DESIGN CHALLENGES FOR THE STRATEGIC STATE:
BRICOLAGE AND SABOTAGE

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Summary

Much reengineering of the state is bound to occur as the welfare state is retrofitted and gradually replaced by a strategic state that is less focused on protection and redistribution and much more on productivity and innovation. This has led to the emergence of a multitude of new organization forms that are not, strictly speaking, patterned on the traditional hierarchical departmental model. This has, in turn, created new challenges in the design of organizations that can ensure a requisite mix of reliability, accountability, nimbleness, exploration capability, innovation, and creativity. Yet, organization design capability is poorly instituted in the Canadian system. Organization design is the Achilles’ heel of Canadian governance. The cases of the Canadian Nuclear Safety Commission and of Service Canada are used to illustrate the costs of organization design failures. In conclusion, we suggest ways in which the organizational design function might be bolstered.

Résumé

A proportion que l’état providence axé sur la protection et la redistribution est remplacé par l’état stratège bien davantage intéressé à la productivité et à l’innovation, des radoubs s’imposent. Voilà qui entraîne l’émergence d’une multitude de nouvelles formes organisationnelles qui ne sont pas strictement calquées sur le modèle du ministère traditionnel hiérarchique. S’ensuivent de nouveaux défis dans le design d’organisations capables d’assurer le mélange requis de fiabilité, imputabilité, souplesse, capacité exploratrice, innovation et créativité. Mais les compétences en design organisationnel sont mal installées dans le système canadien. En fait le design organisationnel est le talon d’Achille de la gouvernance canadienne. On utilise les expériences de la Commission canadienne de sûreté nucléaire et de Service Canada pour montrer les coûts des faiblesses de design organisationnel. En conclusion, on suggère des façons de renforcer cette fonction dans le système canadien.

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« The idea of design involves inquiry into systems that do not yet exist »
A. G. L. Romme

Introduction

Much reengineering of the state is bound to occur as the welfare state is retrofitted and gradually replaced by a strategic state that is less focused on protection and redistribution and much more on productivity and innovation. This has led to the emergence of a multitude of new organization forms that are not, strictly speaking, patterned on the traditional hierarchical departmental model. This has, in turn, created new challenges in the design of organizations that can ensure a requisite mix of reliability, accountability, nimbleness, exploration capability, innovation, and creativity. Yet, organization design capability is poorly instituted in the Canadian system.

Organizational design is most often inherited from tradition and history, or is the result of improvisation by the last batch of imperial newcomers, eager to inflict their footprint on the organization they have just recently joined. As a result, there is often not a good fit between the design, the mission and the context of the organization: neither the faceless forces of history nor the hastily drafted back-of-envelope organization charts ensure good design.¹

So, concern about design surfaces, but the response is rarely adequate: the skimpiest of contours are sketched (as amateurishly as the last time the concern emerged) and the ensuing job of fleshing out the details is delegated to junior executives as part of what is called an implementation strategy. It is hardly surprising that what ensues is not of great significance: little more than tinkering with organization charts.

The major source of the problem is that this sort of architectural work requires a wholly different way of thinking. It is not (and cannot be) guided by the single-minded sort of logic that dominates science (the search for general knowledge and the subsequent test of its validity), but by an inquiry into systems that do not yet exist. The logic, in this latter case, is that of disclosing and crafting a new ‘world’, with the sole purpose of ascertaining if it works, and to ensure that it does².

In the first section, we provide a conceptual framework, and we identify the particular challenges created by the emergence of a world in which nobody is in charge. In the second section, we sketch the many dimensions of the organizational design process. In the third section, we use this approach to examine two pathologies of governance recently observed on the federal scene in Canada: a case of passive sabotage (where fixation on an old and inadequate design in the face of new challenges has proved disastrous – nuclear safety) and a case of active sabotage (i.e., deliberate use of design to ensure failure – Service Canada). In conclusion, we suggest ways in which the organizational design function might be bolstered at the federal level in Canada, but we also underline the fact that this kind of function needs to be instituted as well within the federation, and that such mechanisms should be helpful not only in improving effective governance but also in exposing the ugly face of sabotage early enough to prevent the worst outcomes.
Designing a living organization

i. Organization and organization design

An organization may be X-rayed as a mix of people (stakeholders of all sorts with their skills, talents, and responsibilities), architecture (relationships of all sorts defined by the organization charts and the like), routines (process, policies and procedures), and culture (shared values, beliefs, language, norms and mindsets).

At any particular time, these components (PARC) are assembled within organizations in various ways – bound together by ligatures making them into a more or less coherent whole. A shock disturbing any of these components (whether it originates within or without the organization, whether it modifies a physical or a symbolic dimension) triggers some re-alignment in all the other dimensions. So the organization continually evolves: more so and faster when the environment is turbulent.

Organizations are therefore assemblages that are constantly undermined (over-ground and underground) as a result of new circumstances, of the action of new or transformed stakeholders, new emerging relationships, new procedures, or changes in the material or symbolic order. The role of the organization designer is to intervene in real time in an existing assemblage to improve this four-dimensional configuration of the organization in a manner that generates better dynamic performance and resilience. This sort of intervention has to take into account the turbulence and evolution of the environment in which the organization operates, but also the limitations of such tweaking given imperfect knowledge and the profound uncertainty about what it will generate in terms of unintended consequences.

The core task of organizational design is to disclose new worlds. For organizations are worlds: they are a totality of interrelated pieces of equipment to carry out a specific task (such hammering in a nail); tasks that are undertaken for some purposes (like building a house); and the activities involved bestow those accomplishing them with identities (like being a carpenter). This is the sense in which one speaks of the world of medicine, business or academe.

However, there is more to organizations than the interconnection of equipment, purposes and identities. In talking about these new worlds, Spinosa et al use the word style to refer to the ways in which all the practices are coordinated and fit together in an organization. Style is what coordinates action, what makes certain kinds of activities and things matter.

In their study, Spinosa et al show how economic, social and political entrepreneurs are those who spot disharmonies between what seems to be the rules in good currency and what would appear to be the sort of practice likely to be effective. They detect anomalies. Those anomalies create puzzles. The reaction to puzzles by inattentive observers is often to ignore them, and pursue the on-going tasks. Entrepreneurs recognize instead that the anomalies are creating mysteries, and that what is called for are ways of understanding mysteries, the search for “guidelines for solving a mystery by organized exploration of possibilities.”
Tackling such an exploratory task can only be done by trial and error. This is the world of prototyping, of experimentation, of serious play, of organization design. Innovative and entrepreneurial persons in all areas (economic, political, social) become organization designers and redefine the style of their organization.6

A significant handicap in this sort of endeavor is that this type of world-disclosing activity or inquiry – based on empathy (for one designs always for somebody else), on holistic problem-solving (looking for what works in toto), and prototyping (not waiting until one has the best solution, but starting with anything promising, prototype it, get feedback, plays with it, and learn in that way) – Tim Brown quoted in Martin 2004:11 – is not what higher education is organized to foster, and, as a result, the skills required are not necessarily cultivated and widely available.7

ii. Successful design work in a world where nobody is in charge

One of the most important changes of kind that has occurred over the last while in the institutional order that defines the rules of the game in our democratic societies is the drift from a world where some person or group could (legitimately or not) claim to be in charge, to a world where complexity, turbulence and surprises are so important that it cannot be argued persuasively that anybody is in charge.8

This has significantly increased the complexity of the design work necessary to keep the institutional order up to the challenges generated by such a turbulent environment. It has been argued that what is required is: (1) a new vocabulary because critical description is crucial at the diagnostic phase; (2) a new form of knowledge, a new type of exploratory activity and a new process of experimentalism-based creative thinking; and (3) a new type of competencies to do this work.

Moreover it requires (4) windows of opportunity to ‘tinker’ with the organization with a modicum of chances of success (i.e., at a time and in a way that prevents these efforts from being neutralized by the dynamic conservatism of those who benefit from the existing order). This often calls for exceptional circumstances. Otherwise the pressures of those confronted with real and substantial losses in the short term will trump the timid actions of those hoping for uncertain future benefits from a new order.

However, this process will lead to nothing substantial unless one has been able to develop (5) a mental tool box of levers capable of guiding the work of crafting new organizations, and useable in such design work. But, because organization design is akin to creating a new world, none of the above will suffice unless the design process (6) truly discloses a coherent world (a body) and contributes to impart it with a style (a soul) that provides it with a sextant – focal points that underpin its being able to sustain effective coordination and change.

Given these conditions for successful design, it is hardly surprising that such work is eschewed, and that so many organizations are so poorly designed. It is much easier for governors and managers to focus their attention on less daunting tasks.
A sketch of the design process

The design process is difficult and elusive, very much like the pragmatic inquiry of professionals in their practice. But it must be anchored, at the very least in a loose protocol if it is to serve as a launching pad for effective exploration.

i. The what: the Simons-type model as a possible template

Robert Simons (2005) has proposed a template based on four basic questions that one might reformulate in the following way:

- **Customer/Stakeholder definition**
  what are the best possible assemblages of meaningful primary stakeholders that would represent fully the range of effective partners, clients, etc. making up the broad unit structure?

- **Performance variables**
  what are the most effective diagnostic control systems (the various mechanisms likely to best monitor the organization and to suggest ways to excite them)?

- **Creative tension resolution**
  what are the best mechanisms to resolve the creative tensions between the frames of mind of the different layers and rings of partners in the organization and likely to catalyze interactive networks?

- **Commitment to others**
  what are the mechanisms of shared responsibilities and commitment to others that will ensure some coherence for the organization and the requisite mix of reliability and innovation?

The answers to these questions are meant to help define the four basic dimensions of the Simons framework:

- the span of control (who should decide?),
- the span of accountability (tradeoffs in performance measures when it comes to rendering of accounts),
- the span of influence (the full nature of the interactions and the degree of mobilization they entail), and
- the span of support (the full range of shared responsibilities).

Simons suggests that proper alignment for the organization requires that the spans of control (hard) and support (soft) – on the supply side of resources - be adequate to meet the obligations imposed by the spans of accountability (hard) and influence (soft) – on the demand side of resources.
ii. The how: experimentalism and serious play in a dynamic world

At the source of the process leading to the constant adaptation of the organization design when nobody is in charge, is the dual capacity of allowing (1) as many stakeholders as possible who detect an anomaly to initiate remedial action, and (2) such action to proceed experimentally even though the remedial action is not perfect on the basis of a strong belief that mass collaboration will help improve it and thereby find a faster way to the next best (always temporary) solution.

This calls for (1) a drift toward open source governance (i.e., a form of governance that enables each partner, as much as possible, to have access to the “code” and to “tinker” freely with the way the system works within certain well-accepted constraints)\(^9\); and (2) a priority to “serious play” (i.e., a premium on experimentation with imperfect prototypes one might be able to improve by retooling, restructuring and reframing innovatively and productively)\(^10\).

By partitioning the overall terrain into issues domains and communities of meaning or communities of fate (i.e., assemblages of people united in their common concern for shared problems or a shared passion for a topic or set of issues), it is possible to identify a large number of sub-games – each requiring a specific treatment. Each issue-domain (health, education, environment, etc.) and even some sub-issue domains (like mental health), being multifaceted and somewhat different must be dealt with on an *ad hoc* basis (in the way a sculptor facing blocks of stone of different texture must deal with each block differently) with a view to allowing the design of its own stewardship to emerge.

This open system takes into account the people with a substantial stake in the issue domain, the resources available and the culture in place, and allows experiments to shape the required mix of principles and norms, of rules and decision-making procedures likely to promote the preferred mix of efficiency, resilience and learning. A template likely to be of use everywhere may not be available yet, but it does not mean that a workable one cannot be elicited *hic et nunc*.

However, it is not sufficient to ensure open access, one must also ensure that the appropriate motivations are nurtured so that all meaningful stakeholders are willing and able to engage in “serious play” (i.e., become truly producers of governance through tinkering with the governance apparatus within certain limits). This in turn requires that a modicum of mass collaboration and trust prevail\(^11\), and calls for a reconfiguration of governance taking the communities of meaning seriously. Such an approach may not only suggest that very different arrangements are likely to emerge from place to place, but would underline the importance of regarding any such arrangement as essentially temporary: the ground is in motion and diversity is likely to acquire new faces, so different patterns of organization designs are likely to emerge. Consequently, good governance would require that any formal or binding arrangement be revisited, played with, and adjusted to take into account the evolving diversity of circumstances. It would open the door to the design of more complex and innovative arrangements likely to deal more effectively with deep diversity\(^12\).
Prototyping would appear to be the main activity underpinning serious play:

- identifying some top requirements as quickly as possible,
- putting in place a quick-and-dirty provisional medium of co-development,
- allowing as many interested parties to get involved as partners in improving the arrangement,
- encouraging iterative prototyping, and
- encouraging all, through playing with prototypes, to get a better understanding of the problems, of their priorities, and of themselves.

The purpose of the exercise is to create a dialogue (creative interaction) between people and prototypes. This may be more important than creating dialogue between people alone. It is predicated on a culture of active participation that would need to be nurtured. The sort of democratization of design that ensues, and the sort of playfulness and adventure that is required for “serious play” with prototypes, are essential for the process to succeed, and they apply equally well to narrow or broad organizational concerns.

iii. the wherewithal: tripartite bricolage

In the beginning is the anomaly noted by a stakeholder that points to an aspect of the performance of the organization that would appear to be much below legitimate expectations. This calls for *bricolage* (i.e., tinkering with the ways the organization operates, or with certain of its structural features, or with the definition of the purposes of the organization – re-tooling, restructuring or reframing will be the labels used for such *bricolage*).

As Donald Schön explained, any social system (and organizations are social systems) contains technology, structure and theory: “the structure is the set of roles and relations among individual members. The theory consists of the views held within the social system about its purposes, its operations, its environment and its future. Both reflect, and in turn influence, the prevailing technology of the system. These dimensions all hang together so that any change in one produces change in the others”.

Obviously the law of least effort entices stakeholders to tinker with technology and operations first, for it is likely to be easier (e.g. generate least resistance, take less time, and involve fewer people) than if one were to fiddle with the structure or to question the purpose of the organization. Yet often, most efforts to correct anomalies often quickly become a mix of the three sorts of *bricolage*.

Continuous trial and error lead to experimentation with different prototypes that embody different degrees of retooling, restructuring and reframing. Indeed, minor retooling often triggers a cascade of effects that end up, over time, with major reframing. However there is no guarantee. In other cases, blockages at one of these levels may be powerful enough to derail the whole process of repairs that has been triggered by the original anomalies, and organizational decline may ensue.
Finally, the nature of the anomalies and the severity of their impact may trigger different approaches to the required repairs. The inertia of the organization and the degree of cognitive dissonance may well mean inattention to the early warning signals, and significant denial of difficulties even in the face of very poor performance. This often makes minor bricolage less likely, and allows organizational decline to proceed unhindered until some threshold is reached when action is finally seen as mandatory. In such cases, instant major overhaul is often the only option.

In a mega-system like the state apparatus of a modern industrialized socio-economy, the potential for inattention to anomalies and neglect of repairs is very high especially if there is no agency charged with the responsibility of oversight of the adequacy of the organizational infrastructure, of detection of anomalies requiring repairs, and of the conduct of repairs when needed.

In the Canadian federal government, following a 2007 restructuring of the Privy Council Office (PCO), the “machinery of government” apparatus is described as follows: “(it) provides advice and supports the Prime Minister on matters related to the Prime Minister’s prerogative and responsibilities as the overall manager of Canada’s system of Cabinet government … supply(ing) advice on matters relating to:

- The structure, organization and functioning of government;
- The organization of Cabinet and its committees;
- Ministerial mandates and responsibilities;
- Transitions from government to government;
- Ethics and accountability issues (consistent with Westminster-style government); and
- The role of the Crown, the Governor General ad Government House, as well as issues related to honours policy”15

Part of the responsibilities of a deputy secretary, it is grouped with legislation and house planning as well as formal legal advice to the Prime Minister and others in the PCO portfolio. It does not seem to give priority to monitoring the state of the organizational infrastructure in a continuous and particularly careful way, and appears prone to be inattentive to any anomaly that does not generate a crisis.

To the sort of inattention or neglect that this seems to imply, one must add the possibility of active resistance of officials (in private, public and social organizations) to any profound change, and even more so when what is involved constitutes nothing less than “a challenge to the psychological comfort of the powerful”16.

The massive redesign of many organizations and institutions as a result the drift from Big G government to small g governance (from the welfare state to the strategic state) in some cases (like Canada) has generated forceful resistance within the technocracy (often emboldened by an ambivalent citizenry not eager to lose state protection) to new deals that would call for a lower valence for the state, more inter-sector partnerships, and more mass collaboration – all initiatives that have been seen as reducing the power of the powerful including, especially, the upper levels of the bureaucracy in place, and implying a greater personal responsibility for the citizenry.
In a context inhabited by neglect of organizational design issues, badly equipped capacity-wise to deal aptly and seriously with such issues, and plagued with powerful defensive technocracies, superficial tinkering with organization charts is often administratively expedient even though it is hardly a recipe for wise design.

When crises boil over, technological pathologies and a few minor structural defects are corrected, but when the cultures of organizations are indicted (when what is involved is nothing less than a need to rethink and reframe the notion of the business the organization is in, the theory of what the organization is about), the forces of inertia, self-interest, or fear often succeed in stopping any profound transformation. By a sleight of hand that amounts to nothing more than a modification of some superficial rules of the game or a slight exercise of musical chairs for the officials in the top ranks of the sick organization, the pretense that the problem has been resolved quickly gets accredited.

Even when particular committees of inquiry or mandate review forums draw attention to the need for more fundamental transformation at the level of theory and organizational culture, those matters are readily dismissed as fuzzy and too elusive to be tractable, and there is little will either within the organization or at the oversight or monitoring agency level to insist on those foundational dimensions being dealt with on the pretense that such endeavors are too complex, take too much time, and are rarely successful. Such rationalizations force these foundational issues off the table. 17

As a result, most initiatives that are carried out under the general rubric of organizational design are merely tinkering with innocuous technological features (as open annual meetings and the like) or superficial structural features or organization charts without ever attempting to resolve the admittedly more difficult and obviously more important problem of the reconciliation of the different frames of reference and of the trans-substantiation of the organizational culture or theory of what the organization is about. The rationale is that it is easier to start with easy moves, but it is hardly persuasive when this entails never going beyond that stage.

Indeed, one of the most important occluded factors in the study of organizational design is the capacity for sabotage by groups with a vested interest in the status quo. These occluded forces are often so important that some wise transformation experts, like Albert Hirschman, have suggested that no reform is likely to succeed unless it comes as a total surprise, and act as a thunderbolt. This may be unduly pessimistic. Much can probably be done, despite the countervailing forces, but only if the saboteurs are exposed (be they passive or active) and if corrosive critical thinking is allowed to openly question their rearguard action as sabotage.

The best way to illustrate the significance of organization design may be to expose some failures that can be ascribed either to deliberate design sabotage or to a nonchalant attitude that allowed poor organizational design to survive.

Such active or passive sabotage can easily do much damage, especially when there is no one monitoring the scene, when the forces of denial are powerful, and when there is little in place that might serve as fail-safe mechanisms.
The all-too-easy world of sabotage

The design process sketched in the last sections suggests the basic elements of effective design and redesign. Such an ideal continuing dynamic adjustment is rarely observed in the real world. There are always weaknesses that survive at different pressure points in the process.

One may identify four major sources of design failures:

I the 6 preconditions not being in place
II the Simons conditions being unmet: the what
III poor social learning through prototyping and serious play failing: the how
IV the failure of going beyond the superficial in the tripartite bricolage: the wherewithal

The first major source explains why organizational design is not well done in general. It can only be repaired by a fundamental change in the mindset and a massive investment (intellectual and financial) in this type of work. While it must be held responsible for much of poor or whimsical design everywhere, it is difficult to ascribe particular failures to this general disease.

Nothing but full recognition of the centrality of this long-term function, and its being embedded formally in the institutional architecture will ensure that the work is done. In the absence of such embeddedness, it may be said that there will be no continuous monitoring and evaluation of organizational design, and that it is hardly surprising that the what, the how and the wherewithal of good organizational design is not what it should be.

The other three sources are more proximate, one might say. They point to particular actions that might have prevented observed failures or might have triggered them.

In the rest of this section, we briefly describe the background, the issue and observed blockages in two recent files, and we point to significant design failures and equally important inaction when repairs were in order. In each case, the Simons conditions were not met, social learning was stunted, and critical reflections about the philosophy of the organization did not occur.

i. Two vignettes

A Canadian Nuclear Safety Commission

(1) Background

The independent Atomic Energy Control Board (AECB) was established in 1946 to control and supervise the development, application and peaceful uses of nuclear energy in Canada, as well as to participate in an international measure of control. From the beginning, the AECB was given regulatory powers aimed at encouraging and facilitating research and investigations as well as developing, controlling, supervising and licensing the production, application and use of atomic energy. The possibility existed from the beginning for a company to be established. Atomic Energy of Canada Limited (AECL) was established in 1952 with no mandate specified for it in legislation.
Canada quickly became a world leader in this sector – creating multi-purpose research reactors from scratch, and enabling the first Cobalt-60 treatment for cancer in the world in Victoria, B.C. in 1961; together with AECL, Ontario Hydro and General Electric, a commercial power generator (CANDU) was brought forth in 1962.

Nevertheless, the passage of time has changed the landscape. In the twenty years between 1974 and 1994, several reviews took place including one by Parliament, two ministerial reviews and other studies. The 1994 Auditor General’s Report enumerated key changes that had transformed the context since the AECB’s inception – federal regulatory reform, cost recovery (with the consequence that regulatees wanted more say), more age-related failures of reactors, increasing citizen concerns over the environment, environmental assessment requirements, etc. – noting that stricter procedures were being required and that judicial review of regulatory inspections and enforcement was increasingly being invoked.

A refurbished regulatory apparatus was put in place – the Canadian Nuclear Safety Commission (CNSC) through legislation that received Royal Assent in 1997, and came into effect in 2000. The new apparatus was designed to split regulatory powers from concerns about research and development as well as marketing, and provided for a much more detailed and prescriptive approach to regulating. The CNSC was directed by the authorizing legislation to regulate “the use of nuclear energy and materials to protect (to a reasonable level and in a manner consistent with Canada’s international obligations) health, safety and the environment … (as well as) to respect Canada’s international commitments on the peaceful use of nuclear power”. This was (and is) to be done through regulations that must be vetted by the Governor in Council. The CNSC has the authority to exempt any activity, person, class of person or quantity of nuclear substance, temporarily or permanently, from the application of the governing legislation, in accordance with regulations. The CNSC also conducts legislated environmental assessments, and implements non-proliferation provisions of nuclear cooperation agreements between Canada and its nuclear trading partners, and Canada bilateral agreements with the International Atomic Energy Agency (IAEA) on nuclear safeguards verification.

The CNSC is a “court of record”, whose president may establish panels of commission members and decides if they should act as the commission (except with respect to regulations and by-law making), but has no voting privileges except in case of a tie. It operates with 800 employees and a budget of $90M.

The Minister of Natural Resources Canada has the authority to issue binding directives to CNSC “on broad policy matters with respect to the objects of the Commission”. In effect, CNSC is part of the minister’s portfolio. Nevertheless, because it is an independent quasi-judicial administrative tribunal, the responsible minister and any other minister (e.g., one whose responsibilities are affected by it) are expected to follow centrally issued advice in dealings with it. That advice states “(t)he nature of the relationship between a Minister and an administrative tribunal with independent decision-making or quasi-judicial functions is a particularly sensitive issue. … Ministers and Secretaries of State shall not intervene, or appear to intervene, on behalf of any person or entity, with quasi-judicial tribunals, on any matter before them that requires a decision in their quasi-judicial capacity, unless authorized by law.”
The change in the nuclear industry has broadened and deepened since the Auditor General’s 1994 Report.

On one hand, it has become an increasingly sensitive industry worldwide for several reasons including those related to aging facilities as well as fears related to security, health and the environment. Aging nuclear power generating facilities are raising questions of replacement choices and decommissioning costs. Security fears related to proliferation together with the rise of state and non-state terrorism, as well as growing health and environmental concerns including waste management, are also increasing in importance as time passes. (For example, some strongly safety-minded experts call for a design of a nuclear reactor that ensures the probability of an accident causing harm to a member of the public who is outside a nuclear facility is less that one in a million in one year. In 1990, with various upgrades, an accident at a key AECL research reactor for world medical isotope production that was built in 1957 was conjectured by critics as likely to be in the range of one in 10,000. It is currently, of course, significantly higher today.)

On the other hand, peaceful uses continue to grow in nature and scope: the world has begun to take a hard look at its dependency on oil and to look at nuclear energy as an alternative; medical applications of nuclear technology blossom, and agricultural applications emerge.

AECL was created to further peaceful uses of nuclear energy based on heavy-water technology. Significantly subsidized (with estimates in the billions) but operationally profitable and commercially oriented, it remains deeply embedded in Canada’s nuclear research efforts. It has stimulated and launched successful commercial ventures in both medical and power generation worldwide, currently accounting for the production of raw material for half of the world’s medical isotopes.

Nevertheless, with its reliance on longstanding heavy-water technology, AECL is argued by some to be destined to become lightweight player. Ottawa-based corporation MDS-Nordion is a dominant player in nuclear medicine and relies to a large degree on AECL as a major supplier.

By the very nature of its business, AECL is one of CNSC’s important regulatees.

Several federal ministers together with their policy departments have a significant interest in this industry, including those concerned with the environment, health, international affairs, and national security as well as the two that are currently represented on AECL’s Board of Directors (Industry Canada, and Natural Resources Canada) by their deputy ministers.

(2) Issues

Recent difficulties involving an extended shutdown of a 50-year old AECL research reactor that produces more than half of the world’s medical isotope spiraled, over a few weeks (from the initial reactor shut down in mid November 2007 to its restart in mid-December 2007), into an international crisis in which a hasty legislative override of CSNC was used to authorize the restart of the reactor.
The president of CNSC was removed from her post (but kept on as a member of the Commission), accused by the Prime Minister of needlessly endangering the lives of Canadians, and the minister responsible for Natural Resources Canada asked her in a letter to provide reasons why she should not be fired. In response, she is suing the federal government over what she sees as an unfair dismissal, and resigned in September 2008. The chairman of AECL’s Board of Directors resigned in December 2007, after just over a year in the job.

The longer-term consequences of this shutdown crisis for Canada, for AECL and for MDS Nordion may well turn out to be significant. Canada’s leading medical journal put it this way “why is something as important as the world’s medical isotope supply dependent on a half-century old reactor? Will coordination with Europe be improved to guard against future shortages? How long will it be before the United States starts making its own isotopes?” The difficulties have been exacerbated by a recent announcement by AECL of the abandonment, for costs reasons, of its decade long plan to replace the reactor with two modern ones dedicated to medical isotope production.

The inability of AECL to meet its longstanding commitment to its important customer MDS Nordion (to successfully bring modern replacement reactors on stream) as well as the inability of CNSC and AECL (until recently) to reach agreement on a process for some kind of pre-project design review of the latter’s new flagship project (an advanced CANDU reactor) could only translate into a significant disadvantage for AECL in its marketing efforts to domestic and foreign governments, as well as for its marketability – should the government wish to pursue the full or partial privatization of AECL.

(3) Blockages

While there would appear to exist some levers in the law to deal with unexpected situations when CNSC and AECL might not be in agreement (such as the possibility for the Natural Resources minister of providing binding directives, and Governor in Council vetting of regulations proposed by the CNSC), it is not at all clear that these mechanisms are adequate to deal smoothly with broader public interest tradeoffs. The aim of the underpinning legislation is, inter alia, to limit the risks to national security, the health and safety of persons and the environment that go with the development, production and use of nuclear energy and substances to a reasonable degree, and in a way consistent with international obligations.

While the wording may allow for a little flexibility of interpretation, the former President of CNSC – who held the post from 2001 to very early 2008 - signaled that as she saw it, the agency’s regulatory regime was “the most modern in the world, separating health and safety from economic and political interests.” For her, the authors were told, protection of domestic markets (something Canada’s competitors seem to find a way to do) was irrelevant.

At the same time, the admonition to ministers and secretaries of state to treat quasi-judicial bodies sensitively and specifically to refrain from intervening or being seen to intervene on behalf of an entity on any matter that requires a decision in their quasi-judicial capacity, appears to preclude any minister with a legitimate policy interest from doing or being seen to do anything to push for creative approaches being applied by the CNSC. Similar admonitions would apply to
policy deputy ministers; those who are also board members for AECL might feel doubly
hamstrung. Even the Clerk of the Privy Council might be anxious to avoid any perception of
inappropriate interference.

The main levers for dealing with necessary discussions and tradeoffs in the public interest by the
different stakeholders are therefore ineffective because the barriers erected to safeguard CNSC’s
independence prevent them from being used in a timely-enough fashion if an unexpected crisis
arises. This leaves CNSC’s governance de facto to itself thereby placing over-reliance, some
might say, on the perspectives of a few individuals without sufficient built-in checks and
balances (i.e. embedded loops for social learning) to ensure that other points of view are given
adequate attention.

The joint CNSC / AECL ‘lessons learned’ exercise – carried out by the Talisman International
LLC as a result of the fiasco – reported in June 2008. Given a narrow mandate, Talisman
concluded that “the overarching root cause of the … extended outage in late 2007 was due to a
CNSC and AECL set of processes which were “expert based” not “process based”. The prevalent
culture of informality was considered a significant and fundamental flaw in both organizations’
methods of operation, and contributed to a series of misunderstandings regarding reactor plant
safety system upgrade status, AECL licensing commitments, and CSNC regulatory requirements
and license conditions…(i)n summary the Talisman team believes that improved
communications, clear license conditions, and a mutual understanding of plant status and
outstanding licensing and inspection issues, along with improved inspector training and
enforcement and in-house legal staff, would help prevent the misunderstandings which led to the
extended outage in late 2007).”

B Service Canada

(1) Background

In 1989, the then Clerk of Privy Council (Paul Tellier) was the driving force behind PS2000 –
the first administrative review at the federal level in Canada to designate ‘quality of service to
the public’ as an overarching goal of public management.

In 1993, connectivity to the Internet moved to center stage at Industry Canada as a Director
General, in charge of a relatively obscure function, was able to get backing for an approach that
evolved into a major ‘branding’ effort that, by 1999, was announced in the Speech from the
Throne as an objective “to be known as … (the government that was) most connected to
citizens”. To reach this objective of being most connected to citizens and businesses, the
government proposed the GOL initiative (Government on Line GOL (1999-2006)) as a project
that was ultimately allocated $880M in new money over 6 years, and that was built around two
principles: grouping information and services around client’s needs and priorities, and partnering
within the federal government as well as with other governments to cluster services in order to
better serve the public. At the same time as the GOL initiative was launched, a 3-year Service
Canada pilot project was brought forth, including the two existing channels of communication
(the Canada web site and a 800 line).
As well Service Canada involved a federally driven integrated front door for information and services (SII (1999-2006)) comprised of Service Canada Access Centres located in different federal departments and agencies, co-located in federal and provincial places, or located in municipal organizations, and in non-governmental agencies\(^{35}\). By 2004-2005 the network operated at 76 locations.

In 1997, the then Clerk of Privy Council (Jocelyne Bourgon) – who saw service to the public as a key goal for federal public sector/service reform – gave full support to the recommendation of a federal-provincial-municipal public service managers conference that had expressed a strong interest in learning about the main drivers of service quality improvement, and launched the Citizens First survey of 1998 – an initiative that was celebrated as “leading edge”\(^{36}\) in the service quality community.

The 3-year Service Canada pilot project was extended in 2002 with a view to developing a single window strategy based on a three-way partnership of Treasury Board Secretariat (policy and coordination), Communications Canada (website & 1-800), and HRDC - which had its own federal social services delivery network – that was given responsibility to manage the integrated front door Service Canada network for the system as a whole. A committee of DGs was charged with the coordination work. This committee reported to a DM level committee and each DM in turn reported to his or her minister.

By 2004-2005, HRDC’s own network had become 320 (in person) Human Resources Centres – operated a little differently across the country as needed - plus mail services. HRDC had been split into two departments and both networks were located in one part of the former department, while telephone and Internet services were located in the other. In 2005, the government announced in its budget that one of the two new departments was to become the foundation of the new government of Canada network.

In this way, the three objectives – citizen-centered service delivery, e-Government, and on-going service delivery of a range of federal social programs by one department came together organizationally in 2005 when Service Canada was launched as a stand-alone entity combining delivery networks (i.e., SII plus social services). The deputy head was also named associate DM for one of the ‘policy’ departments that had been part of the ‘old’ HRDC, and became responsible for providing corporate services for the two ‘policy’ departments (HRSD and HRDC) as well as for itself.

Service Canada, the new (integrated) backbone, opened its doors in September 2005.

In its first annual report in 2005-2006, Service Canada described its mandate this way: “To improve services for Canadians by working with partners to provide access to the full range of government services and benefits that Canadians want and need in person, by telephone, Internet or mail”\(^{37}\).

The spirit of entrepreneurialism and serious play that had been engendered by spinning Service Canada off into a separate entity was clear in its words that year.
It was also clear in its actions that included the introduction of a performance scorecard, establishing an office for client satisfaction, entering partnerships with other governments (e.g. registration of births in Ontario), having its executives spend four days a year at the front line, and using service offerings themselves to see how they work. 

In early 2006, Service Canada was moved back closer to the two policy departments (which were merged back into one that is called HRSDC). The deputy head of Service Canada was required to report to the departmental DM and, as a result, its corporate services were no longer shared with separate entities, but shared within the same departmental (i.e. HRSDC) ‘skin’. Reports on its plans and accomplishments (including the 2005-2006 Annual Report) became part of HRSDC’s reports.

In June 2008, Service Canada’s website described what it does this way: “Service Canada is about improving the delivery of government services … offer(ing) … single window access to a wide range of Government of Canada programs and services for citizens”.

(2) Issues

Since 2000, the global company Accenture has been issuing highly regarded annual reports on the progress of 22 national governments (including Canada) in their journey toward citizen-centered service delivery. Their four-pillar model (citizen-centered, cross-government, multi-channel, proactively communicated service) sets out goals, key challenges, and service implications in four stages (see Table 1).

<table>
<thead>
<tr>
<th>Stage</th>
<th>Factor</th>
<th>1- Establishing eGovernment</th>
<th>2 - Using eGovernment</th>
<th>3 - Embracing the four pillars</th>
<th>4 - Building the trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goals</td>
<td>● Number of services on line</td>
<td>● High percentage of citizens and business uptake</td>
<td>● Services cross-channel and cross-government - one stop / end-to-end</td>
<td>● Citizens trust their government implicitly</td>
<td></td>
</tr>
<tr>
<td>Key challenges</td>
<td>● Internet capability</td>
<td>● Citizen outreach</td>
<td>● Cross-government collaboration</td>
<td>● Content of services</td>
<td></td>
</tr>
<tr>
<td>Service implications</td>
<td>● Service availability</td>
<td>● Service delivery</td>
<td>● Service Value</td>
<td>● Service Trust</td>
<td></td>
</tr>
</tbody>
</table>

Extracted from and lightly modified Accenture 2006: 6

Canada scored very well from the beginning (2000) with the combination of GOL and SII. In particular, Canada’s vision of streamlined service delivery (for individuals and for businesses collaboratively across jurisdictions, and later for federal corporate services) was seen as one of the most far-reaching and inspirational in the world (Accenture 2007: 87), and Canada has been lauded for “being ahead of the curve for years” (Accenture 2006: 45).
In fact, by the 2006 Report, Canada (along with the US) was ranked as one of the two trendsetters based on its performance⁴⁰ (: 46).

Accenture observed in its 2007 Report, however, that Canada was nudged out of its first place ranking by Singapore (by a little) mostly because of how citizens perceive their performance in terms of service availability, delivery, value and trust. It reported that “citizens are clearly seeing a gap between the government’s promise and its practice … in terms of … “citizens voice” alone, Canada ranked 9th out of 22 countries … (and) less than half of the respondents believe service has improved compared to three years ago, a greater number think it has stayed the same or in fact, gotten worse “ (Accenture 2007: 87). In fact Canada is now listed as a country in danger of losing momentum (: 87).

(3) Blockages

Virtually from Service Canada’s inception as a stand-alone entity, problems began to emerge with the main policy departments (formerly HRDC) both with respect to the policy-service delivery linkage as well as with the shared corporate services.

‘Service delivery’ is an issue domain in its own right that requires policy choices and decisions to be made. By its very nature it cuts across other issue domains (e.g. labour market or aging) both within and across jurisdictions, and as such, demands integration at the political level. Yet, it is still treated as just one of a raft of management issues, and it is without either a designated spokesperson at the cabinet table or one who can hold Service Canada properly to account within the government of the day for progress towards the public pan-Canadian goal of service to the citizens and service integration, taking into account the expectations generated by earlier pronouncements.

The very entrepreneurialism of Service Canada as a separate organization was directed to improving services to Canadians. This citizen-focused service delivery goal encompassing all levels of government could not but be strongly constrained (and be bound to lose out) to the goal of federal service delivery integration and efficiency, when Service Canada was required to share corporate services, in effect, with an important federal department (or two in its ‘split’ mode) that was meant to be only one of its partners.

This shared corporate services partnership, involving very unequal players in terms both of ‘clout’ and of ‘size’, could only lead to the commitment to federal government program delivery improvement trumping the much broader objective of providing the best possible access to the full range of government services that Canadians want and need.

Without political direction as a counterweight, the earliest opportunity to tame Service Canada and bury it back into HRSDC (and to redefine its role much more narrowly as to serve only the federal government) seems to have been too attractive to senior central bureaucrats to let pass by.
ii. Design failures

These two files would warrant a much more detailed treatment than that which is possible in the context of a short chapter. Moreover, much in these files is still not available for external scrutiny. So we are forced to provide nothing more than a short statement about organization design flaws, and a tentative identification of what would appear to be the main sources of the problems.

A. The Canadian Nuclear Safety Commission case

The fundamental issue in this case is the failure to have seen *ab ovo* the need to devise (and put in place) satisfactory and workable ways to (1) debate, discuss and integrate different legitimate perspectives (expert versus policy, security versus social and economic dimensions), (2) to do so smoothly (in a different but timely manner, as the context changes) and (3) to have satisfactory fail-safe mechanisms in place in case of stalemate.

It is our view that the organizational failure was quite predictable, and that the process was *passively sabotaged* by a gross neglect of the scrutiny required by the precautionary principle at the time of designing the new regulatory framework for CNSC. The Simons conditions were not met, and, as a result, the social learning engine was prevented from going into action, and the tripartite *bricolage* proved impossible.

i. The Simons equation was clearly out of balance. The spans of control and support on the supply side proved unable to meet the requirements of accountability and influence on the demand side. An unduly restrictive mandate that *precluded* consideration of social and economic impacts meant that the weight was entirely on security-focused control without due consideration of the commitments to others. Although there is a real need for safeguarding (and being seen to safeguard) a regulatory agency from undue political interference, this does not obviate the need to take into account the full the range of stakeholders who are best able to serve partners and clients in considering organizational design. In this case, the range was obviously truncated so that some (e.g. those dealing with legitimate citizen/client concerns related to R & D, economic growth and Canada’s reputation in the hunt for alternate power generation) were excluded. Moreover there was no margin of maneuverability as a result of the unduly narrow definition of performance, and of the absence of any viable conflict resolution mechanism with the demand side.

A modicum of prudence and design competence would have led to a refusal of such an overly prescriptive mandate for the CNSC, of such a fundamentalist focus on security as an absolute, of the exclusion of social and economic considerations altogether in final decisions, and of the consequent insularization of the CNSC from its life world context.

Tradeoffs must be made between legitimate public policy objectives such as risk to environment (and even health) versus risks to the country’s ability and legitimacy to contribute to a field be it with research and development or selling and using its own high quality products at home and abroad for worthy causes.
In an advanced democracy like Canada’s, these kinds of tradeoffs need to be brought to the cabinet table – something that was *de facto* not possible. The unduly narrow definition of stakeholders and of acceptable performance variables was a major flaw leaving too much to the diktats of experts.

Another element dictated by a modicum of prudence and design competence would have been the provision for forums where differences of opinions might be legitimately discussed. In this case, the quasi-taboo attached to any effort to make other viewpoints available to the CNSC constitutes a major design flaw. And the Talisman recommendation about improving communication does not address this fundamental problem.

Finally the legal setting has provided no fail-safe mechanism in case of irresolvable differences of opinion except ministerial or parliamentary directives that can only kick in when there is a full-blown crisis – not only an apprehended crisis. A less flawed design would have not only provided for legitimate forums for discussions, but also for processes of conflict resolution.

These flaws were an important source of the fiasco of 2007.

ii. These design flaws prevented any possible social learning, and closed the door to any possible *bricolage* (retooling, restructuring or reframing). Unless the legal framework is amended, the on-going necessary conversations (temporarily made possible by the post-parliamentary decision *glasnost*) may not be capable of being carried out except in a paralegal way without a true *perestroika*. As a result, little or no innovation can be anticipated.

The potential for informal exchanges at a time when informality has been damned as the main source of the problem by Talisman (even in a narrow way) is very limited. It is more likely that CNSC experts with strong views, reinforced by an international body (IAEA) – that is worried exclusively about global proliferation, security, environmental and health concerns and sees Canada’s CNSC as a ‘poster child’ – will be unmoved by any argument echoing a different perspective.

**B. The Service Canada case**

The fundamental issue in this case is the power struggle between those in the technocracy who put a priority on serving the citizen well and those who see their job as improving the functioning of the federal government taken by itself (and not incidentally, the functioning of the federal bureaucracy). In this case, the latter group clearly saw Service Canada as undermining the basis of the federal government and its bureaucracy by working collaboratively with other governments, and thereby opening the door to possibilities that the new packages of services might come to be seen as better delivered by other levels of government. The specter of subsidiarity was seen as almost around the corner. Especially in the world of human resources and social development where the federal authority is widely contested, any weakening of the base of federal operations could be seen by the federal technocracy as a threat. As a result, serving the federal machine came to trump serving the citizen well.
As opposed to the CNSC case where neglect of the importance of good organizational design led to passively sabotaging a very important and complex regulatory process, the case of Service Canada looks like one of active sabotage. The redirection of the Service Canada initiative away from its original mandate in 1999 appears to be a deliberate effort to tame and neuter an initiative that was, in the process of better serving the citizen, seen as disserving the federal bureaucracy.

The consequence of failure in this case is not a life-threatening crisis likely to trigger some overt corrective action, but something much more insidious. The consequence may well be the slow abandonment (at least at the federal level) of international leadership around citizen-centered service delivery (even though the drum-beating rhetoric about it may continue), the resurgence of the sort of mindless and insensitive ‘rationalizations’ of the sort that has led to the closing of post offices and the disappearance of the federal presence and service wickets locally, or to the centralization of taxation offices that has drastically eliminated any possibility of face to face interaction with tax collectors regionally. Increased distance between federal bureaucrats and citizens can only increase the level of cynicism about government’s ability to serve them well. With it, one may speculate on the increase in the exasperation of elected public officials at the federal level with the ability of the public service (as its main administrative partner) to do its job well.

In this case, the failure has little to do with neglect or error, but it has a lot to do with organizational behavior in a bureaucracy and the principal-agent problem.

Important tradeoffs are made at the cabinet table – in this case between (a) improving service to individual citizens and businesses (over a broad range of activities) through collaboration among governments and sectors, and (b) improving service to them by one government and/or one or two key federal departments and agencies – as they are made in the case of major procurement decisions that have domestic and foreign policy implications.

Asking the minister responsible for those one or two federal departments to tradeoff the benefits for his units against the benefits of the Canadian citizens from a much larger initiative is bound to pose problems and is probably unreasonable. This is the reason why Australia has created a ministerial post to ensure that the interests of the broader initiative would be defended at the cabinet level and that appropriate accountability for such broader initiative would be in place. Pushing the tradeoff down to the level uppermost bureaucracy (i.e., the DM of one department of which Service Canada had become one part in 2005), as happened in the second stage of the evolution described above, made the situation even more unworkable.

Having no way to have the tradeoffs made at the cabinet table allows those bureaucrats with their own objectives (such as, at their worst, bigger budgets, more prestige, more discretionary resources to indulge in amenities of all sorts, etc.) to advance their own version of what the priority should be: in this case, the self-serving objective of the federal government infrastructure trumped the interests of the Canadian citizens and businesses

It has been shown in the past that even a super-bureau like the Bank of Canada might be led to pursue objectives that did not appear to be the same as those of the government or those that the best interests of the citizenry may dictate. 31
Bureaus have a capacity to pursue their own objectives independent of the government to some degree. Our hypothesis is that such may be the case in the Service Canada events. Prestige-survival-power might be said to have trumped the ‘public interest’ as the citizen would see it. The fact that, in so doing, the bureaucracy has also been led to punish success, adds to the gravity of the indictment.\textsuperscript{42}

More important perhaps is the reasonable conjecture that the Service Canada experience may not be unique. How many creative and successful federal initiatives to better serve Canadian citizens are scuttled in the name of the prestige-survival of the federal technocracy? How would we know? The question is all the more important that cases that might be construed as active sabotage are infinitely more costly and reprehensible than the trivial abuses of a head of agency circumnavigating to his destinations in the most roundabout way just to fatten his personal air miles account, yet the former actions are infinitely less visible in the absence of any oversight of organizational design than the petty abuses likely to be picked up by internal auditors.

One may therefore infer from the information available that the derailed design came to be clearly out of line with what the Simons conditions would suggest, that prototyping, serious play and experimentation were clearly sabotaged and social learning consequently stunted, and that tinkering with organization charts came to be used as a decoy to hide a deliberate effort to modify the philosophy of Service Canada away from its original vocation of serving Canadian citizens at large better, to the immensely more reduced task of serving the integration of services of the Canadian federal government.

As to the question of what sort of organizational design might have succeeded in preventing such slippage, there is no simple and absolute answer. One may easily envisage a variety of schemes (independent agency, department, but also horizontal political mechanisms to bring clusters of ministers together, etc.) that would have ensured that the original direction would have been maintained. Therefore a separate minister is not the only thinkable solution. The experience of various other countries has shown that a wide range of mechanisms may accomplish this sort of task.\textsuperscript{43}

**Conclusion**

It is difficult to underestimate the toxic effect of organizational design failures (whether they are the result of passive or active sabotage) and as a result, it is difficult to overestimate the benefits that might flow from a greater attention to organization design in the private, public and social sectors.

Yet this trail has not been as fully explored as it should have been, and much of what one might call *pathologies of governance* must be properly ascribed to these flaws. Such a possibility is all the more probable because of the fact that cumulative social learning on this front has turned out to be less effective that it should be. Design inquiry is so often left to practitioners and management consultants, that, as a result, “the body of design knowledge appears to be fragmented and dispersed” – much more so than in other bodies of knowledge\textsuperscript{44}. The time may be ripe for a revolution! As Chalmers Johnson\textsuperscript{45} would put it, “multiple dysfunctions plus elite intransigence cause revolution”.
The question is: what should the revolution entail?

It might take three forms.

First, what is required is a better and fuller appreciation of the organization design function, and the development of the required competencies to ensure that *ex ante* proper advice is sought and obtained about the sort of architecture required for effective performance. This applies both at the level of individual organization (e.g., department or agency) and centrally (e.g., the federal government as a whole).

It is mindless to ask intelligent and well-trained personnel to operate in organizational settings that can only lead them to be predictably irrational and therefore to render the organization dysfunctional.

Second, what is required is an oversight function *in real time* to monitor organizational performance. This sort of *veille organisationnelle* and organizational vigilance (again both at the individual organization and ‘central’ levels) should be as important as the sort of monitoring that is in good currency for human and financial resources. It should not be an audit function that would best be performed *ex post* and might fall into the bailiwick of the Office of the Auditor General, but an activity designed to detect as soon as possible any sign of malfunctioning, it being understood that organization design is always somewhat experimental. Moreover this *veille* should be of central import in social learning by highlighting successes that might deserve more attention and might lead to imitation elsewhere, by detecting early warning signals of problems so as to be able to draw attention to repairs before a crisis occurs, and by questioning organizational redesign that would appear to make no sense or worse still, be toxic.

Third, what is required is that the Office of the Auditor General instead of being allowed to creep into policy matters be directed to pay more attention to organizational matters. This might lead to *ex post* in depth evaluation of major organizational disasters like the assignment of massive operational tasks to agencies having little or no operational experience and capability as seems to have happened in the gun registry file.

These three initiatives are also listed by order of priority, with the autopsy phase obviously being given a lesser priority in a world that emphasizes the importance of social learning.

These macroscopic changes cannot however replace the need to ensure that greater attention is paid in all departments and agencies to matters of organizational design and organizational performance. Nor can it replace the need to ensure, at the local level, that the requisite failsafe mechanisms are in place to ensure that blockages and sabotages are not allowed to prevail.

Anticipating in advance that something awful may ensue from a flawed design is marvelous when one can, but it cannot suffice, because, capacity for anticipation is as problematic as capacity to design perfect apparatuses right from the start. One must accept the inevitability of prototyping and experimenting on this front, and work at ensuring that learning loops are going...
to be as short and fast as possible. Indeed, even this may be too optimistic. One may have to be satisfied to prevent harm.

Promoting good things and working at reducing bad things may look the same on the surface, but, at the operational level, they are quite different: “scrutinizing the harms themselves, and discovering their dynamics and dependencies, leads to the possibility of sabotage. Cleverly conceived acts of sabotage, exploiting identified vulnerabilities of the object under attack, can be not only effective, but extremely resource-efficient too”\textsuperscript{46}.

Preventing harms, experimenting, learning as fast as one can along the way would appear to be the best we can hope for. This is the only way to harness complexity. The word “harness” is quite apt here: it conveys “a perspective that is not explanatory but active – seeking to improve but without being able to fully control”\textsuperscript{47}. In the world of organization design, it may be the only way to go.


\textsuperscript{11} Don Tapscott, Anthony D. Williams, 2006. Wikinomics. (New York: Portfolio).


\textsuperscript{13} Michael Schrage, op. cit. pp. 199ff.


James O’Toole, 1996, Leading change, New York: Ballentine Books pp 238


Auditor General of Canada Report, 1994, Ch 15:7

Ibid.


Nuclear Safety and Control Act (powers)


Nuclear Safety and Control Act 1997, c. 9 19. (1)

A Guide for Minister and Secretaries of State 2007: 14, 68

Available at www.thestar.com/print/Article/33604; accessed 11-6-08


Ottawa Citizen May 19, 2008 Nuclear safety watchdog names new president by Tobin Dalrymple

www.cmai.ca/cgi/content/full/178/5/536; accessed 11-6-08


unpan1.un.org/intradoc/groups/public/documents/UNPAN/UNPAN023528.pdf accessed 8-6-08. The federal investments were for: on-line service improvements (130 most-used services in 34 departments and agencies); strategic infrastructure (privacy protection including a secure channel); service improvements (service quality and standards as well as obligatory measurement and improvements); communication and measurement; and public servants’ readiness to make the highest and best use of these new channels

(www.tbs-sct.gc.ca/rma/eppi-ibdrp/hrdb-ribdr/archive/sc-sc/descripption_e.asp (date modified 31-1-06); accessed 3-6-08

Accenture 2006: 48

Service Canada Annual Report 2005-2006: 8

Ibid. 26-28


although “still working on connecting vision to implementation in Service Canada” (: 46).

K. Acheson , J.F. Chant, , “Bureaucratic Theory and the Choice of Central Bank Goals: The Case of the Bank of Canada” Journal of Money, Credit and banking, 5 (2), 1973, 637-655. An earlier case (and a more juicy one) is exposed in H.S. Gordon. The Economists versus the Bank of Canada. Toronto: The Ryerson Press, 1961. The personal costs borne by Gordon as a result of his drive to expose Coyne’s misdemeanor is a cautionary tale. His original letter was signed by 29 economists and the short book he wrote soon after demonstrated very effectively that there had been deception on the part of the Governor of the Bank of Canada. But after this event, Gordon was marginalized and shunned by the federal bureaucracy. His part-time career as a mediator in public service affairs was brought to a halt, and he was explicitly ignored by a royal commission later struck on monetary affairs (even though he was one of the best known Canadian experts in this area). He was later to depart from Canada to pursue a most successful career in the United States. This cautionary tale illustrates the perils of exposing deception and misinformation generated by the officialdom in the public sector in Canada
42 R. Hubbard, G. Paquet 2008, “Cat’s Eyes: intelligent work versus perverse incentives” www.optimumonline.ca, 38 (3)
44 A. Georges L. Romme, op. cit. 569