society establish views, norms, and codes around what is acceptable action. These too involve considerable balancing of conflicting tendencies in order to establish explicit procedures and guidelines. Within these basic structures and guidelines, consequential calculation then addresses achievement of agreed-upon ends (perhaps temporarily agreed-upon ends) within acceptable means or modes of action, in the most efficient and consistent manner possible.

In other words, we can return to the recipe for public servants suggested at the end of section 3, but with two key additions. While the first step remains

generally straightforward (we in Canada are fortunate that there is little contest over respect for the rule of law) and the procedures for the third step are probably improving (we have clearer guidelines for computational processes and the application of scientific advice), our understanding of the second step has changed. The social criteria for what constitutes an acceptable process of risk assessment and risk management, one that is viewed as legitimate and elicits compliance, have been dramatically strengthened. They have moved from a requirement simply for public information to one for effective two-way risk communication that leads to consensus on risk characterization.⁵² In substantial decision problems, the assessment of policy options realistically can take place only upon a foundation of mutual understanding flowing from such an integrated analytic-deliberative interaction.

But what is more, we can no longer view the decision simply as the responsibility of the public servant conscientiously serving the public interest. It is not enough that the public servant reach a personal reflective equilibrium in the balancing of all the contending pressures. In the risk society, activist citizens demand that decisions on the allocation of involuntary risks be much more substantially shared decisions in which the government minister (represented by the public servant as agent) is just one player among many citizens (for whom the public servant is also expected, at the same time, to be serving as agent).

Nevertheless, despite rising concerns for fairness and increasingly stringent claims for participation, the public servant retains a responsibility to promote also the claims of reason. For the matters with which most public servants deal from day to day – rule making, standard setting, contract management, operational problems of delivery – the issues are more technical and the obligations are more consequential. The evidence should loom larger, and the obligation to assist the public to see and interpret the evidence consistently should weigh more heavily. Personal commitment to institutional goals and compliance with agreed procedures and undertakings should be taken for granted.

Yet all this is now part of a much more demanding public sphere. In the end, it is the obligation to promote mutual learning through discourse that rests as the chief duty of the public servant dispensing discretionary justice through social decisions in the face of risk.

⁵² At the same time, as noted above, the apparently increasing vulnerability of the public servant to after-the-fact review and blame not just on grounds of natural justice or social process, but also on the basis of conformity to procedures manual or requirements for paper trails, must also be recognized.

Annex 1: The Precautionary Principle and the Weight of Evidence

The report of the bovine spongiform encephalopathy (BSE) inquiry in the United Kingdom quotes an observation from the tenth report of the U.K. Royal Commission on Environmental Pollution, in 1984.

Evidence that is not conclusive when judged by the conventions adopted in scientific research may yet be reasonable cause for concern to those who have to act on it outside the laboratory. The politician or manager who must decide what action to take now cannot wait for the rigorous proof that is properly demanded by the referee of a scientific journal. For those responsible for the well-being of the public and the protection of the environment there will sometimes be a difference between what can be believed with confidence and what in the absence of certainty it is prudent to assume.⁵³

The calls for evidence-based decision in public policy are now legion, and approval for the concept is near universal. Despite this, there seems to be considerable difficulty in knowing what is really meant by the term. In fact, it hides some considerable conceptual challenges.⁵⁴

Elaborating the reasoning in the quotation above has become a central feature of discussion about what has become known as the precautionary principle, or precautionary approach, about which there is now an extensive literature.⁵⁵ Despite considerable controversy over its meaning and its validity, reference to a precautionary approach has been built into a variety of international agreements, most notably the Rio Declaration and the Biodiversity Convention, as well as into federal legislation in Canada (e.g., the 1996 *Oceans Act* and the *Canadian Environmental Protection Act, 1999*).

⁵³ United Kingdom, 2000, *The BSE Inquiry*, vol. 15, Annex 2 [online], <www.bseinquiry.gov.uk/report/Volume15/toc.htm>.

⁵⁴ R.M. Royall, 1997, *Statistical Evidence: A Likelihood Paradigm* (Boca Raton, Fla.: CRC Press); J.A.C. Sterne and G.D. Smith, 2001, "Sifting the evidence: What's wrong with significance tests?" *British Medical Journal*, vol. 322, p. 226.

⁵⁵ A number of current references are identified in K.B. Ogilvie, 2001, *Applying the Precautionary Principle to Standard Setting for Toxic Substances in Canada* (Toronto: Pollution Probe).

Extensive documentation explores applications in international fisheries,⁵⁶ and a recent directive from the Commission of the European Communities outlines ways in which the precautionary principle is to be applied in the European Union.⁵⁷ Other references below provide more general interpretations and guidance.

It is important to emphasize that, despite much commentary, the precautionary principle is in no way 'anti-scientific.' To the contrary, it offers a reminder of the need to remember the analytical fundamentals underlying interpretation of the strength of evidence or the use of statistical hypothesis testing. In place of rote recipes leaping to routine display of alleged significance levels or confidence intervals, the precautionary principle reminds us of the following essential theoretical starting points.

In basing action on evidence by means of conventional Neyman-Pearson tests, both a null hypothesis and an alternative hypothesis must be identified. Two possible errors must be considered; the second is rarely given the consideration it deserves in a policy setting. This so-called Type II error refers to the risk of failing to reject the null hypothesis when it is in fact false. In the usual situation, this is the risk of failing to identify a hazard that is in fact present. Basing action on the belief that a hazard exists when it in fact does not (a Type I error, rejecting the null hypothesis when it is true) may generally result in an unnecessarily restrictive posture on the part of a government decision maker, with consequent sacrifice of potential economic benefits. Basing action on the belief that a hazard does not exist when in fact it does generally results in the imposition of involuntary risks on others. The appropriate action will therefore be determined by a test procedure that properly balances these two risks in light of the relative costs associated with these two errors. In general, the necessary balancing act will demand attention to the power of the test procedure, something almost inevitably omitted by the allegedly 'scientific' assertion that there is no 'conclusive' evidence of substantial harm.

The noted political scientist Aaron Wildavsky rejects the precautionary principle explicitly on the grounds that the burden of proof ought properly to rest not

⁵⁶ Food and Agriculture Organization (FAO), 1995, *Precautionary Approach to Fisheries, Part I: Guidelines on the Precautionary Approach to Capture Fisheries and Species Introductions*, FAO Fisheries Technical Paper #350, Part 1 (Rome: FAO).

⁵⁷ Commission of the European Communities, 2000, *Communication from the Commission on the Precautionary Principle* [online], [cited February 12, 2001], <http://europa.eu.int/comm/dgs/health_consumer/library/pub/pub07_en.pdf>.

with those proposing new initiatives, but with those proposing action to limit private sector initiatives that purport to be harmless. His objection is fundamentally political.

The immensity of the change [implied by the precautionary principle] requires reemphasis: private action requires proof of the absence of harm; governmental action requires no proof of harm. The relative role[s] of the citizen and the state have been reversed. In the past it was the citizen who was entitled to act and the state that had to justify its intervention; now it is the state that intervenes by right and the citizen who has to give reasons for acting.⁵⁸

(It may of course be argued that the distinction between the citizen and the corporation is crucial in determining the validity of this criticism. There may be limits to the extent to which the legal fiction of the limited liability corporation should be endowed with the fundamental rights of the person.)

The philosopher Kristin Shrader-Frechette, by contrast, starts from a presumption, implicitly shared, it seems, by Beck⁵⁹ and Zolo,⁶⁰ that the “developer’s risk” associated with a Type I error is an economic risk that generally pales by comparison with the “public risk” associated with a Type II error. She therefore argues for much more stringent application of the precautionary principle.⁶¹

As noted by the report of the Royal Society of Canada’s Expert Scientific Panel on the Future of Food Biotechnology (chapter 8), there is good reason, in the context of interventions in complex natural systems, to see the risks of a Type II error as associated with possibly large, perhaps irreversible damage, hence to be heavily weighted in balancing risks and costs. The report notes, however, the need ultimately for balance and a sense of proportion.

Critics of the principle often argue that it puts the burden of proof upon promoters of a technology to *prove* (with low margins of error) its safety, which is simply unrealistic given the scientific impossibility

⁵⁸ A. Wildavsky, 1995, *But Is It True?* (Cambridge, Mass.: Harvard University Press), p. 430.

⁵⁹ Beck.

⁶⁰ D. Zolo, 1992, *Democracy and Complexity: A Realist Approach* (University Park, Penn.: Pennsylvania State University Press).

⁶¹ K.S. Shrader-Frechette, 1991, *Risk and Rationality: Philosophical Foundations for Populist Reforms* (Berkeley: University of California Press).

of proving no risk (one can reject the null hypothesis, but not *prove* it using a standard statistical framework) ... Proponents of the principle argue that it is equally unreasonable to place the burden of proof upon the claim of unacceptable risk, especially if the standard of proof is the normal high confidence rule required by research science ... The Precautionary Principle can be interpreted in a manner that avoids both these extremes ... A more precautionary approach would invoke the simple maxim that the more serious the magnitude and nature of the potential harm to health or environment, the less demanding should be the levels of confidence (the wider the margin for error) in the assumption of risk.⁶²

The Royal Society of Canada's expert panel thus brings us again to a proportionality rule. The lesson is that the responsibility of the public servant to find a balance that can stand up to general tests of justification, and not just to the illusory standards of 'sound science' as a technical determination, cannot be avoided.

Interestingly, and perhaps a bit unexpectedly, Hilborn et al.⁶³ argue that proper application of the precautionary principle in the fisheries context would give important weight to consequences for fishing communities (including risks of possibly irreversible social and economic damage) as well as for fish stocks, and hence would recognize the economic considerations highlighted by Wildavsky and Leiss. In this connection also, the link of the precautionary principle to concepts of intergenerational equity is highlighted.⁶⁴

Both the general approach and more particularly the manner of its concrete implementation remain controversial, however. Two central tensions emerge in two recent Canadian studies.

Industry comments on a recent report of a Pollution Probe study commissioned by Health Canada stress the general notion that risk assessment should be

⁶² Royal Society of Canada, 2001, *Elements of Precaution: Recommendations for the Regulation of Food Biotechnology in Canada* [online], [cited February 17, 2001], report prepared by the Royal Society of Canada's Expert Panel on the Future of Food Biotechnology (Ottawa) at the request of Health Canada, the Canadian Food Inspection Agency and Environment Canada, <www.rsc.ca/foodbiotechnology/GMreportEN.pdf>, pp. 201–02 of the pdf.

⁶³ R. Hilborn et al., 2000, "The precautionary approach and risk management: Can they increase the probability of successes in fishery management?" *Canadian Journal of Fisheries and Aquatic Sciences*. vol. 58, p. 99.

⁶⁴ Weiss.

based on a foundation of sound science, preceding public involvement in more value-laden judgments about response options, in contrast to the emphasis in the report itself on comprehensive and inclusive public involvement from the beginning of any risk dialogue, even prior to risk assessment efforts.⁶⁵

At the same time, in what could be seen as a similarly motivated attempt to get the precautionary genie back into the empirical bottle, the Government of Canada released a discussion paper developed by an interdepartmental working group, setting out proposed guiding principles for use of the precautionary principle by public servants in taking risk management decisions.⁶⁶ The extent of the work needed before there can be any widely shared operational understanding of the workings of the precautionary approach is evident from the difficulties the document displays in its attempts to span what emerge as two substantially different cultures.

⁶⁵ Ogilvie.

⁶⁶ Canada, Privy Council Office, 2001, *A Canadian Perspective on the Precautionary Approach/ Principle: Discussion Document* [online], [cited December 2, 2001], <www.pco-bcp.gc.ca/raoics-srdc/docs/precaution/Discussion/discussion_e.htm>.

Annex 2: Guidance for Public Servants

The last two decades have brought substantial change in views of government roles and styles, particularly with respect to regulatory interventions. At the same time as there is growing commitment to lifting regulatory burdens, however, there is also increased public concern about social risks and a demand for more stringent scrutiny of development proposals. Many decisions that attempt to capitalize on the opportunities afforded by advancements in science and technology involve risks that stimulate intense public concerns about health, safety, and future well-being. Extensive risk assessment exercises are demanded. The increased public commitment of the past decade to audit and accountability within Western governments has further increased the degree of scrutiny to which official decisions are exposed.

In response to these developments, Canadian, U.S., and British governments have created a growing array of documents that provide formal guidance to public servants charged with making decisions on risk that will affect society collectively. General instructions for regulatory policy and risk assessment procedures reveal several common elements, first with respect to the issue of ‘science into policy,’ or the process for seeking science advice and involving scientific advisory groups, and second with respect to risk communication and involvement with stakeholders and concerned publics.

With respect to the first issue, three themes emerge.

A2.1 When to Seek Scientific Advice

‘Scientific advice’ is defined as value-added guidance derived from scientific findings, data, theories, and conclusions provided to inform policy and regulatory decision making. Decision makers need to be aware of the importance of seeking scientific advice, and departments must be able to anticipate, early on, issues that demand it.

A2.2 Inclusiveness

Advice should be sought from a wide range of scientific sources and experts. All governments emphasize that due weight needs to be given to the ‘traditional knowledge’ of local peoples, and that decision makers must balance multiple

viewpoints and be open to both solicited and unsolicited advice from external and international sources.

A2.3 Sound Science/Sound Advice

‘Sound science’ needs to be supported by research and policy analysis. All advisory processes must be subject to due diligence procedures such as scientific peer review.

With respect to the second issue, the central development is recognition that public perceptions of risk, though they may differ from expert assessments, are not necessarily irrational. Risk communication is recognized as more than a one-way flow of information to a concerned public, and indeed as more than simply an accurate translation of scientific views and uncertainties. Risk communication is seen, rather, as an ongoing two-way flow of information that seeks public understanding of both scientific assessments of likelihoods of low-probability events and public responses to possible consequences. Central agency guidance to public servants has therefore emphasized the following themes.

A2.3.1 Risk and Uncertainty

Public policy decisions involving risk contain a degree of uncertainty that must be assessed, communicated, and managed. Risk management will produce cost-effective and scientifically sound integrated action while taking into account social, cultural, ethical, political, and legal considerations. All departments should have a clearly defined set of risk management guidelines, including how and when the precautionary principle should be applied to maintain confidence that a consistent and effective approach is being used across government. It is imperative to communicate to the public and stakeholders the degree and nature of scientific uncertainty and the risk management approaches used in reaching decisions.

A2.3.2 Openness

Decision-making processes must be transparent and open to stakeholders. Transparency implies that there is a clear articulation of the way decisions

are reached, that policies are presented in an open forum, and that the public is given access to the findings and advice of scientists before final decisions are reached.

A2.3.3 Review/Implementation

Review and implementation entail an evaluation of the decision-making process to capture the best practices that emerge from the advisory process, as well as a subsequent review of science-based decisions to determine whether recent advances in knowledge alter the scientific advice used to make the decision.

In the midst of all the encouragement to public servants to engage in much more extensive processes of consultation and deliberation, however, there is also a reminder about responsibilities in our parliamentary democracy. In the conventional interpretations of our Westminster model of parliamentary democracy, at least as understood by the Privy Council Office in 1990 and quoted below, the lines are clear.

The relationship between the Government and Parliament expresses the fundamental principle of responsible government, namely that those who exercise constitutional authority must be part of and responsible to Parliament. It is Ministers, and not officials, who exercise the constitutional authority of the Crown; and it is Ministers, and not their officials, who are responsible to Parliament. Officials are accountable to Ministers. They may assist Ministers by answering directly before Parliamentary committees; but there should be no doubt that Ministers, and not officials, are constitutionally responsible for the exercise of the power of the state. Thus the cornerstone of responsible government, as manifested in ministerial responsibility, ensures the supremacy of Parliament.⁶⁷

⁶⁷ Canada, Privy Council Office, 1990.

Annex 3: Changing Contexts for Democratic Decision

Increasingly we recognize that government decision makers and officials who mete out discretionary justice are inevitably challenged to keep pace with evolving cultural and ethical foundations in the communities they serve. At a general level, the very concepts of democracy are ceaselessly embattled and negotiated amongst adversaries in an atmosphere of growing fragmentation.

Economics students joke that “a transition period is the period of uncertain length between two transition periods.” As we seek to characterize the context within which public servants must deal with social risk, we find many assertions of fundamental transition.

It is crucial to realize that, with modern democracy, we are dealing with a new political form of society whose specificity comes from the articulation between two different traditions. On one side we have the liberal tradition constituted by the rule of law, the defence of human rights and the respect of individual liberty; on the other the democratic tradition whose main ideas are those of equality, identity between governing and governed and popular sovereignty ... Democratic logics always entail drawing a frontier between “us” and “them,” those who belong to the demos and those who are outside it. This is the condition for the very exercise of democratic rights. It necessarily creates a tension with the liberal emphasis on respect of “human rights” since there is no guarantee that a decision made through democratic procedures will not jeopardize some existing rights ... What cannot be contestable in a liberal democracy is the idea that it is legitimate to establish limits to popular sovereignty in the name of liberty. Hence its paradoxical nature.⁶⁸

In such a setting there is little settled guidance for public servants seeking to understand the basic structure of the rule of law under which they labour.

What is missing ... is a proper reflection on the moment of “decision” which characterizes the field of politics. This has serious consequences, since it is precisely those decisions – which are always taken in an undecidable terrain – which structure hegemonic relations ... It is by finally acknowledging the contradictory tendencies set to work

⁶⁸ Mouffe, pp. 2, 4.

by social exchange and the fragility of the democratic order that we will be able to grasp what I have argued is the task confronting democracy: how to transform the potential antagonism existing in human relations into an agonism ... an agonistic pluralism ... We can never be completely satisfied we have made a good choice since a decision in favour of one alternative is always at the detriment of another one ... Politicization never ceases because undecidability continues to inhabit the decision. Every consensus appears as stabilization of something essentially unstable and chaotic. Chaos and instability are irreducible, but this is at once a risk and a chance ... An ethics which strives to create among us a new form of bond, a bond that recognizes us as divided subjects ... is, in my view, particularly suited to a pluralist democracy. It does not dream of an impossible reconciliation because it acknowledges not only that the multiplicity of ideas of the good is irreducible, but also that antagonism and violence are ineradicable. What to do with this violence, how to deal with this antagonism, those are the ethical questions with which a pluralistic-democratic politics will for ever be confronted and for which there can never be a final solution ... This is to recognize that the field of the political is not reducible to a rational moral calculus and always requires decisions. To discard the illusion of a possible reconciliation of ethics and politics, and to come to terms with the never-ending interrogation of the political by the ethical, this is indeed the only way of acknowledging the democratic paradox.⁶⁹

In his book *Risk Society* (first published in German in 1986), Ulrich Beck points to a different set of tensions contributing to the uncertainty under which the public servant labours. “Based on the assessment that we are eye-witnesses – as subjects and objects – of a break within modernity, which is freeing itself from the contours of the classical industrial society and forging a new form – the (industrial) risk society,” Beck sees a continuing “race between perceptible wealth and imperceptible risks.” In this transition, “the place of *eliminating scarcity* is taken by *eliminating risk* ... Two totally different value systems are expressed in these two types of modern society ... the *commonality of anxiety* takes the place of the *commonality of need*.” Or as Scott Lash and Brian Wynne express it in their preface to the book, “The axial principle of industrial society is the distribution of goods, while that of the risk society is the distribution of ‘bads’ or dangers.”

⁶⁹ Ibid., selections from the concluding chapter, “The ethics of democracy.”

Associated with this transition is an institutional development that Beck labels an “unbinding of politics,” a democratization that creates basic tensions in a decentralization of official decision making. He argues that these tensions reflect

a naïve view that it would be possible on the one hand to enforce the democratic rights of the citizens, and on the other hand to preserve hierarchical authority relationships in reaching political decisions ... this perspective is undermined in several ways ... It becomes increasingly clear that finding political “solutions” becomes *contingent* precisely as democratic rights are established ... Both the formulation of the program and the decision-making process, as well as the enforcing of those decisions, must rather be understood as a process of *collective action*. This implies, however, that the official decision-making authority of political institutions is necessarily *decentralized*. The political-administrative system then can no longer be the only or the central locus of political events. In tandem *with* the democratisation, networks of agreement and participation, negotiation, reinterpretation and possible resistance come into being across the formal horizontal and vertical structure of authorizations and jurisdictions ...

On the one hand, the centering and specialization of the political system and its institutions (parliament, executive branch, administration, etc) is functionally necessary ... That is also the only way it is possible to practice democracy in the sense of choosing a political leadership ... On the other hand, this authoritarian understanding of political leading positions and leadership becomes systematically *eviscerated and unreal* along *with* the establishment and observance of democratic rights ... Constitutional rights in this sense are hinges for a decentralization of politics with long-term amplification effects ... The growing self confidence and participatory interest of the citizens ... may look like “resistance against state authority” to an authoritarian understanding of democracy ... A code word for this development is ... *participation* ... Politics in newer approaches is now viewed as the collaboration of different agents even *contrary* to formal hierarchies and *across* fixed responsibilities ... All of this emphasizes the contingency of the political sphere which has externally remained consistently hierarchical in the formal sense.

With others, Zolo suggests that the idea of “representative democracy” must now be considered obsolete. In its place he suggests a fresh perspective in which

“the political system is seen as a social structure which fulfils the essential function of reducing fear through the selective regulation of social risks.”⁷⁰

Reviewing these respectively French, German, and Italian perspectives on the changing nature of the democracies within which public servants must receive and discharge their responsibilities, Gabardi is led to describe the turmoil as a late modern/postmodern transition.⁷¹ Within this transition, he suggests, we can distinguish four alternative concepts of democracy contending – a communitarian democracy, a deliberative democracy, an agonistic democracy, and an associative democracy. None, however, is a plausible alternative to what already exists, which Zolo calls “differentiated and limited autocratic systems,” or “postmodern neoliberal techno-oligarchies.” Because the likelihood of transition to any settled alternative is vanishingly small, the public servant must expect to work increasingly in a society in which the democratic ethos is seen to centre on persistent local resistance to governance and persistent skepticism about any of the decisions emanating from traditional institutions of governance.

Yet another of idea of continuing tension – though much less dramatic – underlies an expectation articulated long ago of an ongoing alternation between rule of law and administrative discretion. Before the work of Calabresi and Bobbitt, another legal scholar, K. Culp Davis approvingly quotes Morris R. Cohen as saying,

Legal history shows, if not alternating periods of justice according to law and justice without law, at least periodic waves of reform during which the sense of justice, natural law, or equity introduces life and flexibility into the law and makes it adjustable to its work. In course of time, however, under the social demand for certainty, equity gets hardened and reduced to rigid rules, so that, after a while, a new reform wave is necessary.⁷²

But where then does this leave us with respect to Lord Phillips’s final questions? If the ground rules are in such ceaseless motion, how can any retrospective audit go about assuring the reasonable consumer that the balance has been found in the right place (let alone attempt to assess responsibility and blame)?

⁷⁰ Zolo, pp. 180–81.

⁷¹ W. Gabardi, 2001, *Negotiating Postmodernism* (Minneapolis: University of Minnesota Press).

⁷² K.C. Davis, 1969, *Discretionary Justice: A Preliminary Inquiry* (Urbana, Ill.: University of Chicago Press), p. 19.

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