This article proposes a cyclical theory of public entrepreneurship that is rooted in contextual conditions. The authors use material presented to the Institute of Public Administration of Canada for the annual innovation award, as well as an extensive literature review, to illustrate a new model for public entrepreneurship, arguing that today's public entrepreneurs are teams and their actions are systemic. Public entrepreneurs do not create new artifacts, nor do they design grandiose projects, but they slowly reinvent their organizations and, in so doing, transform the systems that control government effectiveness and efficiency. The authors generalize and contextualize the idea of public entrepreneurship and structure the emergence of entrepreneurs into a cycle theory. The individual entrepreneur dominates when the organization is new or there is a need for novel activities. As the organization matures and the need for efficiency takes over, dominant individual entrepreneurship disappears, and with time, a new systemic entrepreneurship arises to tackle them.

The New Public Management movement has focused on how the performance of state agencies could be improved (Moe and Stanton 1989). One of the suggestions that has been made is to let managers manage and to make it possible for entrepreneurs to do their job as if they were in the private sector. Such ideas are not new. "Let the managers manage" was the motto of the Canadian Royal Commission of 1963, known as the Glassco Commission. Moreover, public entrepreneurs existed long before Osborne and Gaebler (1992) published their book. Yet the very existence of entrepreneurship is certainly one of the most enduring paradoxes of any examination of the public sector. The public sector is often perceived to be synonymous with "bureaucratization," and it is associated with routine behaviors, risk avoidance, and lack of initiative. These are presented as inevitable characteristics of the sector (Crozier 1962), though research regularly reports innovative, entrepreneurial behavior that could involve considerable risks to those engaging in it (Dobel 1995; Hafsi and Koenig 1988; Palumbo, Musheno, and Maynard-Moody 1986).

Why do people become entrepreneurs in the public sector, where the risks are many and the rewards can be limited? In the public sector, entrepreneurial behavior has long been regarded as either nonexistent or aberrant, especially in the parliamentary system, where initiatives must officially come from elected ministers. To many scholars working in public administration, who are mainly concerned with equity, accountability, and careful management of public funds, any bold, innovative risk-taking behavior seems suspect (Moe 1994; Moe and Stanton 1989; Perlmutter and Cnaan 1995). According to theoreticians of bureaucracy (see Bozeman 1987; Crozier 1962; Weber 1968), the system works well when the objectives are clear and civil servants are able to apply the established rules faithfully.

Theories of bureaucracy often posit a permanence and a stability that are but a theoretical fantasy today (Henricks 1990). Objectives are clear only for a short period after they are set, whereupon they are challenged by environmental changes. Until the last quarter of the 20th century, most scholars admitted that for the sake of having a fixed set of rules, this discrepancy between theory and reality simply had to be accepted (Hartle 1985; Henricks 1990). Civil servants, who experience such discrepancies as part of their everyday life, are supposed to ignore them until legitimate, structured adjustments are introduced (Duncan, Ginter, and Capper 1991; Haass 1999). Adjustments are rare but always generate crises when they arrive. Still, entrepreneurs in the public sector have challenged these rules and launched innovations that have been beneficial to the public interest (Dobel 1995; Durst and Newell 1999).

The history of the public sector in North America abounds with stories of remarkable entrepreneurs who devoted an incredible amount of energy and sometimes put their future, their position, and their
Finally, we combine these into a contextualized cyclical theory of entrepreneurship and discuss its implications for research and practice in a few concluding comments.

Entrepreneurship

Entrepreneurship leads to social, economic, and political innovation (Eisenstadt 1980; Libecap 1996; O’Neill 1977). This innovation is, to use Schumpeter’s expression (1934), “creatively destructive.” It can transform entire industries. A simpler manifestation is one in which innovation provides an organization with opportunities for new activities (Julien and Marchesnay 1996). For example, it is generally acknowledged that the founder of Kodak invented the photography industry. The technology itself did not really make any difference, as Munir (2000) explains. Despite the unbelievable difficulties that accompany such a great change, George Eastman launched a true revolution, transforming photography from a specialized activity to a common one in which everyone could take part. A few years later, his colleagues once again revolutionized the industry by introducing new standards, but this was not achieved by any one recognizable person or entrepreneur. Rather, it was accomplished by an entrepreneurial team and system, which we shall discuss later.

Pascale (1990) has shown that Jack Welch and his predecessors often made adjustments in General Electric’s operational processes that may be considered entrepreneurial innovations. They maintained or increased the company’s competitive edge. Here again, the dominant individual’s contribution is important but, notwithstanding all the successes ascribed to a specific manager, a large number of original, creative contributions play a determining role that is at least as great (Pascale 1990). Collins (2001) argues further that great companies are those in which top managers are modest enough to build space for the creative entrepreneurial contributions of a large number of managers.1

The history of the public sector in North America abounds with stories of remarkable entrepreneurs who devoted an incredible amount of energy, and sometimes put their future, their positions, and their well-being at risk to reform the public systems or at least impel it to achieve new objectives that were important for the community.

In this article, we describe such an evolution from “heroic” entrepreneurship to systemic entrepreneurship in the public sector and explain why it takes place. First, as Lewis has suggested, a public entrepreneur is “a person who creates or profoundly elaborates a public organization so as to alter greatly the existing pattern of allocation of scarce public resources” (1980, 9). We would further call on Stevenson and Jarillo (1990) to add that in so doing, the entrepreneur “pursues opportunities without regard to the resources available.” Thus, a public entrepreneur as defined here is not the policy entrepreneur described by Kingdon (1995) or Roberts and King (1996) but an entrepreneur who contributes to building a public organization or increasing its ability to deliver services and create value. It is closer to the bureaucratic and executive entrepreneurs described by Roberts (1992). Second, we argue that entrepreneurship emerges in predictable ways and therefore must be contextualized. Generally, when an environment is homogeneous and stable, the public entrepreneurship observed is of the classic type: individual and exceptional (Caro 1974; Dobell 1989). When the environment is heterogeneous and turbulent, the public entrepreneurship observed is more systemic, meaning that it is not limited to a single individual but instead concerns a large number of people, affects a large segment of the organization’s operations, and becomes institutionalized (Riccucci 1995; Sanger and Levin 1992; Scott 2001). To place our discussion in its proper context, we first discuss the major issues that have driven research on entrepreneurship. Next, we describe the manifestations and characteristics of individual heroic public entrepreneurship, stressing the importance of the role it has played in the past. Then, we illustrate and describe the move toward systemic entrepreneurship. Finally, we combine these into a contextualized
These qualities lead some individuals to build original, value-creating solutions in the form of products, services, or organizational processes. Every action involving these values could therefore be considered an entrepreneurial event, and the person behind it an entrepreneur (Irwin 1985). For this reason, some scholars speak of the degree or frequency of entrepreneurship and of the entrepreneurial intensity or orientation within an organization (Lumpkin and Dess 1996; Morris and Jones 1999). These dimensions have also led to a lengthy debate about the nature of entrepreneurship. Shane and Venkataraman (2000) summarize what has become a consensus—that entrepreneurship is truly about the pursuit of opportunities by individuals—but do not disagree with an earlier suggestion by Stevenson and Jarillo, that it is better to think of entrepreneurship as a process by which individuals—either on their own or within organizations—pursue opportunities without regard to the resources they currently control (1990, 23).

One might think that the dimensions and nature of entrepreneurship in the public sector are not really that different from those found in large private sector companies (Duncan, Ginter, and Capper 1991). This may be true, but entrepreneurship in the public sector could take a somewhat different form from the type encountered in the private sector, at least because of the public sector’s “sprawling dimensions, its value system and its complex relationships with citizens that expect and demand more than they do, as consumers, from the private enterprises they deal with” (Ford and Zussman 1997, 9). Trying to draw distinctions between the public and private sectors could lead to lengthy developments. Although a simplification, for our purposes, we would like to emphasize the following differences, generally reported in the literature:

- Only rarely are public sector organizations driven by the profit motive. On the contrary, they are typically motivated by social and political goals, which are often numerous, varied, and difficult to quantify (Adams 1979; Bozeman 1987; Kobrak 1996; Larson and Roe 1999; Rainey 1983).
- These organizations are less exposed to the market and its rigorous application of cost-cutting measures or, more generally, to efficiency requirements. Instead, resources are allocated with political pressures and equal access to services is taken into consideration (Aharoni 1986; DeWitt et al. 1994; Libecap 1996).
- The financial resources are gathered through complex organizational, social, and political processes. As a result, these organizations receive funds indirectly from citizens, who lose sight of the link between paying for and receiving a service (Anderson 1970; Black 1982; Lynn 1981).
- Which segment of the population will end up benefiting is not always clear when an innovation is introduced (Haass 1999; Hartle 1985; Kogod and Caulfield 1982).
- These organizations have trouble identifying their “customers” because they serve a large number of more or less easily identifiable groups that occasionally come into conflict (Haas 1999; Hartle 1985; Kogod and Caulfield 1982).
- These organizations often provide services with more far-reaching consequences than those involving direct contact with customers, and they are held accountable for the indirect consequences of their actions (Durant et al. 1986; Wilson and Rachal 1976).
- These organizations are subject to greater scrutiny by society, so all of their major decisions must be transparent. Their decisions may even require achieving a consensus among and consultation with the most important groups in civil society (Blumenthal 1983; Lau, Newman, and Broedling 1980; Moe 1994; Moe and Stanton 1989).
- Their risk-profit profiles are conducive to safe decisions and error avoidance (Bower 1983; Davies 1981; Hafsi 1989).
- In a large public sector organization, entrepreneurship is promoted or suppressed by the prevailing conditions within the organization, which, according to contingency theory, are themselves correlated with the nature of the organization’s environment (Moon 1999; Morris and Jones 1999; Thompson 1967).
- Such organizations, operating within intense, aggressive environments, tend to generate standardized, rigid behavior, which, in turn, eliminates all entrepreneurship.
- Discouraging factors most often mentioned seem to be (1) rules, procedures, and policies and their fastidious application; (2) restrictions in the area of human resource management (recruitment, dismissal); (3) paltry rewards and internal rivalry; and (4) lack of managerial autonomy (Morris and Jones 1999).

It is generally acknowledged that these characteristics of the public sector are mostly not amicable to risk taking and innovation (Lin 1992; Meyer and Lyons 2000; Moon 1999). As a result, the public sector has traditionally been thought to be incompatible with manifestations of entrepreneurship (Leadbeater 1998). But, as we develop further, entrepreneurs in the public sector can also take advantage of this complexity to find unexpected room to maneuver. And, as the results of entrepreneurship are not always as clear in the public sector as they might be in the private sector, its manifestation may assume a different shape.

Building on these ideas, public sector theorists have begun to think of entrepreneurship in terms that are not so different from those mentioned earlier. In particular, Moon (1999) has shown that the
conditions leading to higher degrees of public sector entrepreneurship are not dissimilar from those observed in the private sector. Morris and Jones (1999) have proposed viewing entrepreneurship as a *process* in which an *agent* or entrepreneur is involved in an entrepreneurial *event*. An entrepreneurial event is the conceptualization and realization of an innovative idea, concept, service, product, or activity. The agent is the individual or group that takes on the responsibility of bringing the event to fruition. Of course, the entrepreneurial process involves values, especially a willingness to take risks in order to pursue an opportunity and bring about creative change (Stevenson, Roberts, and Grousbeck 1989).

**Individual Entrepreneurship**

The literature on individual entrepreneurs is well developed, with the entrepreneur’s personality generally dominating the discussion (Bygrave and Hofer 1991; Morris and Jones 1999). The entrepreneur is believed to be so different from the people around him or her that researchers’ first efforts have traditionally been attracted to the psychological makeup of the entrepreneur. The entrepreneur’s personality characteristics have also been associated with the occurrence of entrepreneurship. Unfortunately, this approach, though leading to a few interesting conclusions, is tautological in nature and not very convincing. According to research done in this area, it leads nowhere. Entrepreneurs’ psychological traits do not really set them apart from other people. Brockhaus (1980), Brockhaus and Nord (1979), Jenks (1950), Kilby (1971), and Sexton and Kent (1981) have strongly criticized the approach of defining entrepreneurship by describing the entrepreneur’s personality traits. Gartner (1988) says that “[w]hen certain psychological traits are carefully evaluated, it is not possible to differentiate entrepreneurs from managers or from the general population based on the entrepreneur’s supposed possession of such traits” (quoted in Morris and Jones 1999, 80). Stevenson and Jarillo, summarizing the literature, go even further: “It can be pointed out that it is extremely difficult to link particular psychological or sociological traits causally to patterns of complex behavior, such as entrepreneurship. . . . Indeed, the literature suggests that no causal link can be established between any of the above-mentioned variables and entrepreneurship” (1990, 20).

To get around the difficulty, Morris and Jones (1999) propose that it is preferable to think not in terms of determining whether entrepreneurship exists but rather in terms of the frequency of its manifestation. A related approach to the problem of defining entrepreneurship is to emphasize the type of activities the entrepreneur engages in (Gartner 1988). In fact, this leads back to making appraisals of the entrepreneurial event and agent, thus assessing the circumstances under which the event or the agent dominates.

Another issue is to identify the different types of entrepreneurs. Roberts (1992) offers a distinction between policy, bureaucratic, executive, and political entrepreneurs. In our case, we focus mostly on what Roberts calls “bureaucratic” or “executive” entrepreneurs—those who have administrative responsibility and are not necessarily elected. Sometimes, however, political entrepreneurs are so immersed in the bureaucratic process that they make things more difficult to distinguish.

In the public sector, the situations in which the entrepreneurial agent “steals the show” are those involving a need to create new activities (King 1988; Klapp 1987). This is probably what prompts Gartner (1988) to say that entrepreneurship should be defined as “associated with the creation of an organization.” That being the case, there is no need to artificially “separate the dancer from the dance.” But implicit in such a definition is the assumption that the organization is a simpler and well-contained entity.

Within public corporations, which are generally more removed from the core of the public service, there are often situations that favor the emergence of entrepreneurs. The Tennessee Valley Authority, for example a federal government-owned corporation in the United States, was built by forceful entrepreneurs—in particular, David Lilenthal.

Similarly, Italy’s ENI (Ente Nazionale Idrocarburi, or National Fuel Trust) was the creation of Enrico Mattei, Petro-Canada was conceived and built by Maurice Strong and Bill Hopper, Algeria’s Sonatrach was the brainchild of Ahmed Ghozali and Belaid Abdessalam. Many others, publicized over the past 40 years, could also be mentioned. Hafsi (1984) explains the regularity of these entrepreneurial manifestations in his government–state-owned enterprise relationship cycle theory. According to this theory, relationships between government and state-owned firms follow a cycle comprising three phases: cooperation, confrontation, and autonomy. These phases correspond to the stages of development of the organization’s technological core (Thompson 1967). When the firm is still building its technological core, its relationships with the state are mostly cooperative. As the core strengthens, the firm starts keeping the government at arm’s length, leading to confrontation, and with time, confrontations cease because they are seen as politically too costly, and the firm becomes autonomous.

For our purpose, Hafsi’s cooperation phase is an interesting one. During this phase, managers enjoy a great deal of latitude because they are in perfect harmony with the government. They are literally a part of it, sharing its philosophy and goals. It has been convincingly documented that they then enjoy considerable spending power and administrative latitude. It is not
surprising that this is the phase during which heroic entrepreneurs emerge, including those mentioned earlier. The other phases in the relationship between the state and the state firm introduce many more constraints and inhibit the occurrence of major entrepreneurial innovations. But as the organization develops further, it loses its flexibility and ability to function effectively and efficiently. Then the need for a more "systemic entrepreneurship" arises, in which bureaucratic and rigid organizations need to be rejuvenated.

Public sector entrepreneurship has been described as alive and well, even in cases in which relations between the government and the public sector organization involve confrontation or in which such organizations are autonomous. The U.S. public sector has often seen the emergence of great entrepreneurs who, against all expectations, profoundly altered their organization's capabilities and obtained improbable results (Moore 1995). For example, Robert Moses was involved for decades in building bridges, highways, and parks in and around New York City, circumventing all of the constraints that had caused many before him to fail (Caro 1974). In the same way, William Ruckelshaus, the first administrator of the Environmental Protection Agency (EPA), managed to make environmental protection a reality, even though resistance from industry and militant environmentalists suggested that this would be impossible (Bower 1983; Dobell 1989; Moore 1995). Canada has also seen numerous examples, such as Lucien Saulnier under Mayor Jean Drapeau in the development of Montreal; André Marier, Michel Bélanger, and Éric Gourdeau under minister René Lévesque in the nationalization of electric power in Quebec; and Gordon McGregor under federal minister C. D. Howe in the creation of Air Canada (Hafsi 1981). Many other examples of Quebecois civil servants who succeeded in developing public corporations have also been documented (Bernier 1998; Bernier and Fortin 1997; Côté and Dussault 1995). Some of these entrepreneurs eventually jumped into the political arena.

All of these cases are worthy of attention because they illustrate the emergence of conditions that create a favorable climate for the creation of new activities, thereby paving the way for the emergence of forceful entrepreneurs, as suggested by Gartner (1988) and described by Moore (1995).

All of them took many personal risks, often flouting the existing rules and sometimes even the law. However, the need for new activities had great legitimacy. Ruckelshaus needed to invent completely new activities and processes in order to protect the environment (Dobel 1995). Moses also built new activities in order to shape New York's infrastructure (Caro 1974). Strong and Hopper in Canada, Mattei in Italy, and Abdessalam and Ghozali in Algeria fulfilled the need to create a new oil company, independent of the multinational oil cartel, to supply energy to the national market (Hafsi 1981). In the same way, Montreal mayor Drapeau, assisted by Saulnier, needed to set up a mass transit infrastructure for Expo 1967 and later for the Olympic Games in Montreal, which led to the construction of the Montreal Metro.

Most of these public entrepreneurs were controversial and often criticized, precisely because they used public property and fulfilled objectives that were important to the public without being mandated to do so (Moe 1994; Moss 1997). For example, it is generally acknowledged that Moses made his contributions with the public's interest in mind, yet many people harshly criticized him for delinquent behavior (Caro 1974). Moses, Lilienthal, Hopper, and many others used every means at their disposal, legal or otherwise, to achieve their objectives and to create new activities and organizations (Hafsi 1981). In so doing, they managed to innovate and succeed in situations in which the chances of doing so were considered hopeless.

Therefore, individual entrepreneurship, especially in the public sector, has been characterized by conditions that favor the emergence of new activities, or "new combinations," as Schumpeter (1934) would have put it. These conditions led to a freeing up of resources and consequently to the creation of financial and organizational slack that rational entrepreneurs exploited in order to succeed (Palumbo, Musheno, and Maynard-Moody 1986). Environmental stability and munificence appear to have been associated with both increased slack and reduced risk and are related to the radical steps taken by these entrepreneurs. Proactive, innovative behavior and bold risk taking seem to be the hallmarks of entrepreneurial individuals who have emerged in the public sector.

Where the environment is resource tight, turbulent, or both, the risk for individual entrepreneurs is often perceived to be excessive, and the type of entrepreneurship that emerges is of a different nature (Morris and Jones 1999; Riccucci 1995; Roberts 1992; Sanger and Levin 1992). The individual adventure leaves the floor to a collective endeavor that we call "systemic." In the next section, we present three examples from the 2001 Innovation Award competition, sponsored by the Institute of Public Administration of Canada (IPAC). As Borins (2000) mentions, the IPAC cases are not as well documented as the Ford Foundation cases in the United States, and thus more information was needed. Through interviews with key participants, we conducted additional research on eight of the innovative cases that received awards. In addition, one of the authors was able to attend the 2001 jury discussions, so that three among these cases have been even better documented and are used here to develop our theoretical argument.
In 2001, the government of Nunavut (formerly the Northwest Territories) and the Alberta Public Service tied for the IPAC Gold Award, and the bronze medal was awarded to the Ministry of Small Business, Tourism, and Culture in British Columbia. In 2001, two years after its creation, Nunavut appeared to have an entirely new type of government, with greater aboriginal participation, decentralization of public services toward local communities, incorporation of Inuit Qajimatunqangit (Inuit traditional knowledge) into government programs and services, use of advanced information technologies to keep in touch with all the widely dispersed communities, and the introduction of "telehealth" and distance learning in remote areas. Finally, extensive citizen participation was introduced into government, which involved a major overhaul of the legal system, legislation, and education. This transformation revealed new leaders, but also an abundance of original, innovative contributions at many levels and in many communities. The convergence of these innovations, still under way, has led to a different type of government that is said to "better reconcile the needs for democratic choice and efficiency."

The Alberta Public Service lost nearly 9,000 jobs from 1992 to 1997. After the great slump in public sector activities in the 1980s and 1990s, it found itself in a different cycle in 1997 and hoped to achieve very strong growth. But corporate memory and a great deal of significant experience and talent had been lost. Furthermore, a very high level of attrition was expected because of the imminent retirement of aging employees. At the same time, competition for qualified personnel in all economic sectors was becoming much stronger. Job security, a traditional feature of the public service, had lost much of its appeal. A new corporate human resource strategy was seen as the best way to deal with the situation.

The proposed strategy had three objectives: (1) develop the leadership ability of all employees, with an emphasis on management; (2) promote learning within the public service, with an emphasis on public service renewal; and (3) promote the Alberta Public Service as an attractive employer. These objectives necessitated considerable change, including getting the unions’ cooperation and standardizing practices throughout all of the ministries. As a result, employee mobility became a reality. Every employee could move from one ministry to another and find clear requirements expressed in a standard way with respect to skills, performance expectations, and professional development opportunities. Employee satisfaction climbed from 68 percent in 1997 to 85 percent in 2000, and our interviewees indicate that it was still very high in 2004.

The third organization awarded an IPAC prize in 2001, the Ministry of Small Business, Tourism, and Culture in British Columbia, launched a new operation called Victoria Connects, a service run by three levels of government to provide business start-up and development services in the Greater Victoria Area on Vancouver Island. Victoria Connects offers regulatory services such as business registration, licensing, and tax payments, and business development support, including information, training, workshops, and counseling. It standardizes the services provided by several partners at the three governmental levels, the Canada/British Columbia Business Service Centre and British Columbia’s One Stop Business Registration. In addition, Victoria Connects has developed a resource library and Internet access to other business information, thereby providing a one-stop shopping service that is quick, useful, and customer-oriented. It eliminates duplication and reduces confusion for clients. In addition, Victoria Connects helps to reduce the costs and improve the efficiency of its government partners.

These examples represent the variety of innovations involved in the transformation of public administration in Canada. The three illustrate the pursuit of opportunity without regard to the resources controlled. The only difference from traditional entrepreneurship, as described by Stevenson and Jarillo (1990) and Shane and Venkataraman (2000), is that in this case, many individuals were involved in transforming a whole system, each nibbling at different aspects of the existing order. A new government, a rejuvenation of public service activities, and the use of technology to dramatically transform service delivery are typical of the more than 1,000 entrepreneurial initiatives that have been submitted to IPAC since its establishment (see Kernaghan, Marson, and Borins 2000). The burgeoning of creativity is impressive. Public sector entrepreneurs seem to be primarily concerned with settling the traditional problems of running a bureaucracy by eliminating its most irritating elements. The
finalists are organizations that have agreed to prepare for the award at great length and deliver a presentation before a jury that is representative of the institute's members. A study of all of the award-winning projects, including those selected as being the best, led to the study of the eight mentioned earlier. Although not by any means a representative sample in the statistical sense, we believe these to be typical submissions. Adding our own findings to those of the extant literature (Borins 1998; Kernaghan, Marson, and Borins 2000), we can draw the following conclusions:

- Increasingly, entrepreneurship is considered a legitimate activity in the Canadian public sector and is encouraged.
- Entrepreneurship is considered an essential way to promote efficiency, improve productivity, and provide better services (Osborne and Gaebler 1992; Roberts 1999; Roberts and King 1996).
- Entrepreneurship, rather than being dissociated from the operational processes of the organization concerned, seems to be generated and stimulated by those processes.
- Many bureaucratic obstacles still exist in the federal and provincial governments, but the difference is that these hurdles themselves have become the focus of managers' and their collaborators' creativity.

But, most importantly,

- Entrepreneurship is a systemic phenomenon that requires a high level of cooperation among specialized actors within the system. The actors at the top safeguard the operations of the system as a whole and manage all other actors' willingness to cooperate. The actors at the bottom innovate, while those in the middle reconcile managers' desire to innovate at the bottom with the orientations and concerns at the top. This process is similar to what happens in large diversified firms (Noda and Bower 1996).
- In this systemic entrepreneurial innovation, several actors and occasionally several organizations participate. The innovative input of each is combined to create a completely new situation.
- Middle managers are a major—though not the only—source of organizational creativity in public entrepreneurship (Qi Jing Ye 2005).
- Entrepreneurship does not emerge without leadership at the top that fosters it. The manager at the top is the “incubator” of entrepreneurship.
- Managers at the top play a key, pivotal role, setting priorities, undertaking interorganizational initiatives where appropriate, and encouraging and rewarding actors for their contributions.
- Managers at the top also play a significant symbolic role, defining new standards and values for innovation, proactiveness, and occasionally, reasonable risk taking.

Such systemic entrepreneurship is not fundamentally different from what has been described elsewhere (Ricucci 1995; Roberts 1992; Roberts and King 1996; Sanger and Levin 1992). In addition to the collective aspects described earlier, we have simply highlighted here the effects on the whole organizational system. Such entrepreneurship has probably always existed in public sector organizations, but it is rarely mentioned and even more rarely documented in a British-type parliamentary setting. We propose that if individual heroic entrepreneurship provides the quick and major bursts required for fundamental change, systemic entrepreneurship is what ensures that these revolutionary interventions have enduring effect.

In the public sector, dominant entrepreneurs who succeed in solving their organizations’ problems—and occasionally even larger social ills—through their contributions emerge only under special conditions, which are generally quite different from those of systemic entrepreneurship.

Individual and Systemic Entrepreneurship: Toward a Cyclical Theory of Administrative Entrepreneurship

Public Sector Entrepreneurship in Context

In the public sector, dominant entrepreneurs who succeed at solving their organizations’ problems—and occasionally even larger social ills—through their contributions emerge only under special conditions, which are generally quite different from those of systemic entrepreneurship. This has been argued elsewhere (Roberts 1992; Roberts and King 1996). Our
The proposition and contribution here is that these conditions are differentiated and, consequently, the type of entrepreneurship that will emerge is predictable. Based on examples from Canada and the United States, Table 1 summarizes the distinctive characteristics of each of the two forms—in particular, the elements of context that are associated with each. Although it is supported by our examples, the table should be considered an inductive step to be formally tested in future empirical work. We use it here to contrast the contexts within which the two types of entrepreneurship considered here are stimulated.

First, the organization’s characteristics are revealing. Individual entrepreneurship is fostered when an organization is young and small or, in a larger organization, when new and favorable environmental conditions justify that its activities be dramatically extended or renewed. Thus, McGregor had to create a completely new airline in accord with Minister Howe’s objectives. Also, as mentioned earlier, even though the organization that Montreal secretary general Saulnier and his alter ego, Mayor Drapeau, headed was large and venerable, it still required new activities to prepare for the 1967 International and Universal Exposition. Among the new activities demanded by Expo 67, there was a need for better public transportation. The idea of an underground rail system had never been considered before, but its time had come. To start on the right foot, both the Trans-Canada Air Lines and the Montreal Metro had to be protected from the usual administrative controls. They benefited from special administrative arrangements that provided financial and administrative slack. In individual entrepreneurship, all major actions are designed to create something concrete and patterned to meet specific needs. Thus, Moses “built” parks, bridges, and highways; Lilienthal “built” dams to control floods and power plants to reduce the cost of electric power; McGregor “secured” airplanes to carry passengers safely; and Hopper “manufactured” petroleum products and developed a distribution network independent of those of the traditional multinational oil companies. When the product was not tangible, as with the EPA, the entrepreneur built a new organization that transformed its environment.

**Proposition 1.** The emergence of individual heroic entrepreneurship is associated with the creation of a new organization or the design of new activities that are intended to provide a specific and concrete product or service to the population. As a result, the entrepreneur is often involved in activities that are new and thus experiencing a period of strong growth. These activities are often important to society, or at least to government. Frequently, the organization created holds values that are widely shared within the civil service and, as a result, attracts a lot of attention and support. Content

| Table 1 Individual Entrepreneurship and Systemic Entrepreneurship |
|---------------------------------|-------------------|
| **Organization** | **Individual Entrepreneurship** | **Systemic Entrepreneurship** |
| Age | Young organization or new activities | Mature, activities exist already |
| Size | Large or small autonomous units | Large organization |
| Types of activities | Equipment, construction, many concrete achievements | Administration, action taken to change the organization itself |
| Growth of activities | Strong | Average to low |
| Perceived importance of the organization and its activities for society | Very high | Importance not very well known |
| Complexity of the organization | Initially the activities not very complex technically or in terms of market | Usually complex |
| Visibility of the organization | Usually high | Usually low |
| Values stressed | General and social | Organizational |
| Organization’s power relative to the government | Relatively low to moderate | Moderate to high |
| **Government** | | |
| Interest in organization’s activities | Moderate to high | Low to moderate |
| Political power | Moderate to high | Low to moderate |
| Resources available for the activity planned | Substantial | Limited |
| **Task environment** | | |
| Turbulence | Low to moderate | High to moderate |
| Heterogeneity | Low to moderate | High to moderate |
| **Stakeholders** | | |
| Number | Small | Large |
| Involvement | High | Low |
| Diversity | Low | High |
| Degree of organization | High | Low to moderate |
| Capacity for action | High | Low to moderate |
takes precedence over organizational processes because the organization or the activity is still in its infancy, with few rules and informal behavior. As suggested by the examples described earlier, relations with the government are usually very cooperative, and the organization depends almost entirely on the government for its resources and capacity for action.

A government that is associated with heroic individual entrepreneurs is often relatively strong, or at least stable. Thus, Lilienthal had the support of President Franklin D. Roosevelt. When Ruckelshaus was appointed to start up the EPA under President Richard Nixon, the U.S. Congress was controlled by Democrats, who were at least nominally favorable to environmental protection activities. Drapeau in Montreal was a very popular mayor. And in politically unstable Italy, Mattei was the only businessman at the time who was capable of establishing a consensus among all the Italian political groups, which furnished a measure of stability. Because the activity planned is perceived to be important, it is given financial resources and a high degree of organizational flexibility.

**Proposition 2.** Individual entrepreneurship is associated with a strong or stable government. Individual entrepreneurs emerge more often in simple or moderately complex environments. Where turbulence and heterogeneity are too great, the risk for an individual entrepreneur is also too big. The stakeholders must be concentrated and powerful in order to support the entrepreneur’s projects. If the stakeholders are too widely dispersed and unorganized, and if the power they wield is widely distributed among them, the entrepreneur will be directly exposed to every type of fiasco, which is consistent with stakeholder and resource dependence theories (Pfeffer and Salancik 1978). Thus, to return to the example of the EPA and Ruckelshaus, there were initially only two major groups of stakeholders—corporations and militant environmentalists—both reasonably well organized. He could address both of them directly, reassure them, or negotiate to launch new initiatives without too much risk of upsetting them (Bower 1983).

**Proposition 3.** Individual entrepreneurship is associated with a simple or moderately complex environment and concentrated and powerful stakeholders. In contrast, systemic entrepreneurship is fostered by conditions that are at the opposite end of the spectrum. The most favorable organization is often complex. Its relative size and power in the machinery of government may be substantial, but generally it is not very visible in the community, in particular before it is rejuvenated. Its growth is often slow, sometimes even negative, and innovators inevitably focus on activities that can make the organization function better. They call attention to slack where none seems to exist and use it to solve problems of importance to government or society. Descriptions of the Canadian situation and numerous award-winning projects in the past 10 years focus on opportunities to improve the government machinery and are typical of systemic leadership.

A government that facilitates the emergence of systemic entrepreneurship is often weak and precarious, with few resources at its disposal. It seeks any opportunities that can help it in such circumstances. For example, anyone who labors with limited resources to make the system more efficient and can make it function better is regarded as a valuable asset. Therefore, it is not surprising that systemic entrepreneurship is more commonly experienced or sought in crisis situations to improve government operations (Osborne and Gaebler 1992). It occurs in periods of scarcity and turbulence, during which major, frequently disorganized public debates take place and involves different strata and representatives of civil society.

**Proposition 4.** Systemic entrepreneurship is associated with weak governments facing a complex environment, as well as complex organizations. Its development is made easier by a crisis situation. Systemic entrepreneurship goes hand in hand with the current state of the public sector. It is oriented toward a gradual change of the system itself rather than introducing new activities, and it fits with the system’s needs for improvements rather than transformation (Osborne and Gaebler 1992; Sapolsky, Aisenberg, and Morone 1987). The Canadian experience shows that in order to encourage systemic entrepreneurship, it is enough to raise its social and administrative standing and give it more legitimacy.

How the environment is changing is also an important contextual element for public entrepreneurship. A revolutionary pace of change may generate great content achievements on the part of individual entrepreneurs, such as building dams, parks, or highways, or it may lead to a complete transformation of the public sector by both great individual entrepreneurs and many systemic ones. Revolutionary transformations of the public sector are rare and happen only in social and political revolutions, such as the one experienced in Russia in 1917 (Braybrooke and Lindblom 1963). An evolutionary pace of change corresponds more to systemic entrepreneurship and appears to emphasize process-based innovations, which is also supported in the extant literature (see, e.g., Kernaghan, Marson, and Borins 2000; Larson and Coe 1999; Lewis 1980; Libecap 1996; Moe 1994; Osborne and Gaebler 1992). Significant content-based innovations require courageous decisions that are not compatible with the evolutionary aspect of this type of change. Also, periods of transition are favorable to process-based systemic entrepreneurship, as was the
case in New Zealand for the transformation of the public sector in the late 1990s.

**Proposition 5.** Systemic entrepreneurship is associated with incremental, process-based innovations (see figure 1 and table 2). Because it is context specific, the nature of public entrepreneurship is cyclical. When economic circumstances are favorable—strong government and a growing economy—new activities are launched with great ceremony, and talented individuals are provided with opportunities to express themselves by taking risks and undertaking large-scale projects. Organizations that thrive under such circumstances are typically small and dynamic, with all of their activities still in development. Their informal atmosphere contrasts with the gravity and rigidity of the conventional machinery of government. In this first phase, because the government is strong and sufficiently powerful, it takes the risk of leaving its reputation in the hands of a new organization, but it does so only when the entrepreneur appears to have the necessary influence and credibility for the operation. In certain special cases, an established organization will undertake new innovative activities, as seen recently when Hydro-Québec, pushed by its market-oriented president André Caillé and following the example of Enron, began speculating on the electricity market during periods of peak demand. Because these transactions produced spectacular results, entrepreneurship of this type was seen as acceptable throughout the organization. Thus, Hydro-Québec, which engages in many routine activities, was pushed to become a particularly entrepreneurial corporation in the 1999–2001 period, and Caillé was generally thought of as a forceful entrepreneur (Hafsi 2001). But even though the whole organization was shaken to its roots by the new ideas, the new marketing activities were conducted by a new subsidiary. All other conditions related to government, environment, and stakeholders remained unchanged. Nonetheless, this first phase typically is marked by the launching of strikingly new activities, even if it takes place within more established structures.

The proliferation of new activities tends to stretch available resources (Hafsi and Koenig 1988). The government must then reconcile all of the demands made on it by credible, prominent people who are often highly respected in the community. Its attempts to mediate lead to a large number of conflicts, which, though minor, have a considerable impact on innovation and entrepreneurs’ willingness to innovate. The eventual effect is a significant decline in entrepreneurship and a gradual integration of new activities into the traditional bureaucracy. During this second phase, entrepreneurship is at its lowest ebb. Disappointed entrepreneurs often leave public administration to work in the private sector or on international projects, both of which provide them with more space. The experiences of Hydro-Québec in the 1970s and 1980s, Petro-Canada in the early 1980s, and the French company Elf Aquitaine in the 1970s (Hafsi 1984; Hafsi and Demers 1989) demonstrate these patterns clearly.

Finally, the disappearance of the great captains of industry who helped to build the public sector accelerates bureaucratization and leads to decreased productivity in governmental organizations. This, in turn, leads to inefficient entities that perform below expectations. Some of them are not only inefficient but obsolete or ineffective as well. Such organizations become more and more inefficient until an external shock reinvigorates them (Miller and Friesen 1984). Typically, unimportant peripheral activities take up substantial resources that are needed for essential activities (Thurow 1980). Taxes increase. The public becomes more dissatisfied, which leads to the political crises that have affected many countries since the early 1970s.

![Figure 1 Three Stages of the Public Sector Entrepreneurship Cycle](image)
The state's difficulties create opportunities that spur a new generation of entrepreneurs to action. These entrepreneurs are of a new type. First, they focus on the organization and how it works. Next, because the organization is complex, its transformation will require many convergent contributions. This leads to a plethora of innovations at different levels, which managers must facilitate and coordinate. For example, new e-government initiatives, such as Victoria Connects, emerged from small organizations in the public service that eventually justified and made possible a reorganization of the entire public administration. These innovations are at the root of the revival of the public sector and the development of systemic entrepreneurship. Motivation is restored and the organization is revived again. This phase is generally much more fertile than the start-up phase because it allows for more delicate and sophisticated innovations that are more difficult to copy, a factor that might make all the difference for competition in world markets (Porter 1990). However, Bernier (1989) has suggested that, once public sector organizations go through the cycle described by Hafsi and Koenig (1988), they may begin a second cycle that could nevertheless be much more accelerated. This requires a type of individual entrepreneur different, probably less flamboyant and more aware of the system's requirements. This is the way some organizations reinvent themselves. One such example is provided by the history of Hydro-Québec, which has had to reinvent itself many times over (Hafsi 2001).

To provide for contingent factors, it is useful to mention that almost everywhere among Western industrialized nations, governments experienced a variety of pressures in the 1980s and 1990s. Globalization made their economic role more fragile. In many countries, it coincided with the rise of a new dominant ideology. The conservative governments of Margaret Thatcher, Ronald Reagan, and Brian Mulroney were little inclined to have confidence in government and voiced the need to reduce its size and power (Metcalfe 1993), a situation their successors have perpetuated. Furthermore, the public, unhappy with the decline in services, developed an increasingly negative attitude toward politicians and public administrators alike. This loss of confidence was coupled with a difficult fiscal environment in which income stopped growing while government spending on programs designed for the welfare state of the 1960s soared (Charish and Daniels 1997). A spiraling public debt forced governments to keep cutting expenses, leaving the population with services worth only a fraction of their tax dollars, another source of heightened public dissatisfaction (Salazar 1992; Silverstein 1996).

The will to raise popular support for public administration has led to new ways of providing public services. Conveniently, technology makes new institutional forms possible. Indeed, modern communications make it easier for organizations to operate in networks, which was unthinkable a few years ago. Some tasks, which not long ago required formal, hierarchical organizations, could henceforth be carried out by networks of organizations that cooperate because of their commitment to common objectives. This new way of seeing and doing things is known as the “New Public Management.” Nonetheless, it is hard to see New Public Management as a coherent whole. Without a hard core (in the paradigmatic sense of the term), it can hardly be driven by a united community (Gow and Dufour 1998).

This new situation demands new public sector managers—entrepreneurs who know how to negotiate to obtain the resources needed to revive organizations that are frequently in dire straits. The new, more difficult context stimulates a new entrepreneurship, even within a parliamentary system. What happens in the public sector is similar to what happens in large private sector corporations. Systemic entrepreneurship in the Canadian public sector is no different from the systemic “intrapreneurship” seen in a company such as General Electric (Hafsi 1981; Pascale 1990). The

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<td><strong>Phase 1</strong></td>
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<td><strong>Context</strong></td>
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<td>• Government is strong or moderately powerful</td>
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<td>• Tension on public services (see table 1)</td>
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<td><strong>Phase 2</strong></td>
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<td><strong>Organizational characteristics</strong></td>
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<td>• Newly created organization</td>
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tremendous transformations that took place in many administrations in the United States, New Zealand, and Australia or in large developing countries such as China (Hafsi and Tian 2005) are the result of the same processes and are based on the same models.

The public sector, however, should not be considered as a whole, except in special cases, such as the new government of Nunavut. Usually, the patterns described here appear in specific organizations, such as a particular administration or public corporation. Also, behaviors that contradict those patterns can be found throughout the public sector. But because the forces at work throughout the public sector are the same everywhere, we propose that the concept of an entrepreneurship cycle can be said to apply in a general way, even though exceptions do occur.

Proposition 6. Entrepreneurship in the public sector evolves cyclically: The first phase is dominated by heroic individual entrepreneurs, the second phase has no or drastically reduced entrepreneurship, and the third phase has a large number of entrepreneurs who work at transforming the whole organizational system.

Proposition 6a. The first phase stages powerful heroic entrepreneurs who, backed by powerful and stable governments and growing economic conditions, create new organizations or new activities to provide badly needed new products and services.

Proposition 6b. The last phase of the public entrepreneurship cycle is inhabited by a large number of entrepreneurs who—in the face of crises, weak and precarious governments, large and complex bureaucracies, and public dissatisfaction—are able to develop incremental solutions that dramatically improve the operations of the public administration system.

Conclusion

In this paper, we have proposed a contextualized theory of entrepreneurship in the public sector. The current phase of public sector reform is built on great slogans, often borrowed from the management literature. The theme of entrepreneurship is particularly in vogue. However, few studies have focused on the organizational characteristics of this phase. We have attempted to do so in this article. We have taken a step back and looked at the literature as a whole to propose that the forms entrepreneurship takes—particularly in the public sector, but probably in general as well—are predictable and context dependent.

The three stages in the evolution of public sector organizations are dominated by differing context and lead to heroic or systemic entrepreneurship—and in the transition between them, to no entrepreneurship.

When the organization or its activities are new, entrepreneurship is of the classic type, dominated by the entrepreneur and his personal, psychological, and sociological characteristics. In such cases, the project is carried out under relatively favorable conditions in terms of resources and organizational slack. The purpose of individual entrepreneurship in this case is to create something concrete, an organization or an artifact (e.g., a product, service, or market).

Entrepreneurship disappears when an organization matures and the main preoccupation becomes making it operate like a machine. At such times, standardization requirements drive out entrepreneurial initiative. But when the organization reaches high levels of complexity, when its environment becomes unpredictable—too turbulent or too heterogeneous or both—operations no longer follow mechanistic rules. Complexity obscures cause-and-effect relationships, and the most appropriate action is to make the system more intelligent by releasing the intelligence of all the key actors. It is at such times that systemic entrepreneurship appears. This form of innovation is focused on improving the operational process of the complex system that makes up an organization rather than what it does or produces. Many people take part in these innovations, often with the goal of improving their performance and image among customers or citizens, which often improves their well-being and that of their colleagues.

Public sector managers and public policy makers should take these patterns into account in order to facilitate their emergence. The revival of a public sector that is in crisis does not come about through the emergence of great entrepreneurs but through the creative contributions of more people within the institution. These contributions are facilitated by the building of a system that favors widespread initiative. This type of entrepreneurship seems to come about more easily when organizational creativity is legitimized and contributions to this creativity are acknowledged. In such cases, entrepreneurs are people who know how to breathe new life into organizations haunted by self-doubt. Innovators can take advantage of the opportunities they are offered to make positive contributions to developing the organization and the larger decision space that thereby becomes available. On the other hand, traditional entrepreneurship, in which a heroic person holds sway, still has currency when there is a desire to create new organizations and activities.

Data on applications to the IPAC award are now available in electronic format. Although the quality of the information available is still debatable, they should
allow testing of the theory proposed here on the nature and dynamics of public entrepreneurship. The study of applications for a public sector innovation prize has already been done by Borins (2001), who looks at such submissions in Canada, the United States, and the British Commonwealth. What has not been done is a study of the material within a more theoretical framework. Public administration suffers from theoretical malnutrition (Denhardt 1984; Savoie 1999). We suggest framing the analysis from an institutionalist perspective. Such a perspective would allow generalizations on the implications of public entrepreneurship, which are not available in the extant literature.

Understanding the actual functioning of institutions and the role of entrepreneurs could lead to a better understanding of the determinants of public sector organizations’ performance. Organizations, as Selznick (1957) suggested years ago, become institutions when they are infused with values. That is exactly what entrepreneurs have to do. They have to innovate, but also gain legitimacy for their accomplishments. Public sector organizations perform better when resources can be secured from an organizational and political environment that does more than tolerate them.

Notes

1. Collins (2001) defines great companies as those that largely outperform the market (four to seven times the market returns) for a long period of time (at least 15 years).
2. Lévesque was a minister in the Liberal government of the province at that time.
3. All of the information used in this section was drawn from the IPAC files, access to which was generously furnished by the IPAC management.
4. The institute is a forum in which managers and researchers in the field meet to exchange ideas. Its thousands of members are overwhelmingly public organizations. It was founded as a “learned society” more than 50 years ago by federal civil servants who felt it was necessary to develop a science in the field. All of the provincial governments in Canada consider it necessary to subsidize the institute. The IPAC Excellence Award, therefore, has major symbolic value for administrators, who turn out in large numbers for its annual conference. A highlight of the annual conference is the announcement of the prizewinners, who see the recognition as an indication of their worth to the public they serve.
5. The context of entrepreneurship is seen here as comprising four dimensions: (1) the organization, (2) the government, (3) the task environment, and (4) the key stakeholders.

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