The globalization of production, the dematerialization of economic activity, and a wave of democratization, together with sweeping demographic changes and much social upheaval have generated growing complexity, turbulence, and interdependence in the world's socioeconomic environment. This has led to a loss of the stable state. The foci and substance of the governance process have been modified dramatically (Schon 1971).

Yet, despite these major developments, some features of the governance system have endured. The nation-state is 200 years old, and it would appear to be in very good health. The purposes for which it was invented (to organize and use social violence, to express a sense of political and social identity, to write and then execute the rules by which a society chooses to govern itself, to organize economic life) are still paramount in the consciousness and high among the values and beliefs of citizens (Economist 1990). Indeed, one might even speak of a convulsive in-gathering of nations these days: nation-states are becoming more and more centres of identification and adherence. Therefore, the problem of governance by nation-states continues to be of central concern.

In Canada, the problem of governance is posed with particular acuity. In a survey published in The Economist, John Grimon (1991) suggests that Canada is "the first post-modern nation-state, with a weak centre acting as a kind of holding company." Therefore, hierarchical and centralized control is no longer workable, and there is a real danger of anarchy and chaos if the forces of entropy were to make the nation-state rudderless. What then is the pattern of governance in such a context? In what direction is it drifting?

Governance is about guiding. It is "the process whereby an organization or society steers itself" (Rosell 1992: 21). This process is complex and changing,
but it hinges on the dynamics of communication and control. Consequently, in a globalized, democratic, and knowledge-based society, the pattern of governance is different from what it was in a closed, authoritarian, and natural-resource-based society: the nation-state may have endured but the governance process and the precise way in which the state plays its role in it have evolved and will continue to evolve.

Because a number of important changes in the sociopolitical environment and in the guiding values are already detectable, some have argued that the contours of the governance system in advanced socioeconomies in the 21st century—in the private, public, and civic sectors—may be surmised in a general way, that already a new set of rules is in the process of crystallizing: complexity is the new reality and perplexity the new frame of mind.

A CONCEPTUAL FRAMEWORK

Those attempting to read the auspices or search for directions are confronted with competing paradigms. A paradigm is a “cluster of fundamental principles guiding the perception and organization of data... a widely shared system of assumptions and beliefs operating at a basic, almost unconscious level of experience” (Ogilvy 1986–87). The most popular categorization of paradigms pertaining to the governance of the nation-state suggests three scenarios: the dominant hierarchical paradigm, the also popular minimal government paradigm, and the emerging heterarchical paradigm of decentralized planning (scissors cut paper/paper wraps stone/stone breaks scissors) (Ogilvy 1986–87).

This categorization, though suggestive, provides neither a sufficiently detailed description of the terrain nor a sufficiently rich heuristic. The difficulty with these simple paradigms is that they quickly run into paradoxes and dilemmas as soon as one uses them. Such anomalies or insoluble puzzles are signs that the paradigm is unable to explain what is happening. A paradigm shift or a reframing is then probable. But shifting back and forth from one of these paradigms to another is a game that has not proved very fruitful.

To produce a diagnosis and to be able to design new systems of governance in the post-modern state requires a guiding analytical framework. In the language of Harvey Leibenstein (1976), an analytical framework is “a set of relationships that do not lead to specific conclusions about the world of events (but constitute) ... the mold out of which the specific theories are made.” A conceptual framework is much more in the nature of an approach, of a preliminary way to organize objects of the inquiry. Such a framework is not easy to construct, for it must build on a synthesis of work done in isolation in the fields of industrial organization, strategic management, the contractual theories of organization, etc. (Charreau et al. 1987; Alt and Shepsle 1990; Milgrom and Roberts 1992). Each group celebrates its own interpretation of reality with little or no reference to the work done by the other groups.

Our approach may not offer the ideal synthesis but it allows for a degree of syncretism and might prove to be a powerful heuristic.
Information and Organization

A wide array of models and theories provide guidance for discussion of governance and organizations. Oliver Williamson (1975, 1985), who has done some of the most interesting work in this area, uses a framework emphasizing the cost of transacting. Other groups single out property rights as a guidepost. Others suggest that one can dissolve the organization into a web of explicit or implicit contracts, and still others postulate that the organization emerges from complex dynamic and somewhat implicit interdependencies. Whatever the model, a basic feature remains constant: organizations may be regarded as a way of structuring and sharing information. In that sense, one may x-ray organizations via their informational dimensions without any a priori commitment to any of the causal explanations in good currency (Ouchi 1980; Boisot 1987; Stinchcombe 1990).

One of the simplest presentations of this approach is the synthesis of Max Boisot (1987) (developed from the work of William Ouchi and others) in which he suggests that organizations might be mapped in a two-dimensional culture space which defines the extent that information is codified and diffused: the farther from the origin on the vertical axis, the more codified is the information (i.e., the less ambiguous, the less fuzzy, the more stylized the code, the more structured the information), and the farther from the origin on the horizontal axis, the more readily diffused is the information (i.e., the more widely the information is shared). Boisot partitions that culture space into four subspaces (Figure 4) in which is a reduced form of Figure 2.

This partitioning carves out different families of organizational arrangements where

- transactions are based on personal knowledge and authority imposing a sort of dominion in a fiefdom where information is not very codified or diffused (lower left quadrant);

![Figure 4. Organizations in a two-dimensional culture space. Source: Boisot (1987).](image-url)
• transactions are based on well-codified, proprietary knowledge not generally available outside the organization and hierarchically coordinated transactions in bureaucracies (upper left quadrant);
• transactions are based on impersonal information and knowledge very neatly codified in the form of price signals and widely diffused in market-type organizations (upper right quadrant); and
• transactions based on shared values, personal contacts, and implicitly-conducted negotiations among peers in clans (lower right quadrant).

Evolution of Governance

Boisot (1987) uses this simple tool to sketch the evolution of the firm: from the fiefdom of the small family firm dominated by its authoritarian owner, to the more bureaucratic forms of management in large firms; from bureaucracies to the multidivisional or holding-company administrative forms that have emerged, introducing some form of market coordination as the centre acts as a sort of capital allocation mechanism among units dominated by bottom-line considerations; and from these quasi-market organizations to the loosely coupled organisms regarded by Peter Drucker (1988) as the "coming new organization."

This template may be used to explore a number of hypotheses about the dynamics of information and organization. For instance, one may use it to stylize the diverse corporate culture of the various departments within a firm: the research and development department might be organized as a fiefdom, the production department as a bureaucracy, the sales department as a market, and the board as a clan. One may also use this approach to examine certain hypotheses about the structuring of organizations, for instance, the hypothesis put forward by Arthur Stinchcombe (1990: 6) that "the structure of organizations [is] determined by their growth toward sources of news, news about the uncertainties that most affect their outcomes"; one may gauge whether the crystallization of an organization's form can be ascribed to this major force. Such a template also helps us make sense of the new organizational forms that have been much celebrated in the recent past (many forms of highly decentralized and less formal networks) which would be located roughly in the right-hand quadrants (Leblond and Paquet 1988; Davidow and Malone 1992; Peters 1992).

One might even conjecture, on the basis of ethnographic evidence, that, both in the private and the public sectors, there has been a systematic drift away from bureaucracy toward forms of organizations that are based on more diffused information, because they are more effective in getting the news. This dispersive revolution in private, public, and civic organizations has often been celebrated as forms of "privatization" and "deregulation." What has not been heralded is the fact that this quasi-disintegration of bureaucracies has been paralleled by a quasi-reintegration using very different instruments: moral contracts and other clan-type ligatures (Badot and Paquet 1991; de la Mothe and Paquet 1994).
In a nutshell, our hypothesis is that the governance system of the different sectors is in the process of moving to an organizational form characterized by a less-codified information structure and more diffuse information sharing, i.e., toward the lower right quadrant in Boisot’s model.

**CRITIQUE OF THE STANDARD PARADIGMS OF GOVERNANCE**

Even though fiefdoms have not disappeared entirely, bureaucracies and market-type organizations are the standard forms in the public and private sectors. Indeed, at times, much of the current debate on governance appears to revolve around the different ways in which private and public bureaucracies might be freed from their arteriosclerosis through some marketization: closer links with the customers, more competition, total quality imperatives, etc.

These debates have revealed that the simple introduction of market incentives and competition will not suffice to meet the challenges at hand. Market-type mechanisms have been shown to be relatively inefficient compared with negotiated arrangements, and competition much less effective than presumed in both the public and private sectors (Cova and Cova 1991). So the traditional bureaucratic governance system is under siege, and nothing less than a radical departure from the hierarchical model (more or less enriched by market paraphernalia) seems to be called for.

**External Pressures**

External pressures on domestic firms and governments have originated first and foremost from one major nexus of interconnected forces: the emergence of a knowledge-based and technologically sophisticated global economic order. Innovation has become the determining source of economic advantage; the globalization process has introduced a fair degree of fuzziness in the very notions of “domestic firm” and “national economy” (Paquet 1990a). Both these forces have triggered a new strategy of coordination and control and a metamorphosis of the rules of the game.

On the one hand, heightened competition and the search for competitive advantage generated by the process of international integration have demanded maximum mobility, fluidity, and flexibility in the process of continuous adaptation by both government and business. On the other hand, the centrality of knowledge and information has set in place a new logic: new types of technological ensembles built on “untraded interdependencies” or synergies among sectors, technologies, and firms have constrained the possibilities of recombination, generated the need for new compacts, and created focusing devices and guideposts that have greatly influenced firms and governments.

Accelerated change has forced them to become multiterritorial, to cope with fierce time-competition, and to experiment with networking and strategic alliances not only with clients, suppliers, venture capitalists, or research
laboratories, but also even with governments. In this process, centralized insensitive Taylorian structures are a strategic handicap: such structures do not learn fast nor grow toward the source of news. This was IBM’s fate: "It grew complacent and failed to innovate" (Stewart 1993).

The emerging transnational-technological context has imposed new strategically crucial tasks on national governments while considerably limiting the scope of independent policies that national governments can pursue (at least without major social costs). The complexity of the issues facing governments generates more and more “wicked problems” in policy formation: unclear and uncertain objectives, given the general turbulence and interdependence, and a great uncertainty and instability in the means–end relationships at least with reference to standard policy tools. In the face of “wicked problems,” simple rules are no longer available; governments must learn as much about their goals as about the means likely to help them achieve them (Rittel and Webber 1973).

In this context, governance has ceased to be a matter of defining organizational targets and designing simple control mechanisms to ensure their attainment. When the ground is in motion, governments and firms have to rely much more on intelligence and innovation, to develop smarter ways and strategic alliances, and to promote innovation.

Simply injecting competition into the governance system is not enough. More competition has brought some benefits (Barzelay 1992), but the intricacies of the “virtual corporation” and “virtual government” (i.e., the new types of sophisticated networks coming together quickly to exploit fast-changing opportunities) require a high degree of cooperation and trust, and the market mechanism by itself does not nurture sufficient cooperation.

As a result, there has been a shift from a narrow celebration of competition (as a government-free environment), to concerns for competitiveness (which encompasses the broader sociopolitical context of cooperation), to insistence on development power, as it has become amply clear that many features of the competitive advantage of firms and nations flow from active private and public entrepreneurship, from government policies, and from new forms of partnerships between governments and firms (Dahmen 1988; D’Cruz and Rugman 1992).

Internal Constraints

At a time when governance systems are strained by external pressures, a family of sociodemographic and ideological-legal pressures has emerged from within nation-states, considerably weakening their power bases. New demands by citizens and clients whose expectations know no bounds have revealed both the extraordinary weaknesses in the bureaucratic paradigm’s ability to cope with these heightened demands and the serious difficulties raised by the loss of legitimacy of that state and the rigidities introduced by charters of rights and misdirected accountability (Marquand 1988).
In Canada, these questions have been and are important. Seven million Canadians were born between 1950 and 1966. This “baby boom” is the most important social phenomenon of our time, and the “boomers” have changed the face of the nation. A “new kind of people” has been produced: more sharply differentiated, more demanding, more alienated, more balkanized, and with a greater capacity for violence (Kettl e 1980). In the last 20 years, the sharp increase in immigration has brought “new faces in the crowd” and a much more polyethnic and multicultural country. The nature of the demands on government and business has become more variegated and has contributed to some attenuation of the solidarities and of the consensus on which the old governance system had come to depend (Hardin 1974).

Ideologies can energize and motivate, but they can also paralyze the nation-state. On the one hand, we witness heightened expectations on the part of the citizens and less willingness to accept centrally controlled organizations using Taylorian methods to extract their contribution as suppliers. This has created a growing tension as the requirement to provide a larger quantity and a higher quality of service has come more and more sharply into conflict with less malleability of the workforce. The failure to live up to expectations has raised important questions about the efficacy and even the legitimacy of the state.

On the other hand, the post-modern ideology has challenged the legitimacy of existing institutions and organizations. Indeed, post-modernism questions all the major interpretative schemes: it raises questions about the destructive effects of the rationalization of society under the influence of the managerial state and of bureaucracies in general; it also generates the emergence of new guiding values and social movements (women, ecologists, transculturalism, etc.) that offer alternative interpretations of society. Everything becomes contestable and unanimity disappears. As a result, the modern state has imploded: contested and balkanized, it has lost its guiding legitimacy.

Moreover, social relations have grown tense and the degree of litigiousness has increased, as we observe a shift in power from the legislative and executive branches of government to the judiciary and as precise methods focused on rules enforcement and centralization are less and less effective. Even when market-related arrangements (such as user fees or merit rating) have been added to the panoply of instruments used by bureaucracies, the fundamental intent to control and enforce responsibility is ever present. Governance has, therefore, become more and more unwieldy, and bureaucratic organizations (even when they have been gingered by market-driven contraptions) are increasingly unable to cope effectively with the tasks at hand without going beyond authority, rules, procedures, and administrative systems.

Anomalies and Paradoxes

The real test of modern organizations is their capacity to meet the new challenges from without and the new constraints from within, i.e., their capacity to read and understand the environment and to respond swiftly and
creatively to the challenges of the new context. The old hierarchical, centrally controlled organizations are inefficient at that sort of adaptation for, as was noted in connection with IBM's difficulties in the recent past, they "suppress innovation, crush aspirations and retard productivity" (Mills 1993).

The large hierarchical private and public organizations suffer from a form of arteriosclerosis that prevents them from taking steps to resolve their problems. Indeed, the way out of the present predicament calls for paradoxical and seemingly contradictory strategies for which such organizations are rather ill-equipped: organizing/focusing on one hand and disorganizing/de-integrating on the other, to be both smaller (as firms break up) and bigger (as their networks grow), to have more autonomy and power but to form more partnerships (Peters 1992).

Successful organizations are those that find ways to accommodate and resolve these contradictory needs — promoting competitive pressure and network cooperation at the same time. These countervailing pressures raise the question of the source of the requisite amount of trust, unrequited transfers, and the like that are necessary for such islands of cooperation to be built in a sea of competition.

Such anomalies and paradoxes call for a reframing of the very way in which we think about public and private organizations. The new forms of organization require more than mere tampering with structures; they cannot simply be quasi-disintegrated and quasi-reintegrated in a more modular or decentralized form according to the old rules of social architecture and using the old materials. The very notion of effective governance has to be rebuilt on an entirely new set of principles and values. It is not simply a weighted average of markets and hierarchies. The degree of turbulence and the speed of change is such that innovation, motivation, and speed of response are the new norms. Moreover, coordination cannot be accomplished successfully through the simple magic of stylized signal prices or the utterance of commands. It must be effected through the development of shared values and shared understanding. This is the only way to achieve the right balance between delegation and control. This calls for new styles of organization and new managerial competencies (Morgan 1988).

A new evolutionary model of organization is needed: one providing an approach to coordination through voluntary adherence to uncodified norms, which can best serve as guideposts because of their informal nature, and of the "jurisprudence" allowing them to evolve as circumstances dictate and new contexts command.

THE ORGANIZATION AS CLAN

The road to a pattern of governance that is less heavy-handed and more flexible, less directive and more participative, more diffuse and less technocratic may appear at best somewhat utopian and at worst a hybrid form of
organization that might unleash the most ungodly exclusive coalitions. These objections have been voiced in a very articulate way, yet neither is warranted. Clan-type networks exist in the private, public, and civic sectors, which should be enough to rid us of the label of impractical idealist. Moreover, successful clan-type networks are open, inclusive, pluralist, and coherent, which should dispel the fear that clans must degenerate into conspiracies (Hine 1977; O'Toole and Bennis 1992).

This new evolutionary model of organization — under a number of labels — has "emerged" in the private and public sectors, but also within a wide range of social "movements" as the most effective governance system. Anthropologist Virginia Hine (1977) has used the clumsy phrase "segmented polyccephalous network" (SPN) and emphasized the central role of the "ideological bond" or "the power of a unifying idea" as adding the sort of glue necessary to make the organization live and prosper. To underline this key dimension, Hine has labeled the new form of organization SP(I)N where I stands for ideology.

The organization chart of an SP(I)N/clan would look like "a badly knotted fishnet with a multitude of nodes and cells of varying sizes, each linked to all the others directly or indirectly." Examples might be the Audubon Society, the Sierra Club, ABB (Asea Brown and Boveri), or the Confederazion Helvetica (Hine 1977; O'Toole and Bennis 1992).

A central and critical feature of the notion of clan is the emphasis on voluntary adherence to norms. Although this voluntary adherence does not necessarily generate constraints on the size of the organization (as some of the examples mentioned above indicate), it is not always easy for a set of shared values to spread over massive disjointed transnational communities: high transaction costs, problems of accountability, etc., impose extra work. So the benefits in terms of leanness, agility, flexibility are such that many important multinationals have chosen not to manage their affairs as a global production engine, but as a multitude of smaller quasi-independent units coordinated by a loose federal structure, because of the organizational diseconomies of scale in building a clan (O'Toole and Bennis 1992; Handy 1992).

This nonhierarchical constellation of units is glued together by a common vision, a covenant that binds the allegiance of the units to the basic purpose. The clan (1) is working on a project that has a hologram function (i.e., each part contains a perception of the whole project and of its place in it) and (2) is capable of learning through dialogue, networking, feedback, and self-organization (Sérielx 1993).

The same generic language can be used to analyze the new process of governance of the state and the new form of corporate governance: in each case, the form/design and the content/strategy of the organization is dramatically modified as it acquires clan status. Indeed, this new organization form is characterized by a different anatomy and physiology, and a different form of organizational glue, leadership, and ethics.
Anatomy

The new form of organization, in the private, public, and civic sectors, is a result of contradictory forces: the word *federal* is often used to characterize the ongoing tensions between big and small, global and local, noncentralized and coordinated, pluralist and coherent, etc. It is also modest, suppletive, and fundamentally designed according to the subsidiarity principle (Handy 1992; Millon-Delsol 1992).

The word “subsidiary” means “reserve army”: this is the source of help when needed. The subsidiarity-based organization is designed to help those in need. It does not derive its authority from basic or primary rights of individual citizens or clients, but from an assessment of their incapacity (if left to themselves) to contribute effectively to the common good and of the consequent need to help the citizens or clients through the intervention of the level of “authority” that is closest to the citizen or client — family, locality, region, etc. — a responsibility being delegated upward only when it is impossible to do the work at a lower level (Millon-Delsol 1992).

The notion of subsidiarity (and its insistence on needs) raises questions about the ideology of egalitarianism that underpins the concept of universal and generalized programs without any attention paid to the capacity of individuals to deal with the underlying problem. With reference to the private sector, it raises parallel questions about the wisdom of mass production in the face of personalized demands. Conversely, subsidiarity would appear to legitimize a sort of *devoir d’ingérence* that is both precise and limited, but might appear to violate the independence and autonomy of citizens. In this reframed version of the organization, a number of basic features stand out (Paquet 1993b).

*Scheming virtuously:* The need to cope with a turbulent environment forces the organization to adopt a design that enables it to use the pulsations of the environment the way the surfer uses the wave: organizations must use the environment strategically to develop more actively plausible scenarios, to learn faster, to adapt more quickly. This calls for *noncentralization*, for expropriation of the steering power from the top leaders of the organization. We are very far from unilateral decentralization that can be rescinded. There must be constant negotiation and bargaining with nature and partners. Managers must exploit all favourable environmental circumstances and the full complement of imagination and resourcefulness in the heart and mind of each team player. They must become team leaders in taskforce-type projects, quasi-entrepreneurs capable of cautious suboptimizing in the face of a turbulent environment (Emery and Trist 1965; Leblond and Paquet 1988).

*Modular structures:* This sort of strategy calls for lighter, more horizontal and modular structures, networks and informal clan-like rapport (Bressand et al. 1989) in units freer from procedural morass, empowered to define its mission and its clienteles more precisely, and to invent different performance indicators. This is not only the case in the public sector: in the private sector,
the "virtual corporation" and the "modular corporation" are now the new models (Business Week 1993; Tully 1993).

"Modular" should not convey a sense that the organization chart is a linear set of blocks. This new organization is patterned after neural networks incorporated into flexible and evolutionary structures of relations and filities. These structures are in a process of continuous self-reorganization. This is happening in government with the proliferation of executive agencies, commissions of inquiry, i.e., all sorts of "temporary networks" getting together to solve urgent issues, very much as it is going on in the private sector to exploit fast-changing opportunities.

**Interactive meso-forums:** Modularized private and public organizations cannot impose their views on clients or citizens in a Taylorian way. The firm, much like the state, must consult. Deliberation and negotiation are everywhere: away from goals and controls and deep into intelligence and innovation. A society based on participation, negotiation, and bargaining is replacing one based on universal rights. The strategic organization has to become a broker, a negotiator, an animateur; in this network socioeconomy, the firm and the state are always in a consultative and participative mode (Navarre 1986; Paquet 1992a; see also Chapter 11).

In these forums that cut across bureaucratic hierarchies and vertical lines of power and are fraught with overlapping memberships, personal ties, temporary coalitions, special-task organizations, "the organizational structure of the future is already being created by the most as well as the least powerful" within the new paradigm (Hine 1977). Indeed, to the extent that middle-range regional and transnational networks and forums are cutting across the usual structures, the interactions distill in an evolutionary way the always imperfectly bounded network.

**Partnerships and moral contracts:** The networks are consolidated by partnerships and moral contracts that must be based on a few basic, shared assumptions. Rigid rules are not useful, as the environment is evolving rapidly and new directions are always in the process of being crafted and recrafted. Protocols cannot be stylized, routined, or written down. In such a multinodal neural network, the density of interchange is maximized, redundancy of connections is the rule, and communication is protocol-free. This is the way the brain resolves problems and also the way clan-type networks operate.

**Physiology**

At the core of the physiology of the clan-type organization is a process of social learning. The efficacy, resilience, and usefulness of the new organizational pattern stem from its capacity to learn. Organizational learning occurs when

Members of the organization act as learning agents for the organization, responding to changes in the internal and external environments of the organization by detecting and correcting errors in organizational theory-in-use, and embedding the result of their inquiry in private images and shared maps of the organization. [Argyris and Schon 1978]
Organizational learning occurs through flexible networks held together by moral contracts based on reciprocal negotiated obligations. Nothing is black or white: all is grey. The moral contracts contribute to the solution of the potential prisoner's dilemma that might plague clan-type networks by defining, often tacitly, the corridor or boundaries within which one must stay to honour the agreed-on expectations (Paquet 1991-92a).

There are many definitions of the learning organization (Friedmann and Abonyi 1976; Senge 1990), none of which covers the whole range of learning mechanisms and activities. One can describe organizational learning very simplistically:

• the process of acquisition of new information is enhanced by the promotion of experimentation, the use of planned, temporary systems-like taskforces;
• the process of retention and use of the new information is improved by teamwork, mutual respect, good communication, and sharing of experiences; and
• the capacity for continued learning and self-renewal of the organization is ensured through mechanisms to evaluate experiences and orderly discarding of dysfunctional ways.

The process of organizational learning itself is acquiring particular characteristics in the face of complexity. The environment is turbulent, the ground is in motion, uncertainty is omnipresent, and the policy/strategy problems are ill-structured and/or wicked. Three main principles appear to drive the learning process under these circumstances (Morin 1990):

• The dialogic principle posits the coexistence of contradictory logics at the very core of the problem definition. Social learning in the clan occurs through the maintenance of complementary/antagonistic forces. This is the only way to tackle a world marred by paradoxes, anomalies, and contradictions: for example, the tension between organizing and focusing, disorganizing and deintegrating, accountability and teamwork, autonomy and partnership, smaller and larger that confront all organizations at present (Peters 1992). Maintaining these contradictions is inherent to the "federal principle" and it is seen as crucial to the functioning of organizations like ABB (divided into some 1200 companies with an average of 200 employees and subdivided into some 4500 profit centres with an average of 50 employees, but with only 100 professionals at the Zurich headquarters). To its CEO, Percy Barnevik, "ABB is an organization with three internal contradictions. We want to be global and local, big and small, radically decentralized with centralized reporting and control" (O'Toole and Bennis 1992).

• The organizational feedback principle establishes that the clan produces not only output, but also itself. On a given day, the members of clans are different from what they were the day before: they have sharpened their roles, the technology has drifted ever so slightly, the self-image or theory of the organization has improved or deteriorated, and in the process the
functioning and governance system has evolved. The clan is a self-organizing form in which simultaneously the clan shapes its members and the members shape the clan.

- The hologram principle echoes the neural nature of the network: the quasi-totality of the information contained in the whole clan may be accessed through any member of the clan. It is a way to transcend the dichotomy between fixation on the whole or on the parts. In the brain, learning gets incorporated into neural nets, and even if a portion of the brain is destroyed the information can be retrieved. In the same manner, social learning proceeds in a two-way process of enrichment of the whole by the parts and vice-versa (Morgan 1986).

These three principles are interactive: they represent a way to approach complexity that challenges the Manichean casts of mind that suggest that only one logic must underpin an organizational form, that organizations are programmed by a “syndrome” that is not evolving but self-reinforcing, and that the duality between whole and parts must be resolved instead of being self-reinforcing.

The Ideological Glue

One fundamental dimension of the clan-type network is the syndrome of images/theory/values that gives it unity, stability, and dynamism. This bond is defined in a variety of ways but is always presented as a central glue — a common appreciative system, a shared vision, or a common set of values.

Jane Jacobs (1992) reminds us that “syndrome” comes from the Greek, meaning "things that run together." She boldly proposes that different ethical or theoretical glues bind together different types of organizations and divide them under two general headings: the guardian moral syndrome underpinning the hierarchical system, and the commercial moral syndrome underpinning market-type organizations.

Jacobs sketches the main features of these two syndromes. The guardian syndrome shuns trading, exerts prowess, adheres to tradition, hierarchy, discipline, ostentation, largesse, honour, fortitude, and deception. The commercial syndrome shuns force, celebrates voluntary agreements, adheres to collaboration, competition, industriousness, thriftiness, and dissent. Jacobs then declares, on the basis of a rather unpersuasive argument based largely on anecdotes, that any attempt to mix the two syndromes can only lead to “monstrous hybrids.” Indeed, much of her book is a relentless declaration that when one syndrome encroaches on the other, “crazy things happen.” In principle, Jacobs is willing to entertain the possibility that syndrome-friendly inventions and adaptations of one syndrome in the direction of the other are possible and that flexibility on this front may produce good results, but her main thrust is a forceful assertion that these two “systems of survival” do not lend themselves to much beneficial mixing.
Jacobs' Manichean approach is wrong-headed. It is built on much misunderstanding of the paradoxical realities of modern society. Monstrous hybrids are often the result of a hypocritical mask or rhetoric borrowed from one syndrome being slapped on a reality that is clearly defined by the other (Sérieyx 1993: 274). Contrary to Jacobs, our argument is that symbiosis between syndromes can occur and does occur without corruption. This is not only possible, it is mandatory and essential in the modern context. Indeed, such mixing constitutes the major challenge for the implantation of the new pattern of governance.

A clan requires a system of survival that combines the two appreciative systems underpinning hierarchy and market. Only such a combination can elicit a mixed system that has the capacity to overcome the hegemony of vertical linkages (imposed by hierarchical arrangements) and of horizontal linkages (embedded in market mechanisms) to promote the dominion of transversal linkages weaving together the network-type clan.

This new “mixed” syndrome (calling, for instance, for the capacity to play the market game when it is called for while recognizing the necessity of playing the guardian game in the face of crises) corresponds to the imperatives of the new reality. In a complex world, one cannot rely on simple radar, based on permanent rules. The key decisions have to be taken in full cognizance of changing and turbulent circumstances. Indeed, one needs not only to elicit transparent ways to mix these syndromes or to establish mechanisms through which one can switch at the right time between syndromes, but to develop the capacity for the mixed syndrome to evolve as circumstances change.

Already, some work on animal collectivities and on sophisticated social organizations has revealed that one may identify communities where the dual syndrome is in place and performs most effectively; although swift and radical guardian-type interventions are made during a crisis to secure the collective survival, the commercial syndrome takes over as soon as the crisis dissolves. Indeed, Japan is referred to as having found a particularly effective and idiosyncratic way to solve this very problem with great success (Vertinsky 1987). But this may not be sufficient. Nothing less than a syncretic meta-syndrome or a meta-set of rules is necessary.

The reason for this is rather simple. If one is interested in change or in changing rules, one must be in a position to discuss the rules about changing rules. In a legal framework, laws, rules, and regulations are established. The rules about defining rules are defined in the constitution — the constitution being a meta-rule. If one wishes to change the constitution (i.e., the rules about changing rules), one must shift the debate to a higher plane: the rules about changing rules about changing rules. In many countries, this requires a referendum. In the case at hand, what is needed to arbitrate and finalize the appropriate mix of syndromes and/or the switching mechanism between syndromes are some basic values that might act as meta-rules (Orgogozo and Sérieyx 1989).
What might serve as meta-rules appears to be rooted in an emerging ideology of participation. Until now, liberal democracies have emphasized rights and negative freedom (i.e., protection against interference with individual choices). This has led to an expropriation of the central ruling work of the citizens. Participation emphasizes positive freedom (i.e., the person being able to do this or be that and the duty to help others in that respect). In a rights society, the dignity of the individual comes from the fact that he has rights; in a participation society, freedom and efficacy come from the fact that the individual has a recognized voice. This participatory model obviously presupposes a “strong sense of community” (Taylor 1985). “The segmented organizational pattern that emerges involves individual participation in more than one segment. Participants... interact with several different nodes in the network” (Hine 1977).

This ideology of participation will bolster the clan as a pattern of governance and help spread it like wildfire. It is still en émergence, but it is in the making. It is embodied in an evolving pragmatic ethic that establishes a corridor within which the language of rights, individualism, and markets prevail, map the area beyond the corridor where the language of good would supersede it, and work out a language of problem solution for border issues: a pragmatic compromise of communicative procedures (commercial syndrome) and communitarian substance (guardian syndrome) that binds the multitude of participants in the sociocultural system in a sort of transversal neural network (Paquet 1991-92b).

THE NEW COMPETENCE

The new pattern of governance demands that managers have competencies quite different from those required in the past, and this has an important impact on the mix of education, training, and personal development likely to enable leaders and managers to be ready for the future. Because the new organization has to become a learning organization, the new “federal” leader or manager cannot ordain or command any longer: he or she must consult, negotiate, act as coach, animateur, designer, advocate, etc.

Families of New Competencies

The competencies that are going to be essential in this new world have not been fully documented yet, and there would be much disagreement in any discussion about what should be on any priority list. But one can draw up a provisional list from the work of Donald Michael (1980, 1988a,b) and Gareth Morgan (1988). The new competencies appear to fall into four general groups: contextual competencies; interpersonal and enactment skills; creating an effective corporate climate; and systems values.

Contextual competencies: This group consists of a number of important competencies and tools that are unlikely to be developed in management
programs: acknowledging uncertainty, recognizing the full implications of the fact that there is no reliable theory of social change, the capacity to entertain two logics at the same time, embracing error, building bridges and strengthening links, reframing problems to explore new solutions, and the capacity to prospect the regulation through values and norms.

**Interpersonal and enactment skills:** This group contains the whole range of communication skills and tools that are going to be required in a variety of contexts: consultation, negotiation, deliberations, conflict resolution, facilitation, action as a broker, a preceptor, an educator, an animateur. There is also the capacity to adopt new roles and attitudes.

Creating an effective corporate climate: In this group, one might retain the central importance of facilitating a shift toward perceiving the organization as a learning system; this requires a capacity to enable and truly empower individuals and a culture of productivity, responsiveness, creativity, and learning.

**Systems values:** This group focuses on the new ethic driven by the new reality of interconnectedness and interdependence: “our values still emphasize rights and autonomy while the actual circumstances of life make imperative the acceptance of obligations and interdependence” (Michael 1988a). This ethic is one that forces a redefinition of leadership: away from leaders as generals to leaders as leaders of leaders — those removing obstacles that prevent followers from making creative and effective decisions themselves (O'Toole and Bennis 1992).

**Experiential and Action Learning**

These new competencies cannot be acquired solely through a bookish mode of instruction or solely through action. One is not simply attempting to develop a broader knowledge base, or a few particular skills (although much of that is also happening) but to promote personal development. Indeed, as David Kolb (1984) would put it, in a true sense, learning is “the process whereby development occurs.” This relatively novel way of looking at learning denies the cleavage between learning and personal development, between learning and experience. It calls for ways to effect this learning by going through all of the steps of the “wheel of learning”: questioning, theory, action/experience and reflection (Handy 1990).

The current debates on management education have revealed its extraordinary weaknesses (Fry and Pasmore 1983; Porter and McKibbin 1988; Paquet 1992a). It has become clear that the educational establishment tends to break down experience or action into bits and pieces and write off too quickly the knowledge that can only result from one’s own experience. As a result, it has failed to provide the sort of learning that is required. The need to change the paradigm has been captured by the new emphasis on leadership, a word that may fail to connote something very precise, and indeed has a protean quality,
but captures very well what Vickers and others have been grasping for since the postwar period.

In leadership, what is at stake is "the ability to stay the course while rocking the boat, to enhance organizational readiness and competitiveness in an unpredictable environment" (Vicer 1992). This ability cannot be imparted effectively except through experiential and action learning. This form of intelligence — métis as the Greeks called this complex but coherent set of mental attitudes and intellectual behaviour that combines "le flair, la sagacité, la prévision, la souplesse d'esprit, la feinte, la débrouillardise, l'attention vigilante, le sens des opportunités" and is applied to "des réalités fugaces, mouvantes, déconcertantes, ambiguës, qui ne se prêtent ni à la mesure précise, ni au calcul exact, ni au raisonnement rigoureux" (Détienne and Vernant 1974) — cannot be imparted in any other way.

The links between leadership and métis and the intricate links between these concepts and the concept of phronesis ("une union entre un jugement sain et l'acte qui est l'expression correcte de ce jugement") is a terrain that Aristotle explored in some details. Contrary to Plato who condemned this sort of intelligence tatonnante, Aristotle celebrated it as the result of a dialogue with the situation that transforms, with experience, into incorporated prudence and vigilance (Paquet 1992b).

One can design programs likely to improve those needed competencies, and much experience has been gained in the design of such programs by the executive leadership team at CCMD. Such a program is profoundly inspired by the experiential learning theory of development that builds on the four learning modes:

- Affective complexity in concrete experience results in higher-order sentiments,
- perceptual complexity in reflective observation results in higher-order observations,
- symbolic complexity in abstract conceptualization results in higher-order concepts, and
- behavioral complexity in active experimentation results in higher-order actions. [Kolb 1984]

But this amounts to "reinventing education" (Handy 1990), to put in place an educational organization providing services, as tailor-made and individualized as possible (to the extent of designing individual contracts for each learner), but also emphasizing the development of the many types of "intelligences" (not only the analytical skills measured by IQ tests) and the need to build much more explicitly on the possibility of educational credits being granted for all sorts of experiences that are now neglected or ignored when formally appraising the status of learners (Handy 1990; Authier and Lévy 1992).

**CONCLUSION**

Over the last decade, new patterns of governance have evolved in the public and private sectors to meet the challenges posed by this new complex, turbulent, and interdependent world. Side by side with the dominant bureauc-
racies and market-type organizations, clan-type networks have evolved. They have proved rather flexible and effective. Fluid alliances have woven "virtual" organizations and temporary networks in both sectors that are in a process of continuous self-reorganization and self-reconfiguration.

We have identified some of the anatomical and physiological features of this new type of organization, and probed into the nature of the mixed ideological bond or glue necessary to provide this new organization form with unity, stability, and dynamism. Moreover, because such organizations require new sorts of competencies in their executives, we have looked at the new ways in which such competencies might have to be acquired.

Geoffrey Vickers (1965) anticipated much of this new state of affairs in his classic book on the art of judgment. He showed how much depends on mental skills, institutional processes, a capacity for reflection-in-action, and dynamic interaction with context — all elements that can be constructed. So the new patterns of governance may not be all that new. Indeed, it may be that we are in the process of rediscovering a new form of intercreation and leadership within organizations that have been allowed to disappear because of our excessive confidence in the efficiency of markets and hierarchies.

In a discussion of the particular qualities of Gildardo Magana (who took over the Mexican Revolution after the assassination of Zapata), John Womack (1969) echoes the workings of a good forum and the aptitudes and qualities of an official carrying the burden of office well, i.e., having become himself the locus of effective argumentation:

What he had learned was to mediate: not to compromise, to surrender principle and to trade concessions, but to detect reason in all claims in conflict, to recognize the particular legitimacy of each, to sense where the grounds of concord were, and to bring contestants into harmony there. Instinctively, he thrived on arguments, which he entered not to win but to conciliate.

This may well correspond to the model of the new leader in a system of governance resembling evolving neural networks.