In Search of Archetypes in Crisis Management[1]

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Despite their unstable nature, crises are frequently defined as opportunities for managers to make strategic decisions in terms of bringing new configurations into play. According to this perspective, research is undertaken to discover new forms taken on by organisations during times of crisis. Relying on the experience of Local Centres of Community Services in Quebec during the ice storm of 1998, the results of this research permitted us to demonstrate three archetypes of crisis management collectivists, integrators and reactive types, each with the specific characteristics and imperatives as defined by Miller (1987). These consist of leadership, strategies, structures and environments. The research also permitted us to establish participants' appreciation of the performance of their organisation and of the managers dealt with the crisis. Finally, we will discuss the importance of applying theories of configuration in the field of crisis management and several promising areas of research in this field.

Introduction

On 5 January 1998 an ice storm started in Quebec, causing a lengthy and vast interruption of electrical supply while simultaneously causing disruption of certain important infrastructures. Quebec never fully recovered from the scope of this disaster, which affected a great number of people over a long period (Quebec, 1999). As of 6 January 1998, Hydro-Quebec, the national supplier of electricity, indicates that 700 000 subscribers were deprived of electricity. The maximum amount of private electricity subscribers were affected as of 9 January 1998. By this time, 1,400,000 subscribers no longer had service, representing half the population of Quebec.

The greatest amount of ice precipitation was recorded on the south shore of the Montreal region, which came to be known as the: ''triangle of ice''. According to most statistics, this region qualified as the one which experienced the most problems. In this region ice precipitation was the most abundant and electrical outages were the longest lasting as well.

The electrical outages caused by the ice storm lead to the deprivation of heat in hundreds of thousands of homes. The longer the outages lasted, the more these homes became uninhabitable, unless they were equipped with alternative heating or supplied with power by a generator. Without these means, tens of thousands of people were forced to find new lodging away from their homes.

Crisis and Catastrophe

The 1998 ice storm provided researchers with a favourable case to study the methods organisations use to manage such an occurrence. A close examination of the pertinent literature on this problem allows us to observe that a conceptual disorder coupled with an abundance of disciplinary interests can be described by different definitions and understandings of the concepts of crises and catastrophes. It is therefore important to start by clarifying each of these concepts.

The concept of a catastrophe has generally been approached from four main angles *according to the origin* (natural occurrence or man-made technology), *according to the consequences* (extent of losses and damage, intensity and length), *according to the underlying course* (interventions of various agents, capacities of responses, organisations, and communities) and *according to the level of risk involved* (Drabek and Hoetmer, 1991; Denis, 1993, 1998, 2002; Lagadec, 1996; Rosenthal, Charles and Hart, 1989; Rosenthal and Kouzmin, 1993; Shrivastava, 1993; Perrow, 1994; Turner, 1994). Generally, the concept of a catastrophe is associated with a relatively well-defined event and its most noticeable manifestations (Rosenthal and Kouzmin, 1993; Denis, 1993; Drabek and Hoetmer, 1991; Dynes, 1970a; Barton, 1962; Cisin and Clark, 1962; Guetzkow, 1962). The definition given by Denis is the one that in our view best characterizes a catastrophe, that of a ''sudden occurrence, with a low probability which, if it arises, has important

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consequences in terms of losses (human, material, financial, etc.) for a given collective, and provokes tensions in the social fabric of that collective'' (Denis, 1993; Denis, 2002). According to this definition, the 1998 ice storm is a catastrophe.

The concept of a crisis takes on a more generic and less specific meaning. If literature about catastrophes led to the elaboration of relatively broad typological motifs, there is nothing similar in crisis literature that attempts to move in several directions at once. While it is a more complex and rich concept, the extensive use of 'crisis' as a concept in a number of disciplines tends to generate confusion about its real meaning (Pauchant and Douville, 1993; Roux-Dufort, 2000). In spite of this multidisciplinary confusion, the concept of a crisis has a certain number of attributes that are well known by most authors, and they are summarised in Table 1.

Morin believes that the notion of a crisis has become such a cliché and became so generalised that it has practically come to mean the opposite of its original Greek meaning (Morin, 1976). Instead of meaning a moment of decision, a crisis has come to mean a moment of indecision, or the idea that something is not going well. Morin attempts to dialectically reconcile the opposite poles inherent in the concept of the crisis (Morin, 1976). This is simultaneously menacing and op-portunistic; destructurisation vs. restructurisation; a sequence of blockages, removal of blockages and relocation. In the same vein of research, many authors estimate that we tend to stress the damaging effects of crises and not focus enough on their integrating effects, notably the social mobilisation they generate (Form et Nosow, 1958; Fritz, 1961; Barton, 1963; Dynes, 1970a, 1970b; Stallings, 1973).

In our research, we rely on this dialectical conceptualisation that combines threat and opportunity. Crisis is simultaneously characterised by negative effects (perturbation, deregulation, conflict, confusion of action, excessive stress leading to action which is hasty or poorly thought out) to positive effects (mobilisation, solidarity, co-operation, improved adaptation to the environment, experimental learning). A crisis can put the fundamental values of a social system and an organisation into question similarly to its techniques for accomplishing tasks, its systematic rules of organisation (Morin, 1976), which could prove beneficial for the immediate or future management of crises (Meyer, Brooks et Goes, 1990).

Methodology

The methodology in the context of this research as it applies to case studies and observation

Table 1: The crisis according to different positive and negative aspects

Crisis	Negative Aspects −	Positive Aspects +
Of the overall organisation plan	Perturbation, disorder (Stallings, 1973; Morin, 1976; Denis, 1993; Lagadec, 1996)	Balanced research opportunities, Restoration of social fabric (Meyer, Brooks and Goes, 1990)
Of the action plan	Inertia, paralysis, source of confusion (Denis, 1993; Pauchant and Midriff, 1995; Lagadec, 1996)	Research to adapt new, more efficient actions (Milburn *and al.*, 1983; Denis, 1993)
Of the plan regarding the relational system between players	Conflict, competition (Denis, 1993; Quarantelli and Dynes, 1976; Dynes, 1970a, 1978; Stallings, 1973; Rosenthal, Charles and Hart, 1989)	Co-operation, alliances, coalition (Quarantelli and Dynes, 1976; Stallings, 1973; Rosenthal, Charles and Hart, 1989)
Of the behavioural plan of behaviours provoked by stress	Excess tension leading to a series of hasty gestures (Hermann, 1963; Dynes, 1970a, 1970b; Hass and Drabek, 1970; Warheit, 1986; Lagadec, 1996; Dynes, 1970a; Quarantelli and Dynes, 1977)	Stress creator, research of clearer solutions (Milburn *and al.*, 1983; Quarantelli and Dynes, 1977)
Of the value plan	Banality, routine (Toft and Reynolds, 1994; Gephart, 1984; Pauchant and Mitroff, 1995; Perrow, 1984; Wenger, 1978)	Prevention, solidarity called into question (Fritz, 1961; Dynes, 1970a; Barton, 1962, 1963; Form and Nosow, 1958; Kaniasty and Norris, 1995)
Of the learning plan	Rapid approach of the norm (Cyert and March, 1963; Hedberg, 1981; Petak, 1985; Rosenthal, Charles and Hart, 1989; March, 1996; Lagadec, 1996)	Experimentation (Hedberg, 1981; Meyer, 1982; Meyer, Brooks and Goes, 1990; Lant and Montgomery, 1987)

measures constitutes the Local Centre of Community Services, better known by the acronym 'CLSC'[2].

According to the methodological plan, the case studies and the choice of the CLSC as an observation site are of interest for the following reasons

1) We must deal with a similar event to be aware of an ice storm causing power outages and destruction of the hydroelectric system. This crisis happened at the same time and in the same region, but is managed in a different location;

2) While accomplishing the same mission in their respective regions, the CLSC maintains relative autonomy. They still possess their own characteristics and have, at their core, specific social and structural arrangements. This autonomy, as well as the community and territorial characteristics of these organisations, lend themselves well to case studies;

3) The CLSC provides those services, which are viewed as essential to the public, not only during periods of crisis but regular periods as well. Besides its official mission, consisting of offering first line services, a CLSC has specific mandates during crisis situations, specified by diverse ministries and regional spheres of reference. These organisations can work according to their usual routines at the time of the crisis; they can also use fallback routines (crisis plans, crisis centres, etc.); finally, they can introduce innovations in their professional practices or organisational design. The object of this research is to illustrate strategic choices by identifying archetypes, and eventually their effects on the organisational performance plan;

4) Direct observation of the event is impossible (some would say immoral), there is no more than one ethnographical type (since the event has passed), the study is limited to statistical occurrence, or there is no reliable source of funding for the statistical plan.

At each location, we have encountered the following people and groups

1) *managers* who are responsible for the application of emergency measures in each of the 9 CLSCs[3]. These managers can be either the director general, the director or the program head. We have met with a total of ten managers at our nine sites;

2) *health and social service professionals* having taken an active part during the ice storm, meaning that they intervened uninterruptedly throughout the crisis. These professionals include doctors, nurses, social workers, community leaders and others. In total, we met 59 professionals from diverse disciplines;

3) *CLSC collaborators* in crisis management primarily stationed in surrounding municipalities and community organisms. In total, we have met 25 collaborators from municipalities or community organisms, necessitating 17 interviews.

Amongst other things, this research features the gathering of first-hand accounts from people who directly intervened on the ground and who took an active part in crisis management. This research is based on a perspective close to the operational level and expands an internal point of view. Gathering accounts from several people at the same site potentially permits us to limit biases generated by the site itself, thus increasing the degree reliability of the research (Thiétart, 1999).

Results

Three Archetypes of Crisis Management

A transversal analysis of the research material has allowed us to put the common elements of the nine management cases into perspective, using the four configurational imperatives defined in the synthesis created by Miller (1987), strategy, leadership, structure and environment. Three archetypes were thus defined and delineated 'collectivists', 'integrators' and 'reactives'. The main characteristics of each archetype are summarised in Table 2.

Collectivists and their modus operandi 'be prepared for our people'. The first archetype, which we will call: 'the collectivists', is dominated by the desire to account for the different needs of a variety of communities and municipalities who are responsible for their territorial plan. The collectivists' *modus operandi* might be called 'be ready for our people'. Collectivists have to cover a relatively rural and less populated region (between 15 000 and 55 000 habitants). There are collectivists of three varieties:

- *The humanist* is motivated by the desire to aid and facilitate. The humanist is particularly concerned with the well-being of its clients, collaborators and personnel;

- *The pragmatic* takes action based on what seems best for his/her fellow citizens. They will offer whatever is asked of them based on their capacities and consult the judgement of fellow professionals to establish services;

- *The anti-conformist* takes action based on ideological convictions related to the community. They do not hesitate to go against the established models if that is what they truly believe in.

The common ground for collectivists regarding their strategic plan is an orientation most

Table 2: Three archetypes of crisis management

Tracers Archetypes	Leadership	Strategy	Structure		Environment
			Macro-strategic	Micro-operational	
Collectivists	Collegial	Proximity of location	Known figure	Decentralized teams	Rural
The humanist The pragmatic The non-conformist					
Integrators	Organizer	Optimizer of key performance	Best known figure	Segmented Teams	Urban Centre
The mobilizer The collective of experts The periphery					
Reactives	Centralizer	Improvisation	Varying Status	Changing Teams	Mixed nature of Types
The adventurer The contingent The municipal-centrist					

closely situated to the constant need, and to their municipalities and region. Like the managers' experience: ''my pre-occupation was to meet with each mayor and ask them what their needs were (…)'' This regional strategy is tainted, either by humanism (assuring a reassuring presence), by pragmatism (being as useful as possible). or a local community ideology (crisis management is the business of the citizens and their surroundings).

This strategy leads collectivists to take on a less geographically localised structure. Collectivists effectively adopt different strategies with varying benefits because they differ from one place to another. As mentioned by a crisis manager: ''work organisation varies from one site to another based on the needs and demands that were made (…). There were two community organisers who toured the sites each day to see how things were going and to see if they had any immediate needs … they shared the work and made the rounds.'' The conception of benefits and structural services of the collectivists reveals a sensibility to the needs of their personnel, in that they aim to put in place a work organisation which prevents professional exhaustion. One manager specifies that: ''from the start, we provide for people 24 hours per day, 7 days per week. The result is that at the end of the week, our employees are overworked and in need of support, and I'm not so sure we've provided as interesting of a service. Our employees gather specific numbers and are not allowed to work overtime. We can work twelve-hour days, but at the end of the day, we need a break.'' In all three cases, whether humanist, pragmatic or anti-conformist, staff recognised this pre-occupation with human resource issues through their managers.

Staff maintain a positive appreciation of crisis management. In this respect, a social worker states: ''we felt the support of the managers. In the end, they had a party for us as a thank you.''

Collectivists integrated elements of planning in their strategy on the fly. They evaluated their needs and consulted their surroundings before intervening: ''before sending out resources, we looked at the needs of each municipality and we worked with mayors that were, according to me, the main contractors …'' one manager told us.

Collectivists take care of their interventions via direct contacts with the municipalities and with their employees. They take care of reuniting members of their staff to give them new internal co-ordination mechanisms for planning the organisation of services. They cleaned out their area by coming in direct contact with each of the municipalities: ''with the community workers of the CLSC, I made the rounds on each site every day. We passed through twice a day, morning and night. We met with each mayor and assisted planning and organisational meetings.'' The mission plan gave them a well-defined mission of their role and responsibilities and didn't attempt to infringe on the territory of other strategic members. Respect for the jurisdictional region is an aspect which is particularly highly appreciated by the community and municipal collaborators.

Their leadership is collegial; therefore, each crisis manager joined with one or several people at different stages of the plan or structure, while still remaining the principal strategic planner. The staff knows who to refer to in order to express their needs; the hierarchical structure is thus generally clear.

Collectivists are renowned as strategic partners which cannot be ignored as much in the domain of current community projects as in crisis management. A security director for public security specified that: ''the CLSC is, generally, very appreciated in the community. There is a round-table which simultaneously serves the police and the CLSC and this is a prime factor.'' They were all associated with the strategic discussion locations as well as the co-ordination committees put in place by the municipalities (sometimes called crisis centres).

Collectivists all evolve in a rural or mainly rural environment, which is consistent with the personalised nature of relations which, in the studied situations, tended to be maintained with the municipalities in their region. As stated by a CLSC manager: ''it's a small region here, everyone knows each other and we know who to discuss with.'' Generally, a strategy in close proximity to the region in the rural environment is consistent with the idea put forward by Dynes, who indicates that ''the tendency is for the community members to cope with the disaster in terms of pre-existing kin and personalistic structure.'' (Dynes, 1970a103).

Integrators and their modus operandi: 'optimise our key skills'. A second archetype, which we will call: 'the integrators', is dominated by a preoccupation to best use the distinctive organisational skills and to ensure action by the other strategic members. We could define integrators by their rigor and their preoccupation with finding the best positioning and organisational fit. The *modus operandi* of the integrators could be called: 'optimise our key skills'. Integrators prefer an urban or mainly urban region. They take on three different types:

- *The mobiliser* in which the skill values mainly consist of a strong strategic path, by an energetic and clairvoyant leader;
- *The collective of experts* in which the value of the skills takes shape between an orientation manager and a group of professionals taking new initiatives, in an interactive and iterative manner. The professionals of the operational centre come to give shape to the orientations of the crisis manager;
- *The periphery* where the research of competencies is made by a path of service integration in the domain of management largely under municipal control. This positioning tends to be normative, which is to say that it is made in respect with specific staff plans, mandates and competencies for crisis situations.

Integrators are preoccupied with the rigour and coherence of their actions, as well as by the rational use of their professional resources. The strategies given by the integrators all revolve around the value of specific competencies of their organisation, while taking into account the characteristics of their clientele, the requirements of the other strategic members and, most importantly, their municipalities and regions. One manager specifies that: ''we wanted to use the right expertise in the right places (…). We said to ourselves that we should orient people in specialised sites. Instead of opening a site and making a melting pot of children, families, and the elderly, we chose to open more specialised sites. We suddenly decided to rely on the idea of making a more concentrated clientele.''

We designated this group 'integrators' because of their main pre-occupation to find the best organisational fit permitting them to best use the professional expertise present in their organisation and to secure the participation of the other members: ''For example, our mental health team took care of the mental health site because they're used to working with these clients (…). If I had sent a nurse who had never worked in mental health to the site, it would be unnerving for both parties.''

Their attempts to integrate do not always take on the same forms and do not always bring about the expected results. For example, surrounding concerns often materialise in an attitude of procrastination in the face of certain situations, which often gets swept along quickly to a state of overburdening: ''for the whole first week, we were constantly thinking that it would only be for one more night … Then after a week, it was officially announced that it would be better to get organised because we'd only be there for one more week! During the previous week, we were very rushed and had the need to tell ourselves that it would be over soon …'' The mobiliser, for their part, is more successful at this integration by exercising clairvoyant leadership internally as much as externally. The manager also remembers that: ''at 10 o'clock PM on 7 January, the mayor announced that he was ordering emergency measures at 11. They called me and I made my way to the co-ordination committee for emergency measures (…). The next morning, I met with the personnel and we engaged our plan. This happened very quickly.'' Finally, in the case of the experts, the manager capitalised on an active goal of the operational centre: ''the way this was accomplished was by having the employees present themselves at the central hall of the CLSC from the start. I had all of the staff members together in front of me at 8 o'clock and we shared the work with less mixed results.'' One nurse says: ''that would have been fine if the administration of the help centre for disaster victims had demonstrated signs of recognition

to CLSC employees. There, like here, I thought that the management was under the impression we were there because it was our job.''

Integrators have planning elements in their strategies, which is congruent with their rigorous and coherent research. They all had emergency measure plans before the crisis which were only partially referred to during the crisis. As witnessed by one of the managers: ''In the original plan of emergency measures, the mandate given to the CLSC was mostly psychosocial but here, we worked in a much broader way than that. Our role isn't only at the psychosocial level. We have a range of professionals at the CLSC and we have to put them at the disposal of the municipality in crisis. If I had only played a psychosocial role, can you imagine the number of professionals that I would never have touched? That's not appealing!'' Regarding the mission plan, integrators have a broad approach, develop an accessibility of 24 hours per day, 7 days per week to their services and aim to simultaneously integrate the psychosocial, health, and re-adaptation components in the sphere of their official mission.

Within the structures put in place by the integrators, professional experts have plenty of autonomy: ''There were three nurses and with us were a few auxiliary family members of the CLSC (…). We had confidence in ourselves and we left ourselves to organise on our own.'' This autonomy is not always absolute; it is buoyed by a vision of crisis management and with contact mechanisms between the strategic and operational centres: ''each site had someone in charge (…). The employee who had a problem called the team head if the problem was severe, he called us sometimes, and this is the way we constantly worked.'' Structural decisions are frequently specialised in their use toward the diverse clientele that they must serve. Thus the integrators are brought to segment their service offers and to create multi-professionnal teams dedicated to one field of expertise or to clientele that are pre-targeted.

The strategic choices and organisational structure that follow reflect an organiser or an orienting type of leadership. Integrators primarily research the equilibrium between professional skills, client needs, the presence of other members, and efficiency in affectations.

Integrators were already known by their municipal and community partners, but they had only a partial knowledge of what they could concretely offer as services. The ties that developed during the crisis permitted the collaborators to discover this worker and to open them up for future collaboration. Their notoriety increased considerably after the crisis. A police director also asserts: ''as police director managing public security with the CLSC, before the ice storm crisis, I wouldn't call communication closed, but I wouldn't say it was very effective either (…). After the two or three weeks that we spent with the CLSC, we re-established the communication channels.''

Finally, integrators evolve in a mainly urban environment, which seems consistent with the retained strategies in terms of putting into place professionals and concentrating strategies in downtown regions. Sylves and Pavlak suggest that the organisational response to crises in urban centres is to enter into an alliance with the professional bureaucratic model where preoccupations with structures, plans, specialisation's, professionalism, etc., dominate (Sylves and Pavlak, 1990).

Reactives and their modus operandi: 'do something, fast'. A third archetype which we'll call: 'the reactives', are characterised by their spontaneous nature and are confident in their strategies. Reactives are filled with worry to react, and react quickly, an attitude which tends to put the members of their organisation under pressure. Their *modus operandi* could be: 'do something, fast'. Among reactives, we find one rural and two semi-urban regions (one urban centre surrounded by several municipalities of diverse sizes). Reactives also fall under three categories

- *The municipal-centrist* demonstrates his strategy by associating with a key player in the crisis management, which has a general effect and which structures future interventions;
- *The adventurer* takes action based on spontaneous initiatives which finally enter into conflict with existing jurisdictions, which carry a series of risky adjustments for the organisation of work, which leaves a general impression of disorder for the operational plan;
- *The contingent* takes action based on circumstantial considerations, which bring about different styles of crisis management. The adjustments brought to the course of action are *ad hoc*, which tends to create confusion for the coherence and action plan.

Reactives immerse themselves quickly and spontaneously into the action, without a plan established in advance. Reactives do not formalise emergency measure plans even when they have one. A social worker observes: ''I was trained to intervene in the sphere of emergency measures, but I never participated in a meeting. I found that there was nothing in my work which resembled what I learned during training. It was like a quick brush up when we already had a plan (…). Even at the co-ordinator level, the rules weren't followed.'' They essentially made decisions based on what the events seemed to force them to do. In this way, strategies are largely and strongly determined by the interpretation of the crisis

made in the heat of the moment. Now, these emerging and ad hoc strategies undergo more questioning and scepticism in view of conflicts between managers and employees, than externally with municipalities or community organisms; the magnitude of this potential conflict is variable from one case to another. The following is an example recounted by a group of social workers: ''our group had to fight continuously with the co-ordination committee of the CLSC for emergency measures to get them to recognise the importance of the psychosocial aspect of the ice storm. We felt that we had to keep bothering them and were questioning ourselves (…). So we overcame a lot of frustration, rage, and temper. Our group finally lost confidence in respect to the rules given to us by the management and the results that could come from them.''

Another characteristic specific to the reactives regarding the strategic plan is their centralising in downtown regions, which differentiates them from the two other groups which share the ability to have many small municipalities of a rural nature in their region of coverage. As one of the crisis managers specifies: ''the downtown plan is well described … We sat down with them … We worked mainly with the downtown.'' Many rural municipalities present in the reactives' region had to exercise pressure to obtain and were unsatisfied with the attitude witnessed in their region. A community organiser tells what happened: ''the next week, I made the rounds of rural municipalities, but since it was close to the end, most people were already organised … In certain places they said there was already a CLSC in their region!''

Reactives respond under pressure. This leads to a perception of being interventionist, autocratic and having a centralised management style. Their propensity to value the speed of work execution under pressure tends to cause particularly difficult communications with the operational centre. Operational centre professionals, and sometimes even other managers, have the impression that they are constantly pushed into or relegated to the role of a simple underling, as one of the crisis managers notes that: ''the head of psychosocial services was affected in a disaster help centre and I, being responsible for emergency measures, was involved in the operations as much as in a disaster centre.'' This contrasts largely with the work organisation model of the integrators where professionals can show initiative at work and which also contrasts equally with the *all-enveloping* style of the collectivists.

Ad hoc strategies generally produce *ad hoc* structures, except when the reactives are associated with strategies. Essentially, the structural coherence put in place by the reactives is largely reliant on and secondary to the strategy of municipal authorities; if the former have a clear vision of what needs to be done and are well organised, reactives should be able to deliver services quite correctly and put in place the appropriate structures to assure that service is properly rendered. Elsewhere, the municipal-centrist have a close knowledge of the municipal and the downtown authorities. By contrast, if the municipal authorities do not know where they are going, the reactives will not bring them answers which can give the needed coherence for crisis management. In the absence of direction dictated from the outside, the adventurer and the contingent tend to put in place relatively erratic models for work organisation. Employees of the operational centre who complained about the fact that the orders given were not clear, and that their assignments changed with time and space, that they didn't keep track of their observations and that they needed to be relieved, or material for the care and aid for the sick, etc.: ''The assignments were not clear and that was not a part of the group planning. Each new day started with the idea of helping people as best we could. We were not co-ordinated with the municipalities and the interventions were not planned either.''

The notoriety of the reactives was mostly weak before the crisis. A director in one of the municipalities indicates that: ''before the disaster, the municipality did not have work links or habits common with the CLSC, either in the field of emergency measures or otherwise.'' The partnerships established with municipal regions and communities were unequal. We removed an encroachment of jurisdictional regions which was viewed as unacceptable by other crisis members under the advice of a municipal director of public security: ''the CLSC should have contact with those responsible for emergency measures co-ordination before deploying its personnel, to know our needs and abilities, to know how they could help (…). At the start, as heads, we felt overrun …''. We also took over the interesting collaborations, particularly when the manager of the CLSC had established a strong familiarity in action with some privileged partners. Also, as explained by a director in a municipal region: ''the CLSC took charge of non-autonomous people and our community centre brought in clientele who were autonomous, so we divided up the available people to assign. Whenever someone was not autonomous, they were sent to the CLSC and that was the intention we had.''

Finally, reactives do not seem to have developed particular sensibilities with their environment, presenting a disparate profile in their groups (one was rural, the two others semi-urban or mixed). There is not a *shared legitimacy* among the reactives in the sense of the definition given by Lagadec (1996).

In their typology, Miles and Snow also had a configuration called the reactors (Miles and Snow, 1978) which Mintzberg et al. qualify as an unstable and inconsistent configuration, which is nothing other than a collection of inappropriate attitudes (Mintzberg et al., 1999). Our reactive archetype can be defined in the same terms, following the example of the reactors in the typology of Miles and Snow.

Performing and Non-Performing Archetypes

Do different players in the crisis have different experiences depending on whether they belong to the collectivists, integrators or reactives? The answer to this question is affirmative. There is a fairly clear dividing line between the three archetypes in terms of their appreciation for crisis management. This appreciation is positive in the case of the collectivists, moderate in the case of the integrators and clearly negative among the reactives. Let us more closely examine the results of this research.

In the case of the collectivists, staff appreciated the attention that managers paid to their location. This is shown by comments like: ''we felt the support of our managers'': ''we were well coached''. The collaborators appreciated the diligence with which the collectivists responded to their needs and the fact that they did not encroach on their jurisdictional region. This is expressed by comments such as: ''we received a service which was unequalled'': ''we couldn't have changed a thing … they worked to the best of their capacities'': ''the CLSC was there just enough, they didn't step on our toes.''

In the case of the integrators, it was mostly the collaborators who showed their satisfaction. They particularly appreciated the prodigious advice, the extent of the services rendered, and the availability of the managers. This is easily demonstrated as follows: ''the CLSC advised us well at the level of the private residence … because they knew their dossiers'': ''we noticed that the CLSC could help bring us very interesting things'': ''they chose to give us a psychologist on the spot … if they hadn't been here, we would have likely gone down unsuitable paths.'' In the periphery, the appreciation for collaborators is also shared, sometimes relatively positive with regards to health services, but mostly negative when it comes to community services. They mentioned: ''at the level of health, we had no problem. The problems that we had were more at the level of community organisers. They took the initiative to develop animation services but it was the responsibility of the city …''

On the side of the employees, the comments are more shared. They are slightly more positive among the mobilisers: ''the best thing we did here was specialise the sites… it's much easier

because it called up less people, there was less dispersion…''; and among the collective of experts: ''there was an excellent collaboration with the management and in no case did they tell us what to do. It made us confident about ourselves…''; more negative in the periphery: ''… there was electricity here, so why didn't the management organise something for the employees and our families?'', ''I'm not sure that we knew how to take care of our staff.''

Finally, the appreciation for the performance of the reactives is mostly mediocre. The staff left the experience bitter: ''If we asked the employees here if they wanted to participate in the case of another disaster, I don't think that anyone here would want to go. People are embittered by that. In any case, I don't want to live through that again.'' They are particularly against the absence of direction when it comes to their role in the disaster help centres: ''The employees didn't know what to do or what their role should be (…)'' They highlighted equally the lack of relief at the end of scheduled work shifts: ''… I was alone and I had to take care of a number of people who were already taken with problems of gastroenteritis and others who had influenza; I was running from one floor to another all the time. I called the CLSC so they could send me someone because I told them I was going to die. I never did receive any help…''

The staff equally felt the absence of knowledge at their place of work, the lack of consideration for their double role as worker and disaster team: ''I would have appreciated having a few days of rest and recognition of the work that I did (…). I was also in a state of disaster and I didn't have the time to take care of myself so I would have appreciated having a few days to reorganise my personal and family plans.''

The appreciation is hardly better on the side of the collaborators. They express difficulties with obtaining services or support of any kind, particularly those who work in rural municipalities: ''We thought that the CLSC could provide us with support but we never got it.''

This lack of satisfaction was manifested toward the staff who showed up in the regions which were further from downtown: ''I asked myself, where is the CLSC? You are always there in day-to-day life, but when a disaster happens we don't see anyone anymore! (…). I felt there was a poor welcome.''

Offers for collaboration were ignored: ''I never received a call back from the CLSC… It was clear that psychosocial intervention was the bulk of the CLSC… I think that the CLSC retained allot of enhanced value by taking care of that crisis and they came out of it well, but they noticeably needed some help (…)'' Service offers appeared less pertinent: ''After the crisis, the CLSC seemed to be doing a lot of intensive treatment with

verbalisation sessions. I'm not sure that this responded to the needs of the population.''

Three Constants in a Crisis Situation

In all the cases of crisis management that we have studied in the sphere of this research, three constants spring forth with force the CLSC intervened greatly near highly vulnerable populations; they broadened their officially recognised mission considerably during crisis situations; and their professionals broadened their tasks and were pushed to develop new approaches to respond to the crisis.

Major intervention near vulnerable populations. CLSC professionals all have to intervene near clients who are destitute, not autonomous and relatively dependant on public services. A manager underlines: ''the clientele we dealt with presented problems of all kinds money problems, couple problems, problems connected to the family dynamic, and problems related to their work at farms who were in the process of losing everything and were asking for help.'' A social worker observes the following about the poverty of these clients: ''The people living in the centre where I worked were destitute, elderly people, adults living alone, some families, people who already had difficulties even outside of crisis periods.'' Finally, a social worker participated in home evacuations: ''I was confronted with people with serious mental problems, who were multi-handicapped, with cognitive problems. There were very serious situations that we as a CLSC didn't know about.''

Professionals also observed that those clients who were not autonomous in their plans lost even more autonomy once they were: ''put in charge'' in disaster relief centres. A social worker notes that: ''… among those who were living at the centre, there were many who were practically imprisoned there. We had to tell them that they could leave and go but they dared not. I told them, it's nice and clear outside today, go home, go find the toys you need for your children, your care products, and your laundry. They became more and more dependant on us.'' A nurse came to similar realisations: ''People demand a lot of the staff. We would have thought parents were on vacation. They would leave their children there, telling us: ''here, take care of them!''. It was like a service to them (…). After the first week, they took it for granted and demanded more and more things and were completely weighing us down.''

This situation of dependence on public services caused diverse reflections among crisis workers. One manager deplores this persistent belief in the state as provider and believes that the population needs to learn to take things into their own hands in order to face another crisis: ''The worst impact that I see for the population is that this will create another push to depend on the province, and knowing that the population does not really take charge (…). Nurses even fought because there were no more diapers to give to the babies! It's not even up to us to provide that! I find that again there is this dependence on the province and it can't continue.''

An expansion of the mission. The majority of the managers and professionals expanded the mission they are officially known for in the sphere of governmental politics dealing with crisis intervention. According to these politics, the responsibility of the CLSC is essentially at the level of psychosocial services. These politics don't foresee a particular mandate at the level of first line health services, including home services. Now during the ice storm crisis, most of the workers recognised that health professionals, especially nurses and doctors, played as important a role as psychosocial service professionals.: ''Since the CLSC plans are made according to psychosocial services, this disaster affected all the services of the CLSC, the health services as much as the psychosocial services.''

The presence of health services staff is effectively seen as essential regardless of the incident. One manager recalls: ''…from the first night, the reality hit us when people sick at home called, people in wheelchairs, people who were getting electricity from gas, etc. That's when you get a reality shock, you don't say that it's not your job; you help them out. But there is nothing foreseen, no real protocols.''

An expansion of professional tasks. Several interviewers underline the impact of the crisis in terms of not limiting yourself to one strict description of tasks. A social worker states: ''I made beds, gave hygienic care, gave breakfasts, helped people with basic needs, and stabilised crisis situations at these sites. I did a bit of everything and the formal tasks I'm usually assigned to were widely enlarged. I responded to immediate needs and it was essential to be polyvalent.'' The same observation came from the nurse's side, who notes: ''I did nursing but also a lot of interpersonal help. I passed around carts for breakfasts and lunch … You can't say that I was only playing the role of nurse … That wouldn't be believed. I think that the other staff

members would have wanted that we give them a hand (…). We looked for a woman's handbag, we helped a man who lost his brother … When you're going down and see someone in a wheelchair, you help them go down, etc.''

The interviewers equally stress the need for a change of approach. A social worker mentions: ''It was different for me as a professional. Usually, these are people who came to see *us* whereas there, it was us who went to see *them*.'' Another interviewer stresses: ''… I wasn't just in my office with a client, I worked in a team with a lot of people. Still, it was trial and error.''

Many interviewers mention the necessity of going out into and getting involved with disaster victims, and to go beyond the needs: ''I would always go around and ask people: ''How are you doing, what's happening today.'' It was rare that there wasn't any particular need that needed to be responded to when you went around like that (…). ''

Seeing to basic needs and reassuring people makes up an important dimension of the tasks and another aspect of professional efficiency in the context of a crisis. One interviewer mentions: ''the people that I saw needed reassurance, many were afraid to sleep in the dark, others found that there were too many people around, some asked how to get to the washroom. Everyone had their own issues and you had to find all sorts of ways to reassure them.''

Resourcefulness and autonomy are equally stressed as essential aptitudes for intervention in this context. As noted by one nurse: ''sometimes people arrived and left us their bag saying, it's nothing important, I'm leaving you my father's pills. So you had to take the man in and then take into account that he was confused and incontinent, that he didn't have the right pants for an incontinent, and that there was only one dose of medicine left. It's often situations like those that happen and you have to disentangle yourself …''

Discussion

The Use and Pertinence of the Configurational Approach in Crisis Management

This research primarily aimed to answer the following questions are there typical ways of solving a crisis? Can these archetypes emerge from the accounts of the workers implicated in the crisis? What are the impacts noted by these actors on their management and intervention practices? Finally, what appreciation do they

have for their experiences of crisis management in terms of organisational performance?

The adoption of a configurational perspective, thanks to its synthesis seems particularly appropriate for producing or generating archetypes of crisis management (Mintzberg et al., 1999). Essentially, configurational theories integrate in a coherent model with several dimensions and organisational variables in the form of a *gestalt*, where all studied dimensions are strongly interrelated between themselves (Miller and Friesen, 1977; Hinings and Greenwood, 1988, 1993, 1996; Meyer, Tsui and Hinings, 1993; Mintzberg and al., 1999). Miller and Friesen observe:

> In examining case studies on business organisations it became obvious that organisational types were of critical importance as active: ''contexts'' within which relationships took place (…). What is more, certain: ''models'' which described a host of relationships amongst the same environmental, organisational, and strategy-making behaviour variables, occurred repeatedly … (Miller and Friesen, 1977, 254).

McKinney (1966) and Tiryakan (1968) estimate that configurational theories give conceptual and theoretical order between ranges of attributes more than the use of a sole concept:

> A typology goes beyond sheer description by simplifying the ordering of the elements of a population and the known relevant traits of that population into distinct groupings; in this capacity a typological classification creates order out of this potential chaos of discrete, discontinuous, or heterogeneous observations. But in so codifying phenomena, it also permits the observer to seek to be connected in any obvious way. This is because a good typology is not a collection of undifferentiated entities but is composed of a cluster of traits which do in reality.' (Tiryakan, 1968, 178)

Even though theoretically, the diverse attributes of an organisation and their interrelations can be many, in reality there are a limited number of configurations that actually make sense (Miller and Friesen, 1977; Miller, 1981; Meyer, Tsui and Hinings, 1993; Thiétart, 1999). Thus, Miller puts forward the idea that certain forces limit the variety of the configurations, all while contributing to give them a special form (Miller, 1987). These forces are called *imperatives* because they condition the nature of a configuration, and are difficult to change or will only change in exceptional conditions. Miller made a synthesis of the literature which made these four imperatives obvious the environment, structure, leadership and strategy (Miller, 1987). Each plays a role in

the definition of a configuration. These imperatives are, in a way: ''tracers'' or organisational contingency factors.

While basing ourselves on these four configurational imperatives defined by Miller, we were able to generate three archetypes of crisis management while setting aside the experience lived by the CLSC and their assistants at the time of the ice storm of 1998. This approach was therefore useful and pertinent in the framework of our research.

The Crisis: a Quantum Leap?

In their works, Miller and Friesen describe the change in businesses as quantic, an idea that situates them at the heart of the school configuration (Miller and Friesen, 1980b; Miller and Friesen 1982a). Quantic means that the change affects a lot of elements simultaneously, as opposed to a *piece by piece* change, one element at a time. Thus, what happens is that a configuration is no longer in sync with its environment. The organisation thus tries to find a new stability in a single leap in order to re-establish a posture integrating a new body of strategies, of structures and of culture, i.e. new configuration as quickly as possible. The crisis situation provoked by the ice storm which arose in 1998 in Quebec could be a fertile context to enrich this idea of quantum leaps since in a crisis context, the organisations have to quickly revisit their strategic thought through reconfiguration on all levels.

Do our archetypes represent a quantum leap according to the definition of Miller and Friesen (1982)? We cannot determine it from our research data because our analysis is focused on the crisis and not on the 'before' or on the 'after'. All that we know from our data is that the CLSC widened its mission and that the tasks of its professionals spread themselves out considerably. In a general manner, the CLSC remained in its jurisdiction while offering health and social services, and the global professionals remained in their field of expertise. The reactives somewhat stretched out and went into all sorts of directions, but the major part of their interventions is nonetheless concentrated in the sphere of professional competence of the health and social service sectors. Future research on crisis management would therefore be necessary to deepen this idea of the quantum leaps proposed by Miller and Friesen (1982).

What Have Organisations Learned about Crisis Management ?

Our research allows us to establish how the organisations configure themselves, but it does not allow us to establish what they learned and in what way these apprenticeships can allow them to increase their robustness facing future crises. Usually, dilemmas or the problems (Hedberg, 1981; Meyer, 1982; Meyer, Brooks and Goes, 1990; Lant and Montgomery, 1987) such as those that are lived in crisis times stimulate the quest for knowledge. The crises constitute very specific learning experiences from which these organisations can profit (Meyer, 1982; Weick, 1988; Lagadec, 1996; Rosenthal, Charles and Hart, 1989). Apprenticeships done during these critical phases are important and should allow us to increase robustness when faced with future crises. Although it is good that several authors recognise that a crisis is in itself a source of learning, few of them described the nature of the learning process of the organisations, the nature of their apprenticeships, and the conditions that favour the development of these apprenticeships. These are thus the courses of research that could be explored further in the future.

Notes

1. This article is a summary of the PhD thesis entitled 'Configurations organisationnelles et gestion de crise', HEC – Montreal, Canada, August 2003.
2. In Canada's Federation, health and welfare are of provincial jurisdiction and Local Centres of Community Services are specific to Quebec's mode of organising health and social services. According to the provincial authority, the mission of the CLSC is to offer first line services, preventive and curative, to a territory based population. In 1992, the Ministry of health and social services adopted a policy that confers to the CLSC specific mandates to face crises.
3. CLSCs were selected on well-established criteria such as length of electrical outages (more than 14 uninterrupted days) and a representation of varied locations (rural, urban, semi-urban). Nine CLSCs respond to these criteria.

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