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Enacting Ecological and Collaborative Rationality through Multi-Party Collaboration

Abstract

This article presents the case study of a partnership between a metallurgy company and an NGO concerned with environmental protection. The partnership constituted an attempt to reconcile the firm's economic objectives with those of citizens who lived in the area on which it had an ecological impact. The NGO sought sustainable development that created profits and jobs while not producing dysfunctional and unsustainable ecological side effects. The partnership created an arena defined by norms of disinterested rationality in which shifting negotiations of legitimacy and changing circuits of power proved crucial to the determination of how they met and what they were able to do. The paper uses four key theoretical building blocks – strategic positioning, learning, power and legitimation, and the translation of the global to the local – that were constituted in the collaboration. In theoretical terms, the paper contributes to stakeholder theory and, more specifically, to the literature on multi-stakeholder partnerships as well as making an original contribution to institutional entrepreneurship theory by showing how formulations established by a global institution are renegotiated at the local level.

Key Words

Multi-stakeholder, environmental, sustainability, institutional theory, stakeholder theory, learning, legitimacy, power, partnership.

Introduction

Criticism of the adverse ecological effects of industrial society is hardly new. Graphic descriptions can be found in Engels' (1844) account of the conditions of the working class in England. In parallel, Carl von Linné, the father of taxonomy and ecological science, introduced the notion of 'nature's economy', representing the first theory of interdependence among living creatures (Deléage 1991; Drouin 1992) and the first environmental organizations were founded to protect natural habitats and quality of life in inner cities (Deléage 1993; Grinder 1980; Velosi 1980). If these earlier accounts saw the relation between ecology and economy in essentially adversarial terms, by the late 20th century, environmental awareness became increasingly integrated with the concept of sustainable development.

The *Brundtland Report* was particularly successful in reaching business communities and emphasizing the interdependence (rather than the conflict) between economy and ecology. The *Brundtland Report* of 1987 called for coordination efforts through partnerships, multi-stakeholder forums, negotiations and collaborative planning, pleas reiterated at the Earth Summit of 1992 and by numerous academics subsequently (See Barouch 1989; Kellman 1992; Callon 1993; French 1995; Hoffman Gillepsie, Moore and Wade-Benzoni 1999; Long and Arnold 1995; Porter and Salvesen 1995; Healey 1997; Roome 1998). Partnerships were increasingly forged between environmentalist NGOs and businesses. Paradigms were shifting and, as Hoffman demonstrated (1999) in a study of the chemical industry, environmentalists were becoming stalwart stakeholders in businesses in the 1990s, engaging them directly rather than, as previously, mediating their relations through government bodies. The strategic positioning of environmentalism was changing.

Multi-party collaborative processes (MPCP) – partnerships, multi-stakeholder forums, negotiations and collaborative planning – have become the preferred mode of achieving better environmental outcomes of several international agencies. In this paper we assess the opportunities that exist for stakeholders in participating in MPCP and enquire as to what types of learning and innovation can result from these processes. From a theoretical perspective, MPCP are an instrument to

implement the main principle of stakeholder theory, and more specifically the instrumental school within stakeholder theory, which recommend the establishment of trust-based ties between businesses and their stakeholders (Heugens, Van den Bosch & Van Riel, 2002, p.36). Studying MPCP should thus enable us to see if these ties achieve the intended strategic purpose of gaining legitimacy and competitive advantage over firms that do not build such ties, as Heugens et al. (2002) suggested. Stakeholder theory is particularly interested in “trust-based” relationship and MPCP are based on a “collaborative” approach. Yet, as we demonstrate, strategy, power and legitimacy games are intrinsic to stakeholders relationship, despite the fact that they are played in collaborative settings and that they are aiming at solving meta-problems through a rational process of learning. MPCPs represent an opportunity to understand how stakeholders and firms interact to redefine what is legitimate and what is not, and to negotiate who and what becomes an obligatory passage point in circuits of power.

We will first review the literature on MPCP while addressing four themes – strategic positioning, learning, power and legitimation, and finally global versus local – from which we will derive research questions. We will then discuss a specific case study of a MPCP put in place to overcome a contentious environmental issue, that is the partnership established between Magnola, a mining company (Quebec, Canada) and a group of citizens. Finally, we provide answers to our research questions, which we generate from each of the themes, following Creswell’s (2003) grounded theory protocols.

Multi-stakeholder organization

Strategic Positioning

Deciding where to be, what to do, and how to get there involves strategic positioning. While this can be a difficult exercise in a single organization it is even more complicated in a multi-party organization. In partnerships many promises are brought to the table, often presented as legitimate conflict-resolution mechanisms, as well as appropriate setting for learning and innovation. In best-case

scenarios, multi-party relations not only help solve meta-problems but also provide competitive advantages (Heugens, Van den Bosch & Van Riel, 2002, p.36).

At the outset the literature concentrated mostly on the study of multi-party collaborative processes (MPCP, e.g. Gray, 1985, 1989; Waddock, 1989; Gray and Wood, 1991; Wood and Gray, 1991; Huxham, 1991, 1993; Logsdon, 1991; Selsky, 1991; Smith Ring and Van de Ven, 1992, 1994). Five elements were most commonly identified as factors contributing to success (Pasquero, 1991). The first one is that the MPCP must follow well-established phases. The second and third success factors concern the legitimacy of participants and recognition of their interdependency (Gray, 1985; Huxham, 1992). They must also realize that it is advantageous to collaborate and stakeholders committed to the debate must be identified and participate in the MPCP. The fourth success factor is concerned with the participants' motives. They should be motivated both by a notion of 'public interest' and by the specific interests of the group they represent. Participants' expectations should be realistic (Huxham, 1991). The fifth success factor pertains to the fact that participants should be capable of implementing decisions made.

Fournier (1986) noted that to be viable in the long run each party needed to obtain a minimum of concrete results. Turcotte and Pasquero (2001), as well as Driscoll (2006), however, found that MPCP did not result so much in decision implementation as 'polysemic' agreements and general principles that were learnt in the process. If implementation is not possible, an intriguing question arises as to why stakeholders continue participating in these processes. The paper will address this research question in the next section by looking at the types of learning resulting from such a process.

Some see MCPs as forging a bright new joint future; others see only opportunities for co-optation (Banerjee 2006) maintaining "business as usual" with merely symbolic attention paid to stakeholders' request (Driscoll, 2006). For example, Poncelet (2001) described MPCPs as devices instigated by

businesses to receive complacent evaluations of their social and environmental performance, a networking structure designed to receive a “kiss here and a kiss there”. The two interpretations are diametrically opposed; consequently neither analysts nor practitioners holding these opposing perspectives communicate much with each other, so there has been little evaluation of the strategic use that stakeholders make of MPCPs. Consequently, for stakeholders, who are uncertain whether to participate or not there is little guidance. The paper will attempt to address this area of uncertainty while assessing the risks of cooptation as well as the opportunities for conflict resolution and problem-solving (which we will discuss under the theme of learning) that participating in an MPCP may represent.

Learning

Partnerships and collaborations with stakeholders have been described as sites of learning (e.g. Driscoll 1995, 1996; Roome 1998; Turcotte and Pasquero 2001; Heugens, Van den Bosch and van Riel, 2002; Turcotte & Dancause, 2003) and problem-solving (Pasquero, 1991; Hood, Logsdon, Thompson, 1993), because they bring together many perspectives within a framework of constructive confrontation (Brown 1991). Several types of learning have been distinguished as possible outcomes of collaborative initiatives: inspired by Argyris' (1976) typology, single and double loops learning have been distinguished (Turcotte and Pasquero, 2001) and related to exploitative and explorative learning (Roome and Wijen, 2005).

Acquiring new information and integrating it into an existing perceptual framework corresponds to single loop learning (Argyris, 1976). When there is a redefinition of the issues and problems, and when there is a transformation of the driving values of an individual or collective's perceptual framework, this corresponds to double loop learning (Argyris, 1976; Foldy & Creed, 1999) in which these new definitions constitute innovation (double loop

learning and innovation being considered synonymous here). Single loop learning is conducive to exploitative learning, that is learning that organizations are able to implement, as “exploitative learning” (March, 1991) with which “new behavioural capacities [are] framed within existing insights”(Roome & Wijen, 2005, p.238). Explorative learning has been associated with “double-loop” learning, concerning “discovery” of perspectives that “differ fundamentally from existing insights” (Roome & Wijen, 2005, p.238).

In a few case studies of MPCP, learning has been found to be more explorative than exploitative (Turcotte & Pasquero, 2001; Turcotte & Dancause, 2002; Driscoll, 2006). However, many factors, including the structure of the collaborative initiative, might determine the potential for learning: Roome and Wijen (2005) found open structures conducive to explorative learning while the alignment of interest among participants and the formalization of routines were necessary for exploitative learning. Mention of interests necessarily implies discussion of power and its legitimization (Lukes 2005).

Power and Legitimation

In establishing any multi-party organization relations of power are unavoidable (Clegg, Courpasson and Phillips 2006). Who gets to be involved, with what rights and privileges, and which actions are legitimated, are crucial to these relations of power (Clegg 1989; Clegg, Courpasson and Phillips 2006). Suchman (1995) defined legitimacy as ‘a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions’ (p. 574)). Many multi-stakeholder collaborations are designed to create within their boundaries Habermas’ ‘ideal speech situations’ (Driscoll, 2006). In his *Theory of Communicative Action*, Habermas argued that ‘a genuinely democratic sphere comes into being when the interactions are focused on issues of common concern to citizens, equally accessible to all those

potentially affected by those issues, based on rational-critical deliberation, and subject to normative standards of evaluation' (Haas, 2004, p.179). Democratic citizen participation offers a privileged way to find solutions to environmental and social problems (Skollerhom, 1998).

Habermas had drawn a distinction between strategic action and communicative action: the former being aimed at the egoistic achievement of specific outcomes and personal power through control and manipulation; the latter being oriented towards shared understanding and being based on reason (Foster and Jonker, 2005). While strategic action would correspond to the moral ideal of the neo-liberal model, according to Foster and Jonker (2005), the stakeholder theory would rather be based on the ideal of the communicative action. Clearly, MPCP are expected to foster communicative action.

Multi-stakeholder collaborative initiative are occasions where meta-norms and meta-solutions can be rationally discussed among all stakeholders (rule of inclusiveness), regardless of the power they possess, within a consensual-based decision-making process, one that grants legitimacy. Heugens et al (2002: 52) proposed that multi-stakeholder networks have a buffering effect and help establish civil legitimacy for participating business organizations, while Calton and Payne (2003) suggest their efficacy for dealing with messy problems with no simple solutions.

Driscoll (2006) analysed the use of multi-stakeholder collaborative processes in the forest industry, using Suchman's (1995) distinctions between pragmatic, moral, and cognitive legitimacy. Pragmatic legitimacy depends on whether an activity will benefit the evaluators. Moral legitimacy concerns whether the activity is the 'right thing to do' and can be based on four principles: consequential legitimacy (what is accomplished, effectiveness), procedural legitimacy (based on the procedure followed), structural legitimacy (focused on general features of organizations or systems), and personal legitimacy (resting on the charisma of leaders). As for cognitive legitimacy, it refers to taken for granted knowledge and representations and is more difficult to acquire (Suchman 1995). Driscoll

(2006) saw multi-stakeholder initiatives as a tactic of symbolic management based on procedural legitimacy to increase structural legitimacy (the current forestry system) but lacking consequential legitimacy (not having significant impact on the greening of the forestry practices).

In short, despite being designed by their advocates as ideal speech situations, critics describe multi-stakeholder collaborative processes as just another legitimation device. Again, we observe a clash in perspectives around the issue of power, and the empowerment of stakeholders, showing a need to better understand the relationships of power (if any) and the legitimacy games within an MPCP.

Translating the Global to the Local

Early studies of sustainable development were characterized by an appeal to global ethical principles by which organizations *should* guide their ecological actions (Newton, 2002), partially in response to charges of anthropocentrism (see Commoner 1990). Approaches such as deep ecology, spiritual ecology, social ecology, and eco-feminism inspired the theoretical foundations of some pioneer works in the 'radical environmentalism paradigm' (Egri and Pinfield 1996). Empirical examples of pro-active environmental practices in firms were extremely scarce (Fisher & Schot 1993), and theoretical and prescriptive approaches were more common (Lovio *et al.* 1997). As civil society collaborations with business organizations became noted (Turcotte, 1995), and a few industries opened up to environmental stakeholders (Hoffman, 1999), a 'reformist environmental paradigm' (Egri & Pinfield, 1996) emerged, presupposing conjoint economic development *and* ecological capacity-building (Hart 1997; Hawken 1993; Hawken *et al.* 1999). However, the accounts remained highly abstracted, rather than, following Czarniawska & Sevón (2006), tracing ideas as they trickle down, percolate, and constitute local action nets, with the global informing action always at the local level. So, more research is needed to understand how global principles are implemented at the local level, an issue that the case will also allow to address.

Comment [MFT1]: I took out the reference to ONE for political reason. Although, as many B&S readers and reviewers, I am a proud ONE member, it might not be the case of some B&S reviewers. Indeed, when ONE was formed, it created quite a commotion for the Social Issue in Management division of AoM because they feared, quite rightly actually, that it would drain from the division a lot of members interested in environmental issues that were then associated with SIM. So here is for the little history of ONE and SIM, two contributors to the Business & Society journal. The B&S journal is sponsored by the International Association of Business and Society, where you will basically find the same people than at SIM and ONE.

In conclusion, and stating the research objectives of this paper, we will explore strategic positioning, learning, power and its legitimation, and global-to-local translation, as they function in the processual dynamics of multi-stakeholder relations, through a single intensive case study. Consistent with the approach of qualitative research, the inquiry focused on a single phenomenon, the MPCP, and asked several questions grounded equally in the case under review and the protocols of grounded theory (Creswell, 2003: 106).:

- 1) Strategic questions:
 - a. What opportunities for conflict-resolution do MPCP represent?
 - b. How can the risk of cooptation be overcome for less powerful stakeholders?
- 2) Learning questions:
 - a. What types of learning can result from a MPCP?
 - b. How does learning occur in an MPCP?
- 3) Power and the legitimation questions:
 - a. What are there relationships of power in an MPCP, if any?
 - b. How is legitimacy constructed within the context of an MPCP?
- 4) Global to local question;
 - a. How can global principles be implemented at the local level, within the context of an MPCP?

Methods

Data Collection

The research strategy chosen for this project was that of an embedded case study, a form of case work that includes several units of analysis, all of which related to a larger whole (Yin, 1994; Strauss and Corbin 1999). The partnership chosen for this study was a 'monitoring committee' for Magnola Metallurgy Inc. (MMI), a magnesium plant slated to be built in the Eastern Townships of Quebec, Canada. The committee was formed to provide citizens with an opportunity to monitor the

environmental impacts that might result from the plant's activities. The *Comité de citoyens du projet Magnola* (CCPM), founded in 1999 to monitor the set-up and operations of the plant. The *Société d'aide au développement de la collectivité* (SADC) took the initiative in creating this citizen's committee to monitor the Magnola project. SADC is a local development organization working to address entrepreneurial, social and environmental concerns. The case seems particularly interesting for several reasons. First, the CCPM wanted to work on a collaborative basis, despite ongoing controversy. Second, it was a context in which the legitimacy of both the company and the provincial government was threatened by the criticisms of radical environmental groups, foremost among which was *la Coalition pour un Magnola propre* (CPM). Thus, from a research perspective it is an exemplary case that, because of its extreme condensation of many normal MPCP aspects, amplifies features not as visible in, although common to, other MPCPs.

Data were gathered, mainly through documentary analysis, complemented to a limited extent by observations and interviews. The main source of data consisted of documentary records.

Documents represent 'data that are thoughtful, in that participants have given attention to [their] compiling' and enable the researcher to 'obtain the language and words of the participants' (Creswell, 2003: 186). In this case, considerable information was available because the production and distribution of documents was part of the strategy of two of the main actors, the CCPM and the CMP, and because the MMI controversy was widely covered in the media. Additionally, the main protagonist, CCPM, espoused 'transparency' as a key leitmotif, such that the level of detail present in the minutes of the meetings is exceptional, offering a rich data base.

The documentary cache assembled for the project was considerable and exhaustive: it included relevant newsletters, minutes of meetings, letters, position statements, analytical

reports, syntheses, technical documents, press releases, and other documents produced and distributed by the CCPM, the CMP and MMI. It also included newspaper articles concerning the MMI controversy and its events. In all, the documents that were read and analysed to support the case description amounted to 553 pages, which we have drawn on to inform description of the events. Closer attention was paid to the 341 pages of documentation produced by CCPM and MMI (such as newsletter, position statements and minutes) or obtained from the CCPM (such as letters to and from various actors).

To a limited extent, interviews and observations were also used as a complementary source of data. One researcher formally attended an official meeting of the Committee. During this session, the researcher was introduced and briefly stated the purpose of the research project (understanding the processes, outcomes and limitations of a partnership between an NGO and a company). Subsequently, the researcher sat as a silent observer and took detailed notes on what was said and how participants interacted. In such meetings, informal moments, such as breaks, allowed time for the researcher to discuss events with the participants personally and to establish contact in order to obtain interviews with participants. Respondents were also contacted by a letter, explaining the research objectives and guaranteeing their confidentiality. After having met with the respondents at the Committee session and having had short conversations with them, more structured interviews were conducted on the telephone in May and June of 2001. Telephone interviews are particularly useful for providing historical information (Creswell, 2003: 86). Eight interviews were done with members of the CCPM for a total of five hours. Respondents were representative of the full range of interests vested in this issue: citizens (4 respondents out of the 8 members of the CCPM), the company (1 respondent), municipalities and regulating agencies (3 respondents from the public sector).

The interviews, using a semi-structured questionnaire (available from the first author on request), included questions regarding the participation of the respondents' organizations in the Committee. They also probed respondents' perceptions of the Committee process and (especially) its outcomes. Interviews were tape recorded, then transcribed.

Data Analysis

Data analysis followed several steps. First, data were read attentively and annotated with marginal comments (Miles and Huberman 1994). Second, these remarks were condensed into themes and then systematically categorized into files. Third, the files were broken down into tables, which served as the basis for the case write-up. In the fourth step, nine units of analysis, reflecting the major issues discussed among the participants, were established. These units included: confidence in the transparency of information; issues of recurrent funding; the representative quality of committee members, and their recruitment; the independence of the Committee; the redefinition of the Committee's operations; the power and influence of the Committee; supplementary tests; acceptable environmental toxicity levels; and specific issues pertaining to the levels of organochlorines and hexachlorobenzene. The description of these discussions within the CCPM and of the entire controversy surrounding the set-up and operations of MMI served as an analytical basis for the governance structure in this partnership. The preliminary results of the case description were presented to the CCPM members in the form of a presentation by one of the author in a meeting, from which feedback was obtained, thus contributing to internal validity. A first version of the case study was produced in the form of a research document, on the base of which another of the authors wrote a more synthetic versions of the case, revisiting the data in an iterative manner which led, at times, to a search for further insights from the data while discovering new analytical insights.

Magnolia

Establishing the Plant

Magnola Metallurgy Inc. (MMI) is a subsidiary of Noranda Magnesium, which in 1999 established a magnesium plant in Danville (in the Eastern Townships of Quebec, Canada), having received a government investment of 1.2 billion dollars to do so. Noranda held 80% of MMI shares while 20% were held by *Société générale de financement du Québec* (a Government of Quebec agency).

Automotive manufacturers are the principal consumers of magnesium, used in alloys to produce lightweight engine castings for vehicles. Local authorities hoped Magnola would create 315 permanent jobs in a region devastated by closure of asbestos mines. The project was a risky venture since it was the first plant to attempt to extract metal from serpentine tailings (asbestos mine tailing deposits), using a proprietary technology. The plant set out to produce magnesium metal (Mg) through the electrolysis of magnesium chloride ($MgCl_2$), extracted from the serpentine tailings ($3MgO \cdot 2SiO_2 \cdot 2H_2O$) along with anhydrous magnesia (MgO). The plant produced its first magnesium ingots in the fall of 2000 and, once it was operating at full capacity, the MMI plant was expected to become the world's largest supplier of magnesium, with a maximum projected output of 58,000 metric tonnes of magnesium annually.

Objections to Magnola

Quebec's *Bureau d'audiences publiques sur l'environnement* (BAPE – the Government of Quebec's environmental hearings board), held hearings on MMI's proposed project in October and November 1997. On these occasions, several groups, including Green Peace, *Union Québécoise de Conservation de la Nature* (UQCN), and *Coalition pour un Magnola propre* (CPMP) argued against the project's unacceptability so long as it would involve a chlorine-based extraction process using electrolytic reduction of $MgCl_2$. Chlorine-based Mg production is known to generate and release organochlorines, including dioxins and furans. These substances are toxic, carcinogenic and bioaccumulative.

Organochlorines can cause hormone-dependent cancers and are known endocrine disruptors. Toxic substances of this order mainly affect the reproductive, immune and nervous systems, by hormonally

confusing molecules in certain cells of the body. All of the functions in an organism that are governed by hormones therefore become susceptible to disruption.¹ . . .

On March 4th 1998, BAPE concluded that Magnola's project, as presented, failed to meet environmental norms, most notably because it would produce dioxins and furans. A series of recommendations were made for the project's improvement. BAPE's requests pertained not only to the problem of organochlorines but also to silica-iron tailing settling tanks, air emissions (conventional gases, green house gases and organochlorines), liquid waste and water supply, gas piping and impacts on the human environment. BAPE also recommended that MMI form a citizen relations committee and that this committee be provided with access to scientific experts from the government to 'provide impartial insight into the findings of environmental monitoring'. Despite BAPE's reservations, the Government of Quebec authorized construction of the Magnola Metallurgy plant in April 1998, with no demand for non-chlorine-based processes. The Government told Magnola that it was to oversee environmental monitoring in a spirit of 'partnership', encouraging businesses to 'take responsibility'. Monitoring would consist of a battery of chemical and physical analyses to be conducted in a variety of settings, carried out by the Magnola laboratory, under an accreditation process intended to validate its monitoring efforts. MMI's electrolytic magnesium extraction plant set up operations on this basis in 1999. Prior to the plant's establishment, earlier in 1999, *Coalition pour un Magnola propre* began analysis to establish baseline contamination levels before the plant started up operations. Samples from deer and small animals were taken within a 30 km radius of the plant and underwent several laboratory analyses. The cost of this analysis program came to \$150,000 and was funded through public donations.

¹ Canada was the first, of approximately one hundred countries, to sign and ratify the Stockholm Convention in May 2001 (Government of Canada, 2006, p.9). The Stockholm Convention on Persistent Organic Pollutants (POPs), committed to eliminating and reducing dioxins, furans, hexachlorobenzene and PCBs, came into effect in May 2004, and Canada released its National Implementation Plan in May 2006, after several multi-stakeholders consultations were held (Government of Canada, 2006).

Many demonstrations against the construction and operation of the MMI plant occurred. Opponents accused the government of putting economic interests ahead of environmental protection. Petitions were signed, meetings with government bodies took place, information sessions were held, alarming articles published, rallies organized, and the region saw an increase in acts of civil disobedience. In May 1999, during an open-house day at the Magnola plant, and in June of 2000, during the official opening of MMI, the *Coalition pour un Magnola propre* organized demonstrations. During a demonstration that took place in May 2001, an activist from the *Comité de lutte contre les organochlorés* (CLO) resisted arrest and groups opposed to the project used his trial as a platform to raise public awareness regarding this issue, calling for MMI to shut down its operations.

Monitoring Magnola

CCPM was established as a partnership project with Magnola for environmentally monitoring its impact. The CCPM's official mission can be summed up in five main points: (1) receive citizens' concerns; (2) receive reports from MMI; (3) consider and discuss any environmental, economic or social concern and, to this end, call upon the expertise of guests and consult with specialists to elucidate the Committee's work; (4) submit opinions and make recommendations on various aspects of MMI's activities and projects affecting the community and its living environment; (5) regularly inform the population of its work (in newspaper columns, public evening meetings, conferences, etc.). Overall, the CCPM had a strong commitment to rationality and rational debate rather than principled opposition irrespective of the evidence. Metaphorically speaking, the members perceived the Committee as a 'watchful eye,' a 'watch dog' on Magnola's deeds and decisions. The CCPM was regarded by its members as a 'credible, serious, very approachable group,' a 'medium of communication,' a 'transmission line between the company and the community' and a nexus of 'information empowerment.' Moreover, 'independence,' 'transparency' and a 'quest for the truth' became the CCPM's leitmotifs. Although not formally legitimated by either the Government or the

firm, it described itself as an ‘official structure’² and sought to establish its legitimacy through its commitment to these practices, seeking to become an obligatory passage point in the circuits of power that flowed around the Magnola operation (Clegg 1989).

The First Leitmotif: Independence

The issue of independence came up in several ways. The first objective of the CCPM was to create a citizen’s committee that would be autonomous with regard to the various levels of government, businesses and other committees and coalitions in the region. From the beginning, the *Comité de citoyens du projet Magnola* defined itself as an organization working ‘independently’ in collaboration with organizations, institutions and regional public authorities (e.g., *Ministère de l’environnement* [MENV], SADC, the *Centre local de développement*, community organisations and the municipalities) to foster ‘sustainable development.’ The *Comité de citoyens du projet Magnola* (CCPM) sought to distinguish itself from *Coalition pour un Magnola propre* (CPMP) in that its objective was to monitor plant operations with the goal of preventing any negative impacts on the population and the environment, through, as they said, ‘dialogue with the project proponent’.

The Committee met on a monthly basis. Meetings took place at *SADC d’Asbestos* or at the Magnola plant. CCPM’s Coordinator was on hand in the organization’s offices one day per week for the Committee Secretariat. Magnola participated as a guest member at Committee meetings, where it could provide an overview of plant operations and present results from environmental sample testing. Magnola’s representatives acted only as ‘informers’, charged with the task of justifying the company’s actions, past and present. Representatives from various levels of government also attended meetings as expert consultants or resource people but did not participate in votes on decisions. All ‘guest members’ were treated as resource people. Voting members consisted solely of citizens. Voting periods were established when only voting members could be present. The categorization of

² CCPM Newsletter, October 2000, p.1

members, which designated some as members who could vote (citizens only) and some who could not (representatives of MMI, governmental bodies), was a subject of debate within the Committee. Several non-voting members would have liked to exercise voting rights. For example, Magnola considered that this kind of committee should be co-chaired by the parties committed to the CCPM's mandate. However, the majority of members considered that restricting voting rights exclusively to citizens was necessary to preserve the Committee's independence in relation to Magnola and to the government. Significantly, despite the apparent spirit of candour and cooperation that predominated among all Committee members as observed in the meetings, the abiding preoccupation with independence was a reflection of the CCPM's apprehensions concerning the *Ministère de l'environnement's* ability to control industry, and indicative of community scepticism about industry's ability to self-regulate its operations.

We have succeeded in preserving relative independence from the municipality, from industry, and from the *Ministère de l'environnement* in that it was really the citizens, a few citizens, who are on the Committee who have the right to vote, make decisions and take control. (Conversation with a respondent, June 2001)

There has to be someone who is relatively independent to monitor what is going on. We did not have boundless confidence in the MENV, its capacity to do that or in the industry to self-regulate in its operations. So ordinary people had to stick their noses in, ask questions and have things explained to them. (Conversation with a respondent, June 2001)

Referring to independence was a way for the CCPM to establish itself as an influential actor, rather than a rubber stamping body, and yet continue to talk in a very cordial tone. When the Mayor of the Municipality demanded that CCPM 'officially dissociate' from more radical groups, the CCPM refused by invoking the necessity of keeping an independent position from political pressures in order

to accomplish its mission of protecting the population and the environment. On several occasions, the CCPM expressed frustrations about the lack of receptivity of the *Ministère de l'Environnement du Québec* (MENVQ) to its requests. 'The members of the CCPM observes that there is very little place for the expression of the citizens' perspectives in the current structure'³ and, that, although the CCPM had been acknowledged by the Minister as a 'potential partner'⁴ in the new accreditation monitoring process, according to which the company itself would do the monitoring following the Ministry's guidelines. With time, and after several letters expressing their frustration and demanding independent monitoring of MMI's emission, the CCPM obtained that the local section of the MENVQ, in collaboration with the CCPM, would supervise monitoring by MMI. When MMI asked to authorise the release of information from their experts before its communication, the CCPM again invoked the necessity for independence (as the antonym of censorship) as grounds for refusing this condition⁵.

Independence had costs attached to it: in concrete terms, the question of independence came up in relation to financial considerations and, in general terms, with regard to resources. To achieve its objectives, the Committee undertook several activities: organizing technical visits to the plant (accompanied by experts); hosting talks by technical specialists; conducting various studies; producing a newsletter, and overseeing chemical and biological analyses. Although participation was voluntary, and notwithstanding the fact that some experts provided services free of charge, gathering, interpreting and disseminating information demanded considerable resources. Therefore, in January 1999, the CCPM approached MMI to provide it with \$100,000 in recurrent annual funding. The Committee members justified the amount based on the fact that Magnola's presence had made the CCPM's involvement in data analysis and interpretation a necessity. With regard to the Committee's recurrent funding, members deemed that it would be necessary for the CCPM to preserve its independence in relation to Magnola and that it should not have to be subjected to pressures regarding the renewal of

³ Minutes of the CCPM meeting, June 19th 2000: 2)

⁴ Letter from the Environmental Minister begin to the CCPM, May 3rd 2000

⁵ Letter from the CCPM to MMI, November 24th, 2000.

funding. Magnola did not acquiesce to this demand, instead offering only a payment of \$10,000 for one year.

In 2001, the CCPM's revenues were \$35,000 of which \$20,000 came from the city of Asbestos, \$10,000 from SADC (in services rendered), \$2,000 from the regional county municipality of Asbestos and \$3,000 from MMI. The CCPM considered these resources to be altogether insufficient, especially since it wished to carry out more of its own environmental monitoring activities to compare and verify its results with those of MMI. In a letter addressed by the CCPM to the Environment Minister in March of 2000, its evident discouragement with regard to the magnitude of the task at hand was obvious.

Without warning and against our will, we have inherited part of the very heavy responsibility that was shouldered, up until now, by our *Ministère* and for which you have not equipped us. We are taking on this responsibility for the moment to preserve our living environment. We are volunteering, despite [the negative impact it has on] our quality of life.⁶

The Second Leitmotif: Transparency

'Transparency' was perceived by Committee members as one of CCPM's 'strong points.' It was also seen as necessary to realizing the core duties of its mandate, namely, (1) informing the public, (2) monitoring Magnola's activities, and (3), establishing high-quality environmental monitoring. The idea of transparency was integrally linked to the Committee's role as an instrument for communication. The role had two dimensions: the first being communication between the plant and the Committee, the second, communication between the CCPM and the population at large. In this regard, the metaphor of the Committee as a 'transmission line' used by some of its members is an

⁶ Letter from the CCPM to the Minister Bégin, March 30th, 2000.

eloquent representation of its activities. Communication with MMI was carried out in a constructive manner, in a relaxed atmosphere of mutual trust and respect .

Committee members wanted Magnola to provide CCPM with all the information it needed to understand plant production processes and pollutant tests. MMI demonstrated a great deal of openness on this count. Committee members visited the plant on many occasions with engineers the better to understand the production process. Magola also provided numerous documents. Moreover, the Committee arranged for a mobile unit for air quality analysis to conduct a thorough sampling of the area surrounding the plant and compile an ambient air profile to increase monitoring and prevention activities, especially testing for the presence of organochlorines and other volatile organic components.

We visited the whole [production] process, the laboratories as well as cells, the electrolytic generator, the electrolytic chamber... we also went to see other businesses, so there are those points of collaboration. (Conversation with a respondent, June 2001)

The main achievement of the Committee was the logging of environmental monitoring in cooperation with the *Ministère de l'environnement* following the plant's set-up. Magnola had 6,000 to 8,000 tests to conduct each year at precise locations. The Committee's role was to monitor the implementation of this testing and to complete it, where necessary. It arranged with Magnola that the test report be a summary, easy to interpret and understand.

Magnola's openness was undoubtedly part of its sustainable development perspective. MMI had voluntarily joined the Responsible Care® initiative (ethics and codes of practice established by the Canadian Chemical Producers Association in 1985, with 150 practical requirements for chemical

producers). Notwithstanding Magnola's theoretical principle of openness, the CCPM's presence brought considerable pressure to bear to ensure the application of this principle.

CCPM's most visible form of communication with the population was the dissemination of information as part of their mandate. The Committee wrote newsletters to inform the population of its work. These newsletters were distributed to citizens of the regional county municipality through mailings or in local newspapers, and were posted on the Committee's Web site. The Committee's opinions were also quoted in the media, including the newspaper *Les Affaires*, the magazine *Actualité* and in other economic news sources in the province of Quebec. Some of the observations disseminated in the CCPM newsletter were also cited by groups opposing the project.

In a longer-term perspective, we have in common the ability to look at all the figures, the ability to judge the situation, and especially the ability to keep the population well informed. (Conversation with a respondent, June 2001)

Communication in the other direction (that is, public input to the CCPM) was problematic and at times more implicit. It was problematic in that the Committee had great difficulties recruiting citizens. Initially, only five citizens responded to the SADC's invitation to participate in the Committee, and in 2002, despite numerous invitations in local papers, the CCPM still had only eight voting members (citizens). The CCPM received complaints from citizens concerning noise nuisance produced by the plant operations which it transmitted to MMI. There was also an implicit communications link from the population to the CCPM through the influence of opposition groups, referred to as 'popular groups'⁷, who elaborated their views at BAPE public hearings and through conferences, scientific reports, and press releases. Members of the CCPM read material produced by other environmental groups, not only ones such as the World Wild Foundation but also more radical ones such as the CMP

⁷ CCPM Newsletter, October 2001, p.1

and Greenpeace. 'We are expecting with great interest the result from the analysis led by the CMP and the *Union des producteurs agricoles*.'⁸ In fact, it is worth noting that most of the elements that the CCPM found to be problematic (e.g., organochlorines, vent pipes or the silica-iron tailing settling tanks) were also identified in the BAPE report. Despite the fact that the CCPM defined its identity as 'distinct' from the more radical groups opposing MMI, they also saw their respective roles as 'complementary'.⁹

The Third Leitmotif: A Quest for the Truth

According to the CCPM's President, the Committee sought to establish 'a fair, truthful, defensive and vigilant position, and do so with honesty.' With this goal in mind, the Committee had to be a site for learning. Several levels of learning were in order:

Knowledge of the issue, the project, products, manufacturing process, the effects of production, the impacts on air and soil, and power relations between industry, the MENV, and citizens. (Conversation with a respondent, June 2001)

The Committee's activities contributed to enhancing environmental controls and therefore increasing data collection, which fostered knowledge acquisition regarding the impact of Magnola's operations on the environment. For example, the CCPM requested that air quality samples be taken using a mobile unit from the *Ministère de l'environnement*, rather than only taking samples at set stations, as initially foreseen. In this way, the results would not be biased by the possibility that the sampling units had been placed in areas where emissions did not accumulate. The Committee proposed that supplementary tests be conducted in addition to Magnola's, such as tests on bioaccumulation and toxicology in various elements of the food chain. These tests measure various particularly sensitive biological indicators to ascertain the preliminary effects caused by a given source of pollution. Conventional and biological tests are

⁸ CCPM Newsletter, December 2001, p.2

⁹ Historic of the CCPM, document produced by the CCPM in 2000: 7

therefore complementary. A protocol was therefore established to monitor potential estrogenic effects on a species of small fish (creek chub) very common to the region. The disruption of the endocrine glands by organochlorine pollution can produce dysfunctions in the reproductive system, the immune system and more. Particular attention was devoted to the presence of a specific protein that appears in men's livers exposed to this kind of pollution and which induces estrogenic effects. Fish catches came from the 12 sample points, distributed around water bodies in the region, including the Burbank pond. These water bodies act as pollution catchers due to the effects of percolation. Moreover, the creek chub, which feeds on insects and various other living substances, was also subjected to bioamplification due to ambient pollution, according to the CCPM (2001). These provided early indications of the potential negative effects of pollution generated by the plant. The creek chub monitoring was described by the CCPM as '*avant-gardiste*' and 'non-conventional' because it would not only be looking for the presence of pollutants but rather would allow its detection in early stage hormonal perturbations, even subtle ones.¹⁰

The CCPM also organized a scientific round table with several independent experts, which allowed it to expand its horizons. In fact, through its years of existence, the CCPM obtained the collaborations of a dozen experts from universities, research institutes and laboratories. The CCPM also contributed to setting up a long-term program of analysis to monitor the evolution or the stability of the concentration of various contaminants in the environment. The bioaccumulation of pollutants is a phenomenon that takes place over a prolonged period of time, meaning that it could take years to detect a problem based on the environmental indicators. According to the Committee, it was therefore essential to anticipate this problem rather than face an irreversible environmental problem. The CCPM also established contacts with the Department of Environmental Sciences at *Université de Sherbrooke* with the goal of finding

¹⁰ CCPM Newsletter, December 2001.

as assistance in interpreting the results of their test, especially regarding possible environmental toxicity levels.

There was no test for bioaccumulation because there are toxins, dioxins, chlorobenzenes, these are things that you don't see, that have no odour, they are miniscule, very rare things that don't even add up to the equivalent of a pound of butter every year, except that 454 g of dioxine is enough to kill 19 million people. So this relationship is difficult for the public to see and bioaccumulation gets into the food chain. So we do tests, with *Union des Producteurs Agricoles*, we test cows and bees. It is our pressure [tactics] that got us those [tests] and we went even further and set up toxicology tests, using fish. Magnola is doing more than the government was forcing it to do, so it is getting into it as well. We would like to do more but we always want to see more... there were two ambient air testing stations, it increased to four. For us, that isn't enough yet, but we did double the numbers just the same and I am very proud of that. (Conversation with a respondent, June 2001)

The common goal is to be able to understand and judge for ourselves whether the future potential emissions from the plant will have an impact on the environment... the point we have in common is our ability to look at all the figures to be able to judge the situation and, especially, to be able to inform the population. (Conversation with a respondent, June 2001)

Data collection was only one of the steps involved in the acquisition of new knowledge. The data had to be interpreted. But, as the participants on the Committee quickly realized, 'forming an opinion for oneself will not be so easy, as the environmental monitoring activities to be carried out are many and complex' (CCPM Newsletter, April 2001). The task was all the more difficult since the acceptability

model for the various toxic emissions established by government decree did not appear acceptable to the voting members of the Committee (the citizens), who, much as the groups opposing the project, considered that the decree was too lax, contravening the Stockholm Convention. However, in a balanced perspective the Committee observed that Magnola's stacks were 'not the only one to produce POPs' (persistent organic pollutants); other sources, such as the wood-burning stoves used by local citizens, also produced dioxins and furans.

Through the Committee we must develop knowledge based on very sound judgment and a perspective on things that I think it is fair since you succeed in striking a balance and not siding with one camp or the other. But that requires deep thought because it is easy to be swayed one way or the other. (Conversation with a respondent, June 2001)

The Committee wished to develop a balanced perspective. It sought to distinguish itself from other environmental groups concerned about MMI because it considered that these groups were too oppositional. The CCPM criticized them for pushing environmental issues too far to the fore without attempting to understand the company's actions. People who valued a rational and balanced approach were sought for when recruiting members. It is possible that this commitment to rationality contributed to the Committee's recruitment problems, since it is unquestionably easier to mobilize people by making alarming statements than it is by requesting that they participate in rational thinking.

Towards the end of 2002, the CCPM expressed the need for increased precautions. In October, the reassuring interpretations of MMI and of the MENVQ were put in between quotation marks in the CCPM's minutes, expressing CCPM's distance and doubt about 'official accounts'; CCPM then issued a press release¹¹, noting widespread uncertainty within the community. Although CCPM was

¹¹ CCPM, press release, "Le Comité de citoyens magnola apporte un nouvel éclairage sur les émissions d'organichlorés, October 16th, 2002, www.reseau-sadc.qc.ca/asbestos/com161002.htm.

grateful for MMI's efforts it thought that pollution problems could be improved by Magnola if it used new technology. Because experts could not predict how quickly substances would bioaccumulate nor at what level effects begin to appear, only that when effects appear the situation would already be irreversible, the Committee aligned itself with activist groups in its position on organochlorines and risk analysis. Prevention is the only defence was the position adopted. From this perspective, MMI must reduce the level of its emissions considerably. In the long term, the only tenable position would be virtual elimination.¹⁵ CCPM took the position that respect for norms instituted by the government regarding the concentration of organochlorines in the ambient air did not provide for long-term protection and that MMI had to reduce its organochlorine emissions very quickly. 'The situation is not without hope' the CCPM indicated, since 'it is technologically possible to reduce emissions.' The press release did not specify whether reductions were possible with the chlorine-based process. However, it did add that MMI had already taken initiatives to correct the situation and that 'the Committee is of the opinion that these measures are adequate for the time being.' In sum, the CCPM took a stand on the unacceptable level of emissions while reiterating its desire to work in a collaborative relationship with the company.

In December 2002, the news from CCPM was both reassuring and alarming. The good news was that the results from the 2000 and 2001 creek chub study showed that none of the fish tested suffered from oestrogenic anomalies. There were debates among the participants at the CCPM meeting about the interpretation of this result; finally caution prevailed. It was decided *not* to conclude that 'the sites were not exposed to oestrogenic perturbing chemicals'¹² The bad news concerned dioxin and furan emissions from the plant smokestack: the quantity emitted in August 2002 were fifty times greater

¹⁵ See <http://www.norandamagnesium.com>.

¹² CCPM minutes, January 2003, p.1

than expected. The CCPM expressed fear that if this level was maintained. 'MMI would become the most important source of dioxins and furans in the province'¹³.

In April 2003, MMI mothballed its magnesium production operations.¹⁶ The company explained that the plant was to be shut down for an indefinite period of time because market conditions would not allow for its viable operation. Increased production and the low cost of magnesium production in China had caused prices to plunge.¹⁷ Economic considerations, therefore, seem to have taken precedence in the decision to cease operations. No doubt to reassure their investors, the competition viewed the plant shutdown as proof that Magnola's technology was at fault.

In my opinion if Noranda's technology had worked as originally stated they should have been able to compete in today's market. Magnola never achieved greater than a 60% operating efficiency and could not produce a consistent product. Therefore, they were not able to secure long-term contracts from the automotive die-casters necessary to sell their products at premium prices... Magnola had access to free feedstock, the waste rock from the processing of asbestos, but the rock contained not only magnesium silicate but also extremely variable amounts of iron, copper, nickel, and boron, any one of which can create problems in the production of high grade magnesium, hence the 'free' feedstock had hidden costs (Burton 2003)

Discussion

Strategic Positioning

CCPM sought to establish itself as a collaborative and rational arena for monitoring Magnola's ecological impact: to what extent was it a mechanism for conflict resolution or co-optation? We noted

¹³ CCPM Newsletter, December 2002, p. 1

¹⁶ See <http://www.norandamagnesium.com>.

¹⁷ See <http://www.Chw.ca/releases/March2003/24/c3650.html>.

that the partnership between MMI and CCPM only allowed for a partial resolution of conflicts. On the one hand, relations between CCPM and MMI were very harmonious and discussions took place in a highly respectful atmosphere of trust for all involved. The partnership was an enclave where rational debates took place, with no apparent ideological bias towards either the environment or economic profitability, with the hope of reconciling positions in order to achieve sustainable development. The partnership was managed with particular care to obtain procedural legitimacy and the rules of decision-making were consensus-based. There were several public calls to involve participants, seeking inclusiveness of stakeholders. However, there were exclusions resulting from the very objectives of the partnership. As a 'learning organization' the CCPM was engaging citizens in a collaborative relationship with MMI and governmental organizations. Yet, the CCPM also understood its mission to be a 'watch dog' on behalf of citizens, and consequently, the 'voting' members had to be citizens, thus excluding from the formal decision process representatives from the company and governmental organizations. Furthermore, the way the venue was framed, with insistence on rationality, collaboration, and reconciliation between economic and environmental objectives, had all the ingredients of a recipe to appeal to individuals with a reformist ideology among the environmental movement, which, *de facto* excluded citizens representing more 'radical' anti-business ideologies (Turcotte, 1995; den Hond and de Bakker, 2007).

While the reconciliation between environmental and economic objectives was attempted within the boundaries of CCPM, it was not achieved. In the end, a substantial dichotomy was revealed in the respective participants' objectives: even though CCPM still garnered hope that interests could be reconciled through a technical solution the priority was the environment. Consequently, CCPM aligned itself on many points with the more radical environmental groups, whereas for MMI (if we believe their press release explaining the reasons behind the plant shutdown), economic issues took precedence. Reconciliation of sensemaking was achieved only temporarily over the polysemy of the 'precaution' concept, when it was taken as a synonym for-management and pollution measurement.

Moreover, the existence of a partnership between CCPM and MMI did not reduce the turbulence and manifestations of conflict with other environmentalist groups, who opposed MMI's activities. Certainly, many efforts were made to foster harmonious relations and, to paraphrase Poncelet (2001), we can say that we were able to observe 'a kiss here and a kiss there.' However, contrary to what Poncelet was suggesting, the collaborative approach did not involve complacency in the case of the CCPM–MMI partnership, but did allow for constructive confrontation. The CCPM neither allowed Magnola to coopt opposition nor did CCPM become merely a conduit for MMI's interests to be promoted.

Heugens et al. (2002) propose that the creation of stakeholder integration structures – such as the CCPM – leads to the establishment of sociopolitical legitimacy on behalf of the organization as perceived by stakeholders. The results of the case suggests that procedural legitimacy was granted only temporarily and only by already supportive stakeholders – by governmental organizations, promoters of economic development and a few cooperative citizens, but not by a large number of citizens with radical views on the project, nor by most media. MMI remained more controversial than legitimate. While it is tempting to propose that the creation of stakeholder structures with radical groups (rather than reformist ones) might lead to the establishment of socio-political legitimacy of the organization, it might not be possible to get these groups on board, as they often challenge the structural legitimacy of the businesses and because their identity is formed around protesting rather than collaborating. Even were they to accept the invitation, they would ask for radical changes, representing substantial challenges for companies.

Learning

Although the CCPM commitment to rationality was indubitable its resources for achieving rationality were extremely limited. Good science is not cheap and CCPM could hardly afford to engage in sufficient science to be rationally persuasive. Furthermore, good and sound science is often not enough to resolve complex issues and trans-scientific problems (Weinberg, 1972). More often than not, as we shall see, it provides occasion for those who can afford it, to stall. The CCPM did not enable technological innovation in order to eliminate or reduce the production of organochlorides as a by-product of the plants' activities, even though it hoped to do so. The production technique remained locked-in by the sunk costs of the newly installed equipment. No radical innovation occurred in this regard.

CCPM sought the development of new pollution measures within the realm of risk management, single-loop learning for the company. The Committee participants wanted the partnership to be a site for learning, an enclave of apolitical rationality that could allow them to understand the real impact of the company's activities on the environment. By focusing on this objective and deploying consensual efforts to reach it, the CCPM became a 'learning organization.' Thus, the case supports Heugens et al's. (2002) proposition that stakeholder integration structures targeting meta-problem solving result in learning effects between organizations and their stakeholders.

If learning was incremental (no revolution in the production process or design), it would be concrete and something that MMI could implement as an exploitative opportunity. Turcotte and Pasquero (2001), as well as Driscoll (2006), found that decisions coming from multi-stakeholder processes are seldom able to be implemented. As this case appears different, it is worth exploring the conditions that might explain such a result. The CCPM was translating environmental concerns that included the more radical environmental movement, making them more accessible to the company. CCPM was perceived by its members as a 'transmission line' and a place of 'rationality,' in a tacit communality with the company's vantage point. The CCPM could be described as a reformist group and its members shared

MMI's enthusiasm for the potential of technical innovations to solve environmental issues. Therefore, CCPM's alignment with Magnola's organizational culture contributed to exploitative learning about new pollution control routines that could be implemented by the company. The CCPM was culturally closer to the MMI than more radical groups, supporting the proposition by Roome and Wijen, (2005) that the less there is diversity and the more there is alignment of interests among the participants, the more likely it is that exploitative learning can result from a multi-stakeholder partnership. It also supports Turcotte and Pasquero's (2001) model of an inverse relation between the diversity of the participants and the tractability of the solutions.

How did the CCPM become a learning organization? The Committee played a remarkable role in the mobilization of resources to measure the company's environmental impact. CCPM rallied government agencies, experts from various universities and laboratories, the *Union des producteurs agricoles*, and (of course) MMI lab experts, with whom it maintained a privileged dialogue. It also referred to analysis produced by more radical groups, such as the CMP and Greenpeace. It created a sphere of disinterested rationality which did become a significant circuit in the flows of power relations around Magnola, with regard to its ecological responsibilities. CCPM was creative in using its commitment to rationality to afford leverage on MMI. The will of CCPM's participants to collaborate with each other in a spirit of reconciliation, as people of good faith, was very real. However, in the end, its rational approach did not diminish the complexity of the issues at hand. Faced with intractable uncertainty, CCPM fell back on larger principles – the principles of precaution, which had a radical meaning for some, while for others it signified the priority of economic imperatives.

Power and legitimation

The state was a shareholder in MMI. The partnership was instigated through a para-governmental organization, SADC. The CCPM had, therefore, implicitly received governmental mandate for

steering MMI's environmental impacts yet it was hardly resourced adequately. The members of CCPM found their mandate difficult to despatch because, as they lamented, they did not have the means necessary to fulfil it. Consequently, CCPM called upon the government to pass more severe regulations and appealed to MMI for recurrent funding – a form of 'taxation', in the respondents' own words. However, the collaborative ecological monitoring partnership proved to be no substitute for state intervention, (since CCPM's means were by no means equal to those of the state), although the partnership did contribute to the governance of the company, by being both its 'watch-dog' and its companion in learning.

The CCPM created, imposed and managed circuits of power new to MMI, in a context where the legitimacy of both the company as a responsible corporate citizen and of the provincial government as a reliable guardian of public health and environment had been threatened. In fact, following Driscoll's (2006) critical analysis of the use of multi-stakeholder collaborations in the forest industry, we can see the instigation of the CCPM by a para-governmental organization involved in regional development as a form of symbolic management, an attempt at substituting one form of procedural legitimacy (the CCPM as a citizen-led ideal-speech situation with a legitimate meta-objective – sustainable development) for the missing procedural legitimacy (the decree that the government had to pass to allow for the installation of MMI). In this instance, despite the entrenched local opposition to MMI and the rational marshalling of evidence by CCPM it was the rationality of neither of these which defeated the diffusion of organochlorides but the rationality of the market. The CCPM did create new circuits of power, but these proved to be weak ones. Indeed, CCPM circuits appear particularly weak when compared by those put in place by MMI to support its entrepreneurial venture in Magnola. The MMI plant was based on a new technology, which involved several risks, not only in terms of environmental impact but also, as it turned out, in terms of efficiency and markets. As an entrepreneur, MMI was particularly successful in finding allies, especially among the provincial and local governments, using arguments of moral consequential legitimacy. Not only would MMI contribute to

local economic development – jobs creation – but it would also solve an environmental problem by recycling the asbestos mine tailing deposits (industrial wastes). There were concerns about the health and environmental impacts of the by-products but these impacts had not yet been scientifically proven; also, a risk management process was to be put in place under the supervision of willing citizens through the CCPM, which represented an attempt at gaining procedural legitimacy, using both the ideal of science and the ideal speech situation – the old and the new paradigms. In the legitimacy game, it is to be expected that players will use all the arguments available within their cognitive framework to configure and reconfigure their circuits of power to their best advantage. Arguments will circulate and be effective within some circuits, but will be rejected among others. In a multi-stakeholder field with considerable diversity in actors' perspectives, a way to be convincing might be to pool arguments from different camps, such as associating the science of pollution measurement with the precautionary principle, thus stabilizing passage points through routing an increasing and diverse traffic through them. The risk is that as different senses collide in the same space the passage point becomes more an arena in which accidents occur than a circuit of free-flowing traffic making common sense.

Despite the CCPM protagonists' respect for the rationality of rationality, the partnership proved to be a very 'amodern' story (Latour 1991) in which politics, economics and technical issues were conflated and resisted any attempt at separation into distinct camps. Different senses collided; for instance, 'knowledge,' in such a context, appeared as a construct in constant evolution, subject to controversy and subjugated to uncertainties, an emergent property of the rationalities in play. Where such lack of common sense is being made cognitive legitimacy is difficult to maintain. Episodes of de-institutionalisation of some sensemaking of the knowledge in the arena occurred. It is typical of messy problems and controversy that new elements and actors (human and non humans) tend to emerge and change the configuration of the field, both from a technical and institutional point of view.

Translating the Global to the Local

The CCPM was very active as a learning organization in rallying several stakeholders to understand the environmental impacts of the company's activities and to impose new pollution control measurements. As such, the CCPM acted as an institutional entrepreneur strategically positioned at the local level, piercing the organizational frontier with arguments from groups with more radical ideologies, protesting and producing 'symbolic damage' (den Hond and de Bakker, 2007). As a 'watch dog', the CCPM also sought support from the new norms established by an international institution – the agreed but not yet ratified Stockholm Convention on Persistent Organic Pollutants. According to Maguire and Hardy (2006) at the end of the multi-stakeholder debates that lead to the Stockholm Convention, 'science was subordinated to precaution' (p. 14), thus altering the power relationships and representing a political gain for the environmental movement. Indeed, the discourse of sound science coupled with risk management allows entrepreneurs to be entrepreneurial – to take risks – while the discourse of precaution empowers governments and NGOs to act against these risks. As Maguire and Hardy (2006, p.16) argue 'Sound science positions governments as reactive, marginalizes NGOs, and gives business more latitude to develop and continue to sell risky products until their harm is unequivocally established.' Risk management doctrines support such action because, until (a lengthy) time has elapsed, during which scientific research is conducted, the business indubitably makes profits, even while it is not clear what the side-effects of these profits are or will be.

Following Czarniawska & Sevón (2006), global ideas always have to be locally translated. At the international level, global NGOs were very active in drafting the Stockholm Convention, bringing about new institutional norms, including the primacy of the precaution principle (Maguire and Hardy, 2006). At the local level, NGOs and citizens with radical views on MMI were also very active in the de-institutionalisation of the company on the base of these new global norms: images of people marching on the street and getting arrested for their conviction presented their case televisually. Within the CCPM, citizens with a reformist view on MMI's project attempted the re-

institutionalisation of the company by entering a dialogue around a theme set by the company – risk management in the context of sound science – to conclude, finally, the need for a more radical meaning of precaution (avoiding the production of organochlorides), in a spirit of ‘radical reformism’ (Orsato and Clegg, 2005)

Although the partnership had been designed as an enclave for rational dialogue, its frontiers were porous. Furthermore, external rationalities –of the market, of international institutions, of the technology, and of various international and local stakeholders – interpellated this space of ideal speech. At the same time, establishing the partnership was an attempt by differentially interested actors to construct legitimacy and establish *their* circuits of power.

Concluding remarks

The paper has presented a case study of a partnership established between a mining company and citizens concerned about health and environmental issues. It has explored propositions from multi-stakeholder theory concerning strategic positioning, learning, power and legitimacy. It did so looking at the negotiation of a global issue in the local context of the partnership. The article has raised several questions, to which the case offers answers.

The first strategic question asked what opportunities for conflict-resolution are represented by MPCPs? The case has shown that MPCPs can offer opportunities for conflict-resolution, but maybe only partially and temporarily: in this case it created a venue for the firm and non-radical citizens in which they could reconcile economic and environmental objectives. In particular, these made polysemic sense of the concept of ‘precaution’, a concept which was their common objective until they discovered they attached different meanings to it. Common sensemaking eluded them. The more radical protestors never participated to this reconciliation thus the political environment remained turbulent. A second strategic question was: how to overcome the risk of cooptation for less powerful

stakeholders? In this case the less powerful stakeholders did avoid being coopted and the MPCP did allow for constructive confrontation: the CCPM did so by referring to legitimate concepts and symbols, such as making “independence” and a “quest for truth” their leitmotifs. However, there were limits to the area of constructive dialogue, which could not transcend the realm of risk management set by the company.

The article raises two questions concerning learning: what types of learning can result from a MPCP? And how does learning occur in an MPCP? The case has shown that single-loop exploitative learning could be a result of an MPCP, in which innovations that were not radical were implemented. Learning occurred through the efforts of an institutional entrepreneur, in this case the CCPM, which creatively mobilised resource, people and networks in its quest for a better understanding of the company’s environmental impact.

What about power and legitimation? Were there any relationships of power in this MPCP? Power relationships certainly existed in this MPCP, despite the fact that it otherwise corresponded to all the criteria of a setting based on communicative action. What were these relationships of power? By focusing mainly on the learning purpose (the ideal of reason) the CCPM succeeded in establishing its circuits of power as the path for environmental management of the company. These circuits were weak, however, in comparison of those put in place with other influential stakeholders by the companies. How was legitimacy constructed? For the CCPM the main emphasis was placed on cognitive legitimacy – the development of new knowledge – going back to learning issues. CCPM made use of moral arguments while focussing on their primary objectives (protecting the public and the environment) or when referring to concepts that defined their identity (e.g. the leitmotifs: transparency, quest for truth, etc.). The company also used moral arguments in a package that mixed the old and new paradigms (job creation and environmental precaution).

The last question the article raised was the following. How can global principles be implemented at the local level, in the context of a MPCP? It involved the action of a local institutional entrepreneur (the CCPM) that took the partnership as an opportunity strategically to position itself at the organizational frontier of the company. It did this by renegotiating the meaning of the precautionary principle advanced by the Stockholm Convention. The text of the Convention was then one among many arguments used to build a new understanding of the company's impact. It was the activities of more radical groups that wrought symbolic damage on the company.

To better understand the phenomenon at hand, the analysis has borrowed from several theoretical fields. It has borrowed from organizational learning to distinguish explorative from exploitative learning (March, 1991) and single-loop from double-loop learning (Argyris, 1976). It applied a typology of legitimacy distinguishing pragmatic legitimacy from several types of moral legitimacy and from cognitive legitimacy (Suchman, 1995) and has also borrowed from institutional entrepreneurship the role of discursive debates in the setting of new norms (Maguire and Hardy, 2006). From power and actor-network theory it has deployed a framework to analyse the interactions among actors (humans and non-humans) and networks, as well as their attempt to configure new circuits of power and reconfigure existing ones (Clegg, 1989), in the translation of the global to the local (Czarniawska & Sevón 2006),.

The main contribution is to stakeholder theory and, more specifically, the understanding of how and under which conditions multi-stakeholder partnerships can benefit business organizations and the societal environment. The case supported previous propositions that multi-stakeholder partnerships are conducive to learning (Pasquero, 1991; Hood, Logsdon, Thompson, 1993; Driscoll 1995, 1996; Roome 1998; Turcotte and Pasquero 2001; Heugens, Van den Bosch and van Riel, 2002). The case also allows us to specify the conditions and types of learning to be expected. Turcotte

and Pasquero (2001), as well as Driscoll (2006), observed explorative learning but no exploitative learning in situations where multi-stakeholder dialogues also included representatives of the environmental movement with more radical views. Turcotte and Pasquero (2001) proposed a model where the diversity of the participants was inversely related to the potential for exploitative learning and positively related to the potential for explorative learning. Roome and Wijen (2005), as well as Turcotte and Dancause (2003), in comparative case studies, found that the structure of the multi-stakeholder partnership would indeed influence the types of learning to be expected, and that the alignment of interests (in other words the reduction of diversity) was conducive to exploitative learning.

The present case study contributes to the evidence supporting the more specific propositions of the previous paragraph. Furthermore, the results have shown the limited scope of the exploitative learning and organizational change that occurred. The partnership allowed the development of technical innovations and incremental change in the organizational routines of the company. One might wonder if the partnership might have allowed for double-loop learning when the citizens' group partner developed a more 'radical' definition of the precautionary principle. It will be for further research to assess if and under which conditions representatives of radical perspectives might allow for double-loop learning and radical change.

The case also contributes to institutional theory. It illustrates how legitimacy is neither an outside nor static institutional feature but rather resembles a kaleidoscope of perceptions defined, temporarily granted, and redefined, through discursive interactions in a polyphonic context where different sense is being made. In such a context, moral arguments are confronted with other moral arguments while actors redefine knowledge and cognitive frameworks. As knowledge construction and legitimacy building are so closely related, it is thus not surprising that attempts at learning and innovating might sometime appear to some critics as merely symbolic management. Thus, the case offers evidence

supporting a growing trend which focuses on change and institutionalisation processes by introducing constructionist ideas into institutional theory (Orsato et al. 2002; Phillips, N., Lawrence, T.B., Hardy, C. 2004; Phillips, Lawrence and Hardy, 2006; Maguire and Hardy, 2006).

The interpretation of the case also suggests reconnecting institutional theory with a concern for power. Not all circuits of power are equal in their influence, as the CCPM case has shown. Nevertheless, apparently less powerful actors (in the CCPM case a small groups of citizens that took over a reformist project) can gain influence by mobilizing discourses and, while becoming convincing agent of learning, in other words, institutional entrepreneurs, aim to redefine cognitive legitimacy. Indeed, the case study has shown how a partnership could become a learning organization and a companion in learning to a business organization. It did so by acting as an entrepreneur in mobilizing resources, persons, departments, organizations and discourse. It created a sphere of disinterested rationality which in itself acted as legitimacy for developing a network of allies enrolled into their project for knowledge development. In doing so, they established their circuits of power, demonstrating, if demonstration is required after Foucault (1980), that power/knowledge are linked. It is a finding that stands in contrast to Foster and Jonker 's(2005) as association of stakeholder theory with Habermas' theory of communicative action. It was less reason and more strategy and power that prevailed. However, the case has shown that reason, knowledge, legitimacy and power were linked together rather than in opposition, as Flyvbjerg (1998) would predict.

The case also makes an original contribution in showing how discourse established by a global institution is activated at the local level. Far from a functionalist vision of a transmission line going from the global to the local, it shows that there is renegotiation at every step. Indeed, the same discursive tensions among 'sound science' and 'precaution' that were constitutive of the Stockholm Convention (Maguire and Hardy, 2006) were renegotiated again at the local level. The text of the Convention became one reference among several others that each of the actors translated and

redefined to support their views of the project. The precautionary principle became an obligatory reference point for the actors involved in this local debate, but one referred to in polymorphic ways, opening a new negotiation process over its meaning at the local level. All these negotiation moments are part of the change process.

Practical recommendations can be formulated for the convenors of multi-stakeholders partnerships, for activist groups and for firms. For convenors of multi-stakeholder initiatives, one recommendation is to understand the objectives of the partnership and structure it consequently, knowing that the degree of diversity among participants (their ideological positions, their interests) will influence the type of learning expected (explorative or exploitative). Another implication would concern power and its perception. Although it would be naïve to think that the relative power and access to resources of the actors involved has no influence in the context of these quasi ideal speech situation, nevertheless, the aura of the ideal speech situation and a devotion to rationality does offer a context conducive to learning and innovation by creating opportunities for building a learning network.

For activist groups, an important implication regards the potential consequences of participating or not participating to partnerships with business organizations and other forms of multi-stakeholder initiatives. Radical groups often interpret participation in such initiatives as a form of co-optation that could only undeservedly contribute to legitimate business as usual. However, it might be worth taking the risk to collaborate in order to co-opt the business organization and attempt to be a companion to radical change, while it is always possible to fall back to a contestation position if this does not work. As the case shows, precautions can be taken so as to avoid losing autonomy. Groups with reformist positions are often solicited to participate in such partnership, to such an extent that it becomes very intensive for their members in terms of resource and time consumption. They have to evaluate the opportunity to participate in view of their potential to influence learning and cognitive legitimacy toward their ideal. For firms, one general recommendation would be to instigate such

partnership upstream, before controversies, as a device with which to understand emerging norms better within their institutional environments and to maximize learning. Another lesson for firms is that procedural legitimacy is granted quite temporarily and cannot, in the long term, replace other forms of moral legitimacy.

The limitations of these findings are linked with those generally associated with case studies. Case studies allow for in depth understanding of the phenomenon at hand and are recognized to offer high internal validity, yet how much can be generalized from one or a few cases? In such context, the transferability of the knowledge produced depends on the level of detail provided about the method and about the case itself (Contandriopoulos, 1990), to see to what extent the situation described is sufficiently similar to inform other situations and to translate into useful insights for these (Latour, 1991, 1992). Although we recognise the exploratory nature of this work, we attempted to relate the results with other comparable case studies of multi-stakeholder collaborations; thus, we contributed by testing propositions found in this literature. The case was based mainly on documentary analysis and only to a limited extent on interviews and direct observations. Although relying more on participants' observations and interviews would have contributed to increased validity, the availability of a great amount of information on the case, and the exceptional level of details provided in the MCCP documents, allowed for an in-depth description of events. Furthermore, the use of multiple sources of information (various types of documents coming from various organizations) contributed to internal validity.

It is useful to borrow from several theoretical developments to understand better a phenomenon as we have done. While a multiplicity of theoretical frameworks may increase fidelity (Miles and Huberman, 1994), it multiplies the number of avenues for theoretical development. In this case the combination of several theoretical perspectives allowed them to inform each other; particularly, by exposing links between learning (knowledge development) and legitimacy building we have integrated two

previously opposed perspectives in the study of multi-stakeholder collaboration and stakeholder theory. By the same token, the case contributes to understanding how institutionalisation processes occur at the local level. In conclusion we can suggest that one potentially fruitful avenue for future research would be to analyse more systematically how new norms developed by global institutions are negotiated at the local level. Another issue would be to understand the complementarity of roles between organizations with radical and reformist perspectives within the social and environmental movement.

References

- Argyris, Chris.
1976 'Single-loop and double-loop models in research on decision making'. *Administrative science quarterly* 21: 363-375.
- Barouch, Gilles
1989 *La décision en miettes, systèmes de pensée et d'action à l'oeuvre dans la gestion des milieux naturels*. Paris: Édition l'Harmattan.
- Brown, David L.
1991 Bridging organizations and sustainable development. *Human relations* 24/8.
- Buchholz, Rogene A.
1993 *Principles of environmental management, the greening of business*. New Jersey: Prentice Hall.
- Burton William B.
2003 'The world's lowest-cost perspective magnesium producer'. Interview with the President of magnesium Alloy Corporation. See <http://www.magnesiumalloy.ca/report/0306Worlds-Lowest-Cost-Prospective-Magnesium-Producer.pdf>.
- Butterfield, Kenneth.D., Richard Reed, and David J. Lemak
2004. 'An inductive model of collaboration from the stakeholder's perspective'. *Business & Society* 43/2: 162–195.
- Cairncross, Frances
1992 *Costing the earth*. Boston: Harvard Business School Press.
- Callon, Michel: Lascoumes, and Y. Barthe.
2001 *Agir dans un monde incertain: essai sur la démocratie technique*. Paris: Seuil.
- Calton, J.M., and S. Payne
2003 'Coping with paradox: multi-stakeholder learning dialogue as a pluralist sensemaking process for addressing messy problems'. *Business & Society* 42/1: 7-42.
- Clegg, Stewart.
1989 *Frameworks of power* sage.
- Clegg, Stewart. R., David Courpasson, and Nelson Phillips.
2006 *Power and organizations*, Thousand Oaks/CA: Sage.
- Collins, Denis.
1995 'Introduction: a breath of fresh air' in D. Collins and M. Starik (eds.), *Corporate social performance and policy*. Supplement 1, ix–xii.
- Commoner, Barry
1990 *Making peace with the planet*. New York: Pantheon Books.

Contandriopoulos, André-Pierre, François Champagne, Louise Potvin, Jean-Louis Denis, and Pierre Boyle

1990 *Savoir préparer une recherche, la définir, la structurer, la financer*. Montréal: Les Presses de l'Université de Montréal.

Creswell, John W

2003 *Research Design : Qualitative, Quantitative, and Mixed Methods Approaches*. Thousand Oaks : Sage Publications.

Czarniawska, Barbara, and Guje Sevón,

2006 *Global ideas: how ideas, objects and practices travel in the global economy*. Oslo/Copenhagen: Liber/CBS Press.

Davis, John

1991 *Greening business, managing for sustainable development*. Cambridge, MA: Basic Blackell.

Deléage, Jean Paul

1991 *Histoire de l'écologie, une science de l'homme et de la nature*. Paris: Éditions La Découverte.

Deléage, Jean Paul

1993 'Les étapes de la prise de conscience. L'écologie planétaire ou la conscience politique' de M. Beaud and C., Bouguerra (eds.) *L'état de l'environnement dans le monde* 35-44. Paris: Éditions La Découverte.

Den Hond, Frank and Frank de Bakker,

2007 'Ideologically motivated activism: how activist groups influence corporate social change activities'. *Academy of management review*.

Driscoll, Cathy

1995 'Diversity, dialogue, and learning: the case of the forest round table on stainable development'. Ph.D. dissertation, Queen's University, Kingston.

Driscoll, Cathy

1996 'Fostering constructive conflict management in a multistakeholde context: the case of the forest roundtable on sustainable development'. *International journal of conflict management* 7/2: 156–172.

Driscoll, Cathy

2006 'The not so clear-cut nature of organizational legitimating mechanisms in the Canadian forest sector. ' *Business & society* 45/3: 322–353.

Drouin, Jean-Marc

1992 *L'écologie: généalogie d'une discipline*. In B. Ajchenbaum-Boffety (ed.). *La Terre outragée, les experts sont formels*. Paris: Les éditions Autrement.

Egri, Carolyn. P., and Larry Pinfield

1996 'Organizations and the biosphere: ecologies and environment, in S. R. Clegg, C. Hardy, & W. R. Nord, (eds.) ' in *Handbook of Organizations* 459-483. London: Sage Publications.

Engels, Friedrich

1971 *The condition of the working class in England*. Translated and edited by W. O. Henderson and W. H. Chaloner. Oxford: Blackwell.

Fischer, Kurt, and Johan Schot

1993 *Environmental strategies for industry: international perspectives on research needs and policy implications*. Washington DC: Island Press.

Flyvbjerg, Bent (1998) *Rationality and power: democracy in practice*. Chicago: University of Chicago Press.

Foldy, Erica Gabriell, and W.E. Douglas

1999 'Action learning, fragmentation and the interaction of single-, double-, and triple-loop change: a case of gay and lesbian workplace advocacy'. *The Journal of applied behavioral science* 35/2: 207-227.

Foster, David, and Jan Jonker

2005 'Stakeholder relationships: the dialogue of engagement'. *Corporate Governance* 5/5: 51-57.

Foucault, Michel

1989 *Power/Knowledge*, (ed C. Gordon). New York. Pantheon.

French, Hilary.F.

1995 'Partnership for the planet: an environmental agenda for the United Nations'. *Worldwatch Paper*: 126.

Government of Canada

2006 *Canada's national implementation plan under the stockholm convention on persistent organic pollutants*, Ottawa, Ontario, Canada, May. ISBN 0-662-42780-7.

Grant, John K

1991 'Sustainable development: where to from here?'. *Business Quarterly* 56/1: 54-58.

Gray, Barbara

1985 'Conditions facilitating inter-organizational collaboration'. *Human Relations* 38/10: 911-936.

Gray, Barbara

1989 *Collaborating: finding common ground for multiparty problems*. San Francisco: Jossey Bass.

Gray, Barbara, and Donna J. Wood

1991 'Collaborative alliances: moving from practice to theory'. *Journal of Applied Behavioral Science* 27/1: 3-22.

Grinder, R.Dale

1980 'The battle for clean air: the smoke problem in post-civil war America' in M.V. Melosi (ed.). *Pollution and reform in american cities, 1870-1930*: 83-103. Austin: University of Texas Press

Haas, Tanni

2004 'The public sphere as a sphere of publics: rethinking Habermas's theory of the public sphere'. *Journal of communication* 54/1: 178-185.

Halme, Minna.

1997 Environmental management paradigm shifts in business enterprises: organizational learning relating to recycling and forest management issues in two Finnish paper companies. Tampere: University of Tampere Press.

Hart, Stewart L.

1997 'Beyond greening: strategies for a sustainable world'. *Harvard Business Review* January-February: 66-76.

Hart, Stewart L.

1995 'A Natural-resource-based view of the firm'. *Academy of Management Review* 20/4: 986-1014.

Hawken, Paul

1993 'The ecology of commerce: a declaration of sustainability'. London: Harper Collins: chapter 3.

Hawken, Paul, Armory Lovins, and Hunter Lovins

1999 'Natural capitalism: the next industrial revolution'. London: Earthscan 2: 22-47.

Healey, Patsy

1997 Collaborative planning: shaping places in fragmented societies. Basingstoke: MacMillan.

Heugens, Pursey, Frank Van de Bosch, and Cees B.M. Van Riel

2002 'Stakeholder integration: building mutually enforcing relationships'. *Business & Society* 41/1: 36-60.

Hoffman, Andrew

1999 'Institutional evolution and change: environmentalism and the U.S. chemical industry'. *Academy of Management Journal* 42/4: 351-371.

Holcomb, John M.

1990 'Corporations begin to see green. How greens have grown'. *Business and Society Review* 75: 20-25.

Hood, Jacqueline N., Jeanne M. Logsdon, and Judith Kenner Thompson

1993 'Collaboration for social problem-solving: A process model'. *Business & Society* 32/ 1: 1-29.

Kelman, Steven

1992 'Adversary and cooperationist institutions for conflict resolution in public policymaking'. *Journal of Policy Analysis and Management* 11/2:178-206.

Kivisaari, S., and K. Lovio

1996 'Greening of management and technology studies: do we need reconceptualization?' in S. Kivisaari, & R. Lovio (eds.), *Bright Ideas? Environmental management in Finnish*

perspectives 11-26. Helsinki: Helsinki School of Economics and Business Administration.

Latour, Bruno

1991 *Nous n'avons jamais été modernes - Essai d'anthropologie symétrique*. Paris: La Découverte.

Latour, Bruno

1992 *Aramis, ou l'amour des techniques*. Paris: La Découverte.

Livesey, Sharon

2002 'The discourse of the middle ground'. *Management Communication Quarterly* 15/3: 313-349.

Logsdon, Jeanne M.

1991 'Interests and interdependence in the formation of social problem-solving collaborations'. *Journal of Applied Behavioral Science* 27/1: 23-37.

Long, Frederick J., and M.B. Arnold

1995 *The power of environmental partnerships*. Orlando: Harcourt Brace and Co.

Lovio, R., K. Rasanen, & S. Kivisaari

1997 'The greening of organization studies, the 13th EGOS colloquium: organizational responses to environmental changes'. Budapest, Hungary: held July 3-5.

Maguire, Steve and Cynthia Hardy

2006 'The emergence of new global institutions: a discursive perspective'. *Organization Studies* 27/1: 7-29.

Miles, Matthew B. and A. Michael Huberman

1994 *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks: Sage.

Newall, Ted J.E.

1991 'Managing environmental responsibility' in business quarterly special collection: *Business and the Environment* 7-10.

Newton, Tim J.

2002 'Creating the new ecological order? Elias and actor-network theory'. *Academy of Management Review* 27/4: 523-540.

Newton, Tim and George Harte

1997 'Green business: technicist kitch?'. *Journal of Management Studies* 34: 75-98.

Orsato, Renato J., and Stewart R. Clegg

2005 'Radical reformism: towards critical ecological modernization'. *Sustainable Development* 13: 253-267.

Orsato, Renato J., Frank den Hond, and Stewart R. Clegg

2002 'The political ecology of automobile recycling in Europe'. *Organization Studies Journal* 23/4: 639-665.

Pasquero, Jean

1991 'Supraorganizational collaboration: the Canadian environmental experiment'. *Journal of Applied Behavioral Science* 27/1: 38–64.

Phillips, Nelson, Thomas B. Lawrence, and Cynthia Hardy
2004 'Discourse and institutions'. *Academy of Management Review* 29/4: 635-652.

Phillips, Nelson, Thomas B. Lawrence, and Cynthia Hardy
2006 'Discussing 'discourse and institutions': a reply to Lok and Willmott'. *Academy of Management Review* 31/2: 480-483.

Poncelet, Eric C.
2001 'A kiss here and a kiss there : conflict and collaboraton in environmental partnerships'. *Environmental Management* 27/1: 13–25.

De Grove, John, Porter, Douglas R., and David A. Salvesen
1995 *Collaborative planning for wetlands and wildlife*. Washington, DC: Island Press.

Roome, Nigel, and Frank Wijen
2005 'Stakeholder power and organizational learning in corporate environmental management'. *Organization Studies* 27/2: 235-263.

Roome, Nigel J.
1998 'Conclusions: implications for management practice, education, and research' in N.J. Roome (ed.), *Sustainability Strategies for Industry* 259-276. Washington DC: Island Press.

Schmidheiny, Stephan
1992 *Changing course*. Cambridge, MA: MIT Press.

Shrivastava, Paul
1995 'Ecocentric management for a risk society'. *Academy of Management Review* 20/1: 118–137.

Skollerhorn, Erland
1998 'Habermas and nature: the theory of communicative action for studying environmental policy'. *Journal of Environmental Planning and Management* 45/5: 555-574.

Starik, Mark
1995 'Research on organizations and the natural environment: some paths we have traveled, the field ahead' in D. Collins and M. Starik (eds.), *Corporate Social Performance and Policy Supplement 1*, 1–42.

Starik, Mark and Gordon P. Rands
1995 'Weaving an integrated web: multilevel and multisystem perspectives of ecologically sustainable organizations'. *Academy of Management Review* 20/4: 908–935.

Stead, W.Edward and Jeanne Garner Stead
1992 *Management for a small planet: strategic decision making and the environment*. Newbury Park: Sage Publications.

Strauss, Anselm and Juliet Corbin

1990 *Basics of qualitative research. Grounded theory procedures and techniques*. Newbury Park: Sage Publications.

Suchman, Mark C

1995 'Managing legitimacy: Strategic and institutional approaches'. *Academy of Management Review* 20/3: 571–610.

Turcotte, Marie-France

1995 'Conflict and collaboration: the interfaces between environmental organizations and business firms', *Research in corporate social performance and policy*, supplement 1, 195-230.

Turcotte, Marie-France and Jean Pasquero

2001 'The paradox of multi-stakeholder collaborative roundtables'. *Journal of Applied Behavioral Sciences* 37/4: 447–464.

Turcotte, Marie-France and Christine Dancause

2002 'Apprentissage et actions: étude comparative de structures multipartites', *Revue canadienne des sciences de l'administration* 19/3: 217-230.

Velosi, Martin V.

1980 'Environmental crisis in the city: the relationship between industrialization and urban pollution' in Martin V. Melosi (ed.), *pollution and reform in american cities, 1870-1930*, 3-31. Austin: University of Texas Press.

Weinberg, A.

1972 'Science and trans-science'. *Minerva* 10: 209-222.

Wood, J. Donna, and G. Barbara

1991 'Toward a comprehensive theory of collaboration'. *Journal of Applied Behavioral Science* 27/2.

Yin, Robert K.

1994 *Case study research, design and methods*. 2nd edition. Thousand Oaks, CA: Sage Publications.