

# THE WAR OF THE WOODS: PROCESSES OF ORGANIZATIONAL LEARNING AND INSTITUTIONAL CHANGE

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## ABSTRACT (150)

Using a partially grounded theory approach, we examine multilevel learning processes over time at four British Columbia forest companies in response to significant changes in their environment. We identify a self-reinforcing 'legitimacy trap', where organizations respond with moral indignation and the escalation of normative commitment to an institutionalized practice when they are subjected to normative claims that they judge to be illegitimate. We then identify facilitators of and impediments to high quality adaptive exploratory learning, using the Crossan, Lane and White (1999) framework of organizational learning processes. We build on their framework to include 'normative confusion', which leads to unlearning and paves the way for future learning. We also examine processes of institutionalization at the field level, in addition to the processes of intuiting, interpreting, integrating and institutionalizing at the levels of individual, group and organization. We formalize our findings in propositions and offer suggestions for future research and practice.

## 1. INTRODUCTION

This research was motivated by a dramatic story. For years in British Columbia (BC) we had observed what came to be known as the "War of the Woods". Environmentalists protested logging practices, blockading roads and chaining themselves to logging equipment. Forest companies enlisted the government's support and had protesters arrested. Environmentalists told the world that BC's practice of clearcut<sup>2</sup> logging was the equivalent of forest rape, devastating the world's last remaining intact temperate rainforests. Forest companies staunchly defended clearcutting as the 'right way' to log. Forest companies portrayed environmentalists as deviant, lying, stinking zealots with no knowledge of the local situation. Environmentalists portrayed forest companies as 'rainforest ravagers', greedy corporate pigs, in bed with the government and concerned only with short-term profits.

At the centre of the controversy was MacMillan Bloedel (MB), the oldest and largest of the forest companies, with a long and proud history in the province. MB was the chief target of environmental protests, and also the chief defender of forest practice orthodoxy. From the mid-1980s until 1997, MB publicly defied environmental pressures, insisting that the company was in the right. The company spent considerable time and money in fruitless legal challenges, and bowed to pressures only when forced to do so by the government and

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<sup>2</sup> To clearcut is to cut all of the trees in a particular area.

its customers. In 1998, however, MB both shocked its organizational field and earned environmentalists' accolades when it announced it would completely phase out the practice of clearcut logging in favour of variable retention logging. MB subsequently led the field in environmental proactiveness, and pressured other companies to follow.

What happened here? How could a deeply entrenched organization suddenly change its stripes and convince the field to follow it? We saw this story as a case of organizational learning and institutional change, both involving adaptation to new pressures from the external environment. MB engaged in a process of strategic renewal, first defending, then challenging, and then re-assessing the external claims it initially considered illegitimate.

## **1.1 Theory Development**

In this paper, we build on the framework proposed by Crossan, White and Lane (1999) to further develop our understanding of facilitators of and impediments to internal organizational learning processes. We find evidence for a 'legitimacy trap', in which organizations become stuck in exploitation and escalation of normative commitment when they are challenged by claimants they see as illegitimate. We identify ways in which organizations can improve their learning processes to extract themselves from a legitimacy trap such as by consciously integrating alternative views into their sensemaking processes. We then expand the framework beyond organizational boundaries, tracing the processes through which (1) organizations actively reshape their internal norms in response to external pressures, and (2) participate as deliberate actors in shaping their institutional field. We now briefly sketch the theoretical foundation for this study.

Intuiting, interpreting, integrating and institutionalizing represent feed-forward processes of exploratory learning, according to the Crossan et al. framework. Ideas occur to individuals (Crossan, et al. 1999; Nonaka & Takeuchi, 1995; Simon, 1991), thus exploratory learning for strategic renewal begins at the individual level through intuition. Individuals interpret their ideas in their own context and integrate them with others in the organization at the group level. Learning and change then become institutionalized at the organizational level, through changes in organizational systems, practices, values, etc. Inversely, feedback processes occur where institutionalized learning impacts individual insight and interpretation. This is consistent with exploitation (March, 1991), which involves reducing variety through the use of routines and procedures, in contrast to exploration, which involves increasing variety by experimenting with new ideas and taking risks (Weick & Westley, 1996).

There is permanent tension between the feed-forward and feedback of learning; institutionalized learning impedes intuition and the assimilation of new learning (Crossan et al., 1999). To utilize both types of learning, organizations need institutionalized norms and procedures that can facilitate the emergence of new cycles of learning when their current routines fall out of sync with external environmental claims. This paper studies those processes of organizational learning that allow for the development of new institutionalized norms and procedures. Specifically, it examines how newly emerging external claims become legitimate, i.e. the processes through which organizational members notice, analyze, reframe, and develop shared agreement about external claims.

We refer throughout the paper to the organization's 'frame'. We use the term 'frames' to describe issue-specific knowledge structures that include taken-for-granted assumptions, norms of appropriateness, institutionalized beliefs in causal linkages, behavioural scripts, agreed upon concepts, etc. (Walsh, 1995). At the organizational level, frames are jointly created by organization members through sensemaking and enactment (Weick, 1995). The 'dominant' frame refers to the one held by those in power in an organization *on a particular issue*, in contrast to the 'dominant logic', which is more of a global construct (Bettis & Prahalad, 1995; Prahalad & Bettis, 1986). The two are very similar, however.

Frames, as cognitive repositories of institutions (Greenwood & Hinings, 1996), create strategic blindness among organization members (Ansoff, 1977; Starbuck & Hedberg, 1977; Walsh, 1995). Bettis and Prahalad (1995: 7) claimed that "organizational attention is focused only on data deemed relevant by the dominant logic. Other data are largely ignored". Similarly, other researchers suggest that new information is perceived or not perceived (White & Carlston, 1982), interpreted and enacted (Weick, 1995) according to how it fits with existing frames.

New external claims are often outside the dominant frame of an organization. When they do not fit the frame, they may be considered illegitimate, and threatening to the status quo, particularly since they usually must be relatively strong in order to overcome the organization's tendency not to notice them. Framing external issues as threats reinforces reliance on well-learned, dominant responses, and thus accentuates exploitation (Staw, Sanderlands & Dutton, 1981). It also reduces individual search for and use of external or peripheral information. Viewing external claims as illegitimate thus prevents organizational members from engaging in exploratory learning. Framing these claims as opportunities can promote exploratory learning (Jackson & Dutton, 1987; Dutton & Jackson, 1988), but may not be feasible when external claims are extremely negative, blame-casting, or distrusting of company's current values, priorities, or actions. Under such circumstances, organizations might be tempted to discard the claim and become locked into their institutionalized norms.

When new claims from the external environment are seen as illegitimate, organizational learning is merely exploitative, those new claims are ignored or defied, and opportunities may be overlooked. Conversely, when new claims are considered as legitimate, a new learning cycle is initiated and exploratory learning occurs, re-balancing innovation and efficiency. The organization can develop new solutions to address novel claims. When organizations ponder carefully the validity of the external claims, they are more likely to maintain a balance between exploitative and exploratory learning. In this paper, we address the steps through which external claims, initially seen as illegitimate, can become legitimate. Legitimizing claims from the environment stimulate organizations' strategic renewal over time.

The paper is structured as follows. We present the methodology in the next section. In the third section we analyze in depth the process of change that occurred at MB. We show why learning was problematic for the company, explore the factors that deepened its resistance and encouraged its persistence, and identify a 'legitimacy trap': when an organization is met with strong normative challenges that it considers illegitimate, the organization is likely to respond with moral indignation, 'normative commitment' and strengthened resistance to change. We then describe the processes by which MB gradually recognized the legitimacy of the external claims and how it overcame impediments to organizational

learning. Using the Crossan, et al. (1999) framework, we trace the seeds of learning at MB through their growth and development at the individual, group and organizational levels. We conclude this section with an identification of factors which facilitated organizational learning at MB, and offer formal propositions. In the fourth section, we compare learning processes of four firms operating in the BC coastal forest industry (MB, TimberWest, Interfor, and Canfor), discuss the successes and failures at intuiting, interpreting, integrating, and institutionalizing the new claims arising from their shared external environment, and explore implications for strategic organizational renewal. We propose that deliberate engagement in feed-forward learning processes, while taxing and treacherous at times, enables continued learning and adaptation to take place and enhances the capacity to sustain a fruitful, dynamic balance between exploitative and exploratory learning over the long term. We formalize our findings in propositions. Lastly, the paper discusses the interaction between organizational renewal and the promotion of new norms from the organization to the field level. We close with implications for further research and practice.

## **2. METHODOLOGY**

The study was conducted using a partially grounded theory approach with longitudinal case studies. Starting with a casual understanding of the story developed from press coverage and a very general question (how did such dramatic change occur?), four companies were identified as part of the sample. These four had all considered the change in question, yet each chose a different path – the first one (MB) articulated a novel template in response to external claims. The second, TimberWest, adopted the template pragmatically, with little resistance and little adaptation of its pre-existing dominant frame. The third, Interfor, adopted the template in the press, but was criticized for its lack of implementation on the ground. The final company, Canfor, did not adopt the new template, continuing instead its own history of environmental proaction by focusing on an alternative solution.

### **2.1 Data**

With each of the four companies, interviews were conducted with key personnel at the organizational and at the field level. Annual reports, environmental reports, and internal documents were collected and analyzed, and newspaper articles were reviewed. For MB, two former executives/managers who left the company just before its change in leadership in 1997 were also interviewed, with the expectation that they might better reflect the dominant paradigm of MB managers prior to the company's turnaround. To capture additional historical flavour without the biases inherent in retrospective sensemaking, we examined interviews conducted with Canfor and MB key personal in 1996. All the interviews were semi-structured and averaged approximately 1½ hours each. They were tape recorded and subsequently transcribed. For the time period January 1995 to October 2000, all newspaper articles dealing with coastal forestry in British Columbia that had appeared in the Vancouver Sun, the province's primary newspaper covering business issues, were analyzed. In addition, a database of news coverage on forestry and environmental issues from several Canadian and US newspapers, prepared by W.T. Stanbury of UBC and spanning the period from late 1980s until 2001, was extensively

consulted,<sup>3</sup> as were selected academic books and articles. In addition to interviews with key corporate members at different points in time and media coverage, we conducted interviews with environmentalists and government employees, the most relevant stakeholders for the external claims discussed. A series of public conferences, workshops, presentations, annual general meetings and a protest trip to a land use planning process were attended. Extended non-intrusive notes from these sessions were subsequently transcribed and analyzed. Table 1 summarizes the types of data sources used for each company and for the field as a whole.

**Table 1: Data Sources**

<b>Data Type</b>	<b>Company Level</b>	<b>Field Level</b>
<b>Interviews</b>	MacMillan Bloedel: <b>25</b> (3 in 1996, 22 in 1999-2000); TimberWest: <b>11</b> ; Interfor: <b>5</b> ; Canfor: <b>9</b> (6 in 1996, 3 in 2000); Field notes.	Other Stakeholders: Provincial government: <b>3</b> ; Environmental NGOs: <b>8</b> ; Field notes.
<b>Press</b>	Media releases.	Over 3500 news articles from the <i>Vancouver Sun</i> (1995-2000); the Stanbury databases (1987-2000)
<b>Archival Data</b>	Newsletters, annual reports, environmental reports, websites, videos, speeches.	Stakeholder websites, newsletters and documents; academic books and articles.
<b>Public Events</b>	Conferences, workshops, presentations, annual general meeting; field notes.	Conferences, workshops, presentations, protest trip; field notes.

## 2.2 Analysis

During the data collection, the researchers engaged in sensemaking with the data, constructing alternative background scenarios, and beginning to explore recurring themes. Following completion of the data collection, chronological stories were constructed for each of the four companies, and for the field as a whole, triangulating multiple sources and types of data. Overall, we relied more heavily on interview data for internal company stories, and on the press coverage and other accounts for the construction of the field story.

**2.2.1 Thematic Interview Analyses.** Using the program NUD\*ist, we reviewed each interview and the transcripts for public speeches to both identify new themes, and to code sections of the interview text to already identified themes. Each document was reviewed at least twice: first in the theme generation phase, and a second time after all interviews had been reviewed and all themes generated. At this point, themes were compared against each other, then considered as a whole and reiteratively reduced to more abstract categories.

## 3. ILLEGITIMACY AND EXPLOITATIVE LEARNING: RESISTING CHANGE

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<sup>3</sup> We are very appreciative of Bill Stanbury's willingness to allow the use of his carefully constructed database in this research.

### 3.1. Why Environmental Claims Were 'Illegitimate'

MacMillan Bloedel (MB) was one of the oldest and most respected companies in British Columbia (BC), founded in the early 1900s. H.R. McMillan, the charismatic founder and long time CEO of MB, had previously founded BC's Forest Service, becoming its first Chief Forester. MB was the first company to begin an intensive silvicultural program and it advocated sustainable forestry before the term was invented. As the largest company in BC's largest industry (accounting for approximately 50% of the province's exports), MB carried significant weight in the province with the government, the public, and other members of the industry. As illustrated by the following quotations from interviews, MB employees and managers had a strong sense of the status of their company as an integral part of the province's economy and of its legitimacy as a solid environmental citizen<sup>4</sup>.

*"In the past, we've always prided ourselves, at least when I first started working with MB, we thought of ourselves as leaders in the industry in silviculture and forest management. We were doing the best job, we were doing it better than the government and so forth."* (MB Environmental Employee).

*"The prevailing thought in the company around the Meares and Carmanah episodes was that we had the legal rights to tenure<sup>5</sup> and any diminishment of those rights had to be contestable. Any diminishment of timber-driven economics for the sake of non-timber values<sup>6</sup> or assets was against the interest of the people in B.C. because of the diminishing ability to create wealth...What paid for the infrastructure that people (in BC) now enjoy was probably the forests to a large degree... That's where the money came from. That's not a bad thing."* (MB Logging Manager).

*"People like me who are hostile to the greens, that does not mean we are not environmentalists. The foresters that H.R. MacMillan hired in the 1930s, they were the first environmentalists."* (Former MB Executive).

And yet, when MB's managers faced external pressures from environmentalists to cease clearcutting in BC's coastal forests, their claims were considered illegitimate. These perceptions had changed by the time the majority of interviews were conducted in 1999. However, the rhetoric used in earlier interviews, in statements to the press, and within the industry, was potent. Environmentalists were portrayed as upper middle class, over-privileged university dropouts or unemployed welfare bums. They dressed funny, smelled bad, and had a penchant for living in trees for days on end. They were derisively called tree-huggers, barefoot cave-dwellers by the river, eco-extremists, eco-terrorists, bio-eccentrics, idealist kids from Germany and New York, and cappuccino-sucking, concrete-condo-dwelling, granola-eating city slickers.<sup>7</sup>

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<sup>4</sup> MB's compliance record was somewhat better than the industry average.

<sup>5</sup> Tenure is the term given to a long term timber license granted to a company.

<sup>6</sup> Non-timber values describe non-logging interests in the forest (such as recreation, salmon spawning grounds, wildlife habitat, biodiversity, or aesthetics).

<sup>7</sup> This phrase first appeared at a pro-logging rally in Victoria (*Vancouver Sun*, March 22, 1994, A1-2). BC urbanites were much more likely to support the environmental movement than were residents of smaller, forest-dependent communities.

The validity of the environmental claims was also doubted. Environmentalists were portrayed as liars, as these quotes from two former MB executives suggest:

*“We always felt that the environmentalists didn’t need to have truth on their side, just like the unions. They could raise a big enough stink that it didn’t matter that they didn’t have the facts all right.”* (Former MB Executive)

*“I don’t know whether they lied or they did far worse, what Tennyson called “delivering half truths”, which are very difficult to refute, particularly if you have virtue or seeming virtue on your side.”* (Former MB Executive)

The attacks came from sources considered by MB to be illegitimate, and appealed to values and ways of thinking that had little meaning in the MB culture. In fact, some claims were nearly incomprehensible to MB managers.

*“I remember this incredible passage in MacLean’s where she [environmental leader Elizabeth May] held a crystal to her breast and said she had a vision of South Moresby as a park, and the day after that the band [Haida natives] agreed that it should be a park.”* (MB Executive, shaking his head).

The same executive described a woman who blocked logging operations because she heard the cedar trees singing. *“Singing cedars...”,* he said incredulously. *“Now what am I supposed to do with that?”*

Many of the attacks focused on the practice of clearcut logging. However, as a forester explained: *“You are looking at a generation of foresters and we are trained to maximize growth and yield, and the Holy Grail was to get rid of that cumbersome old growth forest that wasn’t growing anymore, wasn’t optimizing revenue.”*

### **3.2. Escalating Normative Commitment to Prior Practices and The Legitimacy Trap**

Clearcutting was forest science's recognized way to maximize the growth and yield of the forests over the long term. The government mandated clearcutting via legislation, and the industry and profession supported this practice. That was *“the way it’s supposed to be”*. As a technology, we would expect clearcutting to be a cognitive institution because it was ‘orthodox’ within the field, a ‘scripted’ practice that was ‘conceptually correct’ (Scott, 1995). However, it became more than cognitive when its normative legitimacy was challenged by ‘illegitimate’ voices. Clearcutting came to symbolize the expertise of professional foresters. If the forestry experts deemed it to be a best practice, who were the environmentalists to claim that it was wrong? The cognitive institution developed into normative commitment, and was vigorously defended in open defiance (especially through lawsuits), attempts to avoid consultative processes, public relations initiatives, and only token compliance with requests from the government to compromise with environmentalists.

The emotional tenor surrounding the normative commitment was as strong as it was striking. Initial reactions to challenges could be characterized as moral indignation, and defense of the company's own virtue. The rhetoric was vituperative on both sides. The media began calling the conflict 'the war of the woods'. It seemed like a 'holy war': both sides claimed truth, and both claimed to be righteous David fighting evil Goliath. At the MB head office, managers later joked that they would have been fired if they said the name of the enemy in the boardroom.

*"Our inclination was to fight. Managers and board members were aloof but open-minded. Logging managers and those on the pulp and paper side wanted to fight. They took the position that we were doing better than anyone else in the world, and that we didn't do anything wrong. And we didn't do anything wrong."* (Former MB Executive).

An industry member commented on attitudes at MB: *"They have the perspective 'we are the biggest and the mightiest and we don't need to be told what to do and we do not need to bow to this kind of pressure.'"*

As environmentalists' arguments gained more credibility with the public, pressure on MB to change was endorsed by more legitimate voices. The provincial government, traditionally a major player in the dominant power structure in the organizational field, began legislating change, first in limited areas, and then more broadly. MB's customers, targeted by environmentalists' smear campaigns, pressured MB to change its position. Even with these powerful stakeholders pushing for change, MB's now very public normative commitment to the practice of clearcutting made it more difficult for the company to change its position in the future. Emotionally, agreeing to diminish the company's reliance on clearcutting was like an admission of guilt or a symbol of submission and defeat – as 'caving in' to environmentalist pressures. It was now viewed as a denial of MB's normative legitimacy (Suchman, 1995). Organization members had taken pride in this normative commitment. Executives clung tightly to it. This normative commitment became a very strong constraint to learning new ways:

*"We really believed we were doing the right thing, and now we had to acquiesce. [The Chairman of the Board] didn't want to do this or admit that we were wrong -- and we weren't wrong."* (Former MB Executive).

*"It's contentious. You are challenging people's basic assumption about who they are and what they are doing. It's painful. There are huge issues around appearing to give in to pressure on issues."* (MB Executive).

Even after MB had to acquiesce in limited ways to pressures from government and customers, MB's CEO and senior executives continued to maintain that clearcutting was the right way to log. This normative commitment to clearcutting endured until 1997, when a new CEO, Tom Stephens, was appointed. Environmentalists' claims continued to be framed as illegitimate, and MB clung emotionally to its previously institutionalized norms.

A former executive suggested that the dominant view prior to 1997 was that MB was winning the war: *"The environmentalists didn't have as negative an effect as people would imagine. The pressures became less."* Changes in practices that were made to meet new



government demands (when absolutely unavoidable) were considered to be isolated concessions, and framed as necessary sacrifices to ensure business as usual in the rest of the forest: *“We were allowed to continue with our solid wood business elsewhere because we sacrificed Clayoquot.”*

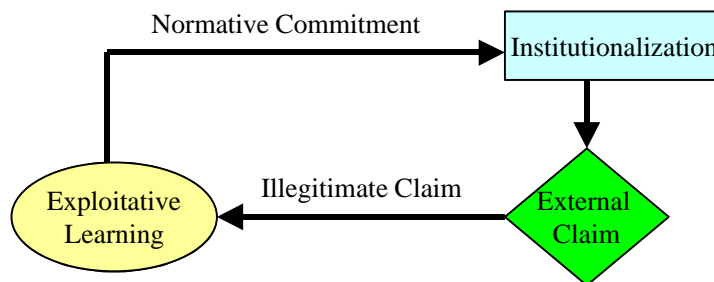
In summary, we observe several processes and outcomes during this phase of resistance. First, the challenge of a cognitive institution by a group that MB perceived to be illegitimate had the effect of converting that institution into a strongly held normative one, and stimulated moral indignation among MB managers. This was followed by a very public defense of the practice, which then made change even more difficult: admitting the legitimacy of environmental claims would have been seen as equivalent to admitting guilt or surrendering to the enemy.

Previous literature on organizational learning has identified a competency trap (Levitt & March, 1988; Leventhal & March, 1993; March 2001), in which organizations overemphasize exploitation because prior “successful experience leads to more experience, which leads to greater competence, which leads to more success, and so on” (March, 2001: 66). Organizations that overemphasize exploitation often fail to adapt to changes in their environment. They either do not see those changes at all (Prahalad & Bettis, 1986; Starbuck & Hedberg, 1977), or view them as transient (Starbuck & Hedberg, 1977).

MB was caught in a different trap. While it continued to respond to new challenges in its usual way, normative commitment acted as an additional contributor to MB’s overemphasis on exploitation. The firm refused to acknowledge that environmentalists’ claims signaled the need for a legitimate change. Instead, MB persisted, and defended the legitimacy of its institutionalized practices vigorously (including spending vast sums of money on lawsuits the firm was advised it could not win and on PR initiatives that measurably hurt its image with the public).

We argue here that such a *‘legitimacy trap’* (Figure 1) is likely to be even more resistant to exploratory learning and change than the competency trap, for two reasons: one, because of the personal emotions involved, and two, because of the public nature of the contest for legitimacy which resulted from the defense of old practices. We derive the following propositions:

**Figure 1: The Legitimacy Trap**



**Proposition 1:** *When a cognitive institution in an organization that perceives itself to be legitimate is challenged by a group that is considered illegitimate by that organization, the institution will acquire normative value. Instead of assessing the claim on its merits, the organization responds with moral indignation and normative commitment. The resulting resistance to change is called a legitimacy trap.*

**Proposition 2:** *The legitimacy trap is self-reinforcing over time. The more an institutionalized practice is publicly defended, the more resistant the organization becomes to change.*

Legitimacy traps are not inescapable, however. MB, quite dramatically, broke out of the loop. How did they do it? Crossan et al. (1999) suggest that learning processes take place continuously at the individual level, even when they might appear discontinuous at the organizational level. Although at the organizational level, MB appeared not to be effectively adapting to changes in its environment, learning *did* occur at individual and group levels in the organization. In the next section, we explore the seeds of learning developing prior to 1997 at MB, and how these seeds eventually enabled second order change at MB in 1998.

#### **4. THE SEEDS OF CHANGE: INITIATING EXPLORATORY LEARNING**

At the organizational level, MB had to absorb and address new ideas and perceptions from the field in which it was embedded in order to learn how to effectively respond to its detractors. Pressure was strong for MB to overcome its past, find ways to learn from the changes in its environment and act in novel ways. Through processes of intuiting, interpreting, integrating, and institutionalizing, MB began converting environmental information into novel organizational action. The eventual result was radical and revolutionary change at the organizational level (Greenwood & Hinings, 1996). It is important to note that processes of intuiting, interpreting and integrating were occurring simultaneously within various parts of the organization and at various points in time. These processes often overlapped and, interestingly, different groups came to similar conclusions following different paths.

##### **4.1 Intuition and Interpretation**

It was Tom Stephens who initiated a phase of deep changes when he became MB's new CEO in 1997. However, environmental learning had been under way before Stephens' arrival. MB's change process had progressed slowly, originating from isolated areas of the company in the late 1980s. Some of the people who dealt directly with the pressures began to see and think about clearcutting differently than the dominant company frame. Intuition and interpretation occurred mostly at the individual level of analysis, and provided the ideas for later integration and institutionalization (Crossan et al., 1999).

Initially, the responsibility for dealing with environmental pressures fell solely on the logging managers in contested areas. Logging managers and public relations officials acted as boundary spanners absorbing environmental uncertainty (Thompson, 1967). Weick (1995), citing work by Nemeth (1986), suggests that people exposed to strong, consistent minority positions start to privately wonder "how could someone be so wrong and yet so

certain of his or her position?" (Weick, 1995: 141). Private reflection stimulates thinking that, in turn, stimulates greater consideration of alternatives. Resulting interpretations need not focus on the explicit message of the minority, but often remain relevant to it. Organizational members in direct contact with environmentalists could be expected to diverge privately from MB's dominant frame – yet this contact was limited to a small number of individuals, most of whom were isolated from the head office.

Logging operations managers recall questioning the practice of clearcutting early on. For example, when Haida First Nations initiated protests in the remote Queen Charlotte islands, one manager recalls being appalled at the television coverage of the protests because the protesters were people he knew and liked:

*"In my own mind, the arguments, the standard, solid academic and economic arguments about wealth creation, were simply not winning. I started to get the impression at the time that we were not going to justify progressive clearcutting on the basis of wealth creation."*

'Relational ties' with promoters of alternate views thus appeared to influence the intuition and interpretation of individual members of the organization.

Initially, MB's head office was buffered from any learning that took place in the field. Later, as pressures began to come from the government, customers and communities, corporate public relations personnel became involved (though at a first line and middle manager level, not at senior levels). Prior to this time, MB senior managers/executives were not directly involved with environmentalists except when the latter protested at board meetings. Once avenues of *direct exposure* (frontline logging managers, public relations and environmental affairs) were opened, the incidents of intuition multiplied.

As the government and customers became more active in pressuring MB for change, and as public relations staff became involved and were subject to more direct exposure to alternative views, they, too, began to question the status quo:

*"One thing we haven't been as effective at is getting the company to recognize where the value system of the public has moved to and getting the company to move. We don't have to cave in to extremists, but we need to stay in sync with public values."* (MB Frontline PR Staffer<sup>8</sup>)

The hiring of Linda Coady as Director of Public Affairs in 1993, coincided with an escalation of pressures from stakeholders perceived to be more legitimate by MB executives: government and customers. MB customers in Europe and the US were targeted by environmental groups with the demand that they publicly cancel contracts with MB, or face smear campaigns. 1993 was also the year of the 'Clayoquot Summer': Clayoquot Sound became an international icon and a flashpoint for the conflict between loggers and environmentalists, attracting celebrities and protestors from Europe, the US, and elsewhere. Over 700 people were arrested that summer for blockading logging roads. It was an international embarrassment for both the company and the government.

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<sup>8</sup> Alan Stubbs, MB Journal, 14(9), September 1994.

The BC government, which had changed in 1991 to one more aligned with green interests, stepped up initiatives in land preservation and new forest practices legislation. Coady's initial appointment in public affairs was probably related to her political connections with the new government. She quickly identified that MB lacked a 'green voice', however, and with her promotion to VP, Environmental Affairs, she became that voice. Coady was an 'unconstrained actor' (Cliff, 2000). Cognitively, she had not been steeped in the norms of the field, and thus she was able to see things that others, blinded by the cognitive constraints of field- and organization-level institutions, could not see. Normatively, she was unaffected by MB's commitment to clearcutting: she had not been clearcutting for years and listening to the environmentalists did not imply that she personally accepted blame for past actions. Furthermore, for Coady, environmental claims were legitimate and her perception of legitimacy was increased by her direct exposure and her relational ties to environmental activists. One example is Coady and Adrienne Carr of the Western Canada Wilderness Committee becoming friends, despite being on opposing sides. Another is that Coady and Greenpeace campaigner Karen Mahon both had babies about the same time and lived in the same neighbourhood: 'stroller diplomacy' ensued.

When we asked different organization members to tell us who was most influential in bringing about changes at MB, invariably, two people were mentioned. One (VP and Chief Forester Bill Cafferata) was described as being particularly reflective, well read, and able to have a conversation with just about anyone. He had, on his own initiative, read a number of books on ecology and biodiversity. The other (Coady) was described as someone who could 'think outside the box', and who had strong relational ties with environmentalists, government and other stakeholders. Thus, both Cafferata and Coady *actively sought and integrated divergent viewpoints* from outside organizational boundaries.

To summarize, both situation and person variables influenced intuition and interpretation. First, organization members' were more likely to perceive other views without immediately dismissing them when they had direct exposure to people with other viewpoints, especially when they had relational ties to them. Second, individuals who actively sought and attempted to integrate divergent views were also more likely to engage in the exploratory learning processes of intuition and interpretation. Third, unconstrained actors are better able to perceive divergent views.

***Proposition 3:*** *Exploratory learning processes of intuition and interpretation are facilitated when individuals have direct exposure, relational ties, or both to people with other viewpoints.*

***Proposition 4:*** *Individuals who are unconstrained by the organization's dominant frame and those who actively seek divergent views are more apt to engage in intuition and interpretation.*

## **4.2. Normative Confusion and Unlearning**

While Coady, Cafferata, and some public relations and operations staff noted, expressed, and acted on their doubts about the company's official position on clearcutting and environmental issues, there were many others in the organization that were deeply confused about it. Many forest workers saw protesters every day at the blockades. Many

lived in communities that had turned against MB, and they heard criticisms of MB's logging practices from their neighbours. Their children were occasionally harassed at school. Senior managers were telling them that what they were doing was okay, but they were beginning to doubt it in light of the very public challenges to MB's legitimacy. Individual employees were not immune to the multiplicity of influences outside the firm, bringing 'normative fragmentation' (Oliver, 1992) into the organization. Even more than fragmentation, 'normative confusion' appeared to grow at MB: workers no longer fully accepted the company's frame, but they could not accept the environmentalists' frame either. And no integrative position was available for them to adopt.

Normative confusion is not addressed as part of the organizational learning processes described by Crossan, et al. (1999). It was, however, very important at MB. As workers no longer knew what to believe, they were 'unlearning' the dominant paradigm. Learning theorists have described unlearning as an essential part of organizational transformation (e.g., Starbuck & Hedberg, 1977; Prahalad & Bettis, 1986; Bettis & Prahalad, 1995). At MB, however, there were no available replacements for the prior dominant frame: (the environmentalists' claim was unacceptable, because it threatened the very foundation on which the organization operated. Employees' inability to make sense of a situation can be paralyzing, as Weick (1993) has aptly demonstrated, and the growing institutional vacuum at MB generated a ripe ground for a new frame. Neither the institutionalized, nor the environmentalist norms provided any viable alternatives. This normative confusion increased interpretation efforts at the individual level and a heightened willingness to adopt a new frame at the group level. Normative confusion may have thus set the stage for faster integration and institutionalization of a new normative framework.

***Proposition 5:** Exposure to multiple, conflicting influences will create normative confusion among organization members. This confusion can contribute to the unlearning of the dominant frame and stimulate greater willingness to adopt new norms. However, prolonged normative confusion in the absence of viable alternative norms can be paralyzing or de-motivating for organizational members.*

Bettis and Prahalad (1995:10) suggested that "both learning and unlearning in the case of strategic change involving the necessity to change dominant logic is likely to occur in discontinuous bursts". They also relate the amount of learning in a particular period to the amount of unlearning in the prior period. In MB's case, both learning and unlearning took place gradually, dispersed in various parts of the organization. However, it was only with the application of power through official endorsement that a new norm could be developed and that new processes of learning became broadly acknowledged and institutionalized.

## **4.2 From Interpretation to Integration**

At MB, the earliest integration happened in forestry operations. Several small experiments in partial cutting in response to community pressures took place in areas where intuiting managers had sufficient *autonomy* to act on their individual interpretations. For example, on Galiano Island, where clearcutting was met with significant opposition by community members, managers opened a process of community consultation. As a result, clearcut logging was adapted to partial cutting, retaining the overall look of the forest.

These experiments were initiated by small groups. These groups were criticized by those organizational members that were still normatively committed to prior norms. The new approaches were welcomed, however, by outside groups that espoused the alternate values:

*“We took a lot of flack from our professional colleagues... But what we didn’t take a lot of flack from was our neighbours...It was a turning point, because the criticisms [were] that you were not maximizing growth and yield... They were very solid arguments, if you did not value what people wanted. The only thing was, we did it, and nobody sat in the road, nobody wrote nasty letters to the newspaper, and nobody complained to our customers.” (MB Executive)*

Despite the fact that these experiments were neither long-lasting nor accepted by colleagues or superiors, they did become part of the organization's behavioural repertoire, or the 'genetic code' of the organization, as one interviewee described it. These early experiences laid the framework for later alternative responses.

Experiments also took place in the stakeholder sphere. Negotiations began with the environmentalists over Clayoquot Sound, initially covertly, but later with the knowledge and acceptance of MB executives. A former executive explained the outcome:

*“[Coady] showed us we had to give it up, slowly and surely. She had trouble with some of the board members who wanted to fight rather than roll over and give up. The government didn’t want us to give up either. We drew a fence around Clayoquot, which was about 10% of the annual harvest, and decided to give it up to the environmentalists and join with them to look at sustainable forestry there.” (Former MB Executive)*

While senior executives interpreted these experiments as isolated responses to isolated pressures, still clinging to the dominant frame, those directly involved saw them as the beginning of a growing understanding and sophistication on environmental issues (and the emergence of new norms in response to new pressures).

*“We were able to convince our colleagues that we had to have a few spots in our company where we were doing something different. The emphasis at that point was we can do this here, but God help you if it spills over there because the cost would be prohibitive. So we started a few discrete projects, and of course, inevitably the projects became bones of contention within the company because they were so different from the whole structure of volume-based industrial logging. So we started to painfully hack away at that within ourselves. We were a house-divided on that... Where people have not been exposed to it, there is not a great deal of sensitivity...Most of the environmental things they are looking at are still quite ghetto-ized and extraneous.” (MB Executive in 1996.)*

In all these experiments, integration of learning occurred if the individuals who espoused alternate views had either the *autonomy to act* or the *endorsement of someone in power*. In contrast, broad integration was constrained by the deliberate *isolation of exploratory learning* from mainstream operations. We conclude that the institutionalization of learning

cannot occur unless fuller integration is encouraged and supported from within the organization.

***Proposition 6:*** *Integration of exploratory learning will take place only when there is autonomy to act or the endorsement of someone in power. Integration of exploratory learning will be impeded by isolating the learning from other parts of the organization.*

### **4.3 From Integration to Institutionalization of the Firm**

For MB, the ‘isolation constraint’ remained in place until the power shifted through leadership succession. When Stephens became CEO in 1997, through the action of institutional investors,<sup>9</sup> he quickly set three goals for the company: 1) to be the safest forest company, 2) to be the most respected forest company, and 3) to be outrageously successful. To further the second goal, Stephens appointed Bill Cafferata, Chief Forester, to head a cross-functional team *to find a new way* to do forestry that would help the company preserve its social license to operate.

The Forest Project team included Coady, a senior logging manager, a conservation biologist, a forest ecologist, and a strategist. Internal and external consultants were engaged to build financial, ecological and social models, and to collect data. Because the task for this group was to find a way for the company to adapt to its external environment, the representation of stakeholder interests was a very critical determinant of the ‘quality’ of learning that took place. Lack of attention to changes in public values had created MB’s problems to begin with. Oldfield (2001), in the context of risk assessment, suggested that managers miss critical risks if they do not attempt to understand and codify tacit stakeholder perceptions of risk. The codification of stakeholder perceptions at MB was a very sophisticated process: researchers conducted focus groups to surface tacit stakeholder perceptions, and these were included in formal models, complete with sensitivity analysis.

External stakeholder consultation processes dealing with the same issues (typically run by the government) had generally been unsuccessful in identifying any solutions. These groups engaged in strategic behaviours, refused to compromise, and often walked out. Incompatible value systems among stakeholders had created ‘institutional gridlock’, a situation in which interdependencies and competition among the value systems of field members makes it difficult or impossible to negotiate a palatable solution to a field level problem.

Even within MB’s Forest Project, the conflict was legendary – at times, it appeared as if the group would explode, and two members almost came to blows. The different members of the Forest Project aligned naturally with different stakeholder interests or issues externally and internally, each espousing the views of one or more groups through their own intuition and interpretation processes facilitated by direct exposure and relational ties. Thus the full range of forestry conflict was internalized within the group.

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<sup>9</sup> Stephens was hired because of MB’s poor financial performance, not its social performance. However, it may be that MB’s deliberate isolation of exploratory learning and adherence to its old dominant frame in the social setting was symptomatic of the company’s failure to learn more generally.

For example, Coady represented the interests of environmentalists – she knew these interests well because she had to deal with their concerns regularly. The logging operations executive had internalized the views of shareholders for profitability as well as the concerns of forest workers about long term jobs, the viability of their communities, and the safety of new logging practices. The forest ecologist and conservation biologist had internalized the needs of the trees and forest ecosystems, of wildlife and plant species. Integration occurred, at the group level, via formalized models, which explicitly recognized the diversity of perspectives and the tradeoffs among them. Through development of these models within the group, tacit assumptions and understandings were surfaced. Each member confronted and dealt with varied points of view. Joint sensemaking took place. Because the newly created group was held together by a common identification with the company and a shared goal to come to some kind of an integrative solution to save their company, they were able to work through the conflict to a truly integrative solution.

While Crossan et al.'s framework focuses on processes of organizational learning leading to strategic renewal, the *'quality'* of the learning is not considered. In our study, the quality of organizational learning was related to attempts by organization members to actively understand and incorporate divergent stakeholder views into their interpretive frame. At MB, deliberate efforts to understand alternate views stimulated intuition of new perspectives and adjusted interpretations. Institutional theory would suggest that an existing solution or template from the organizational field would be adopted in such a situation (Greenwood & Hinings, 1996). However, since a ready-made solution did not exist for adoption within MB's institutional environment, team members had to negotiate their own template in-house. Previously fragmented learning by members in their diverse areas was reinterpreted and integrated in an intensive process. This approach substantially increased the acceptability of the final solution to stakeholders, and thus the quality of the learning.

The solution the team developed was called variable retention, and it was superior to any other that had been developed in the field. It involved the complete cessation of clearcut logging over a five-year phase-in period. It was a winning solution ecologically, socially and economically. The team presented variable retention to the CEO and the Board of Directors, who responded with a standing ovation. This *official endorsement at the organizational level* went a long way toward facilitating institutionalization of the solution in the firm. When we asked a manager if there was resistance to variable retention within the organization, he answered, "*After the board gave it a standing ovation? You'd have to be nuts [to resist].*"

Once integration was successfully completed, institutionalization of the new norm and development of new standards, practices and approaches for addressing environmental issues on an ongoing basis was fast and painless. Variable retention soon became policy, and was announced by Stephens to the press and various stakeholder groups. Organizational support designed to institutionalize variable retention was put in place almost immediately: benefits of the solution were communicated to employees, operating and safety training was provided, an annual review program including external stakeholder assessment was initiated, and reward systems were adjusted. Successful trials were communicated to employees as they took place.



The institutionalization of variable retention was facilitated by the official endorsement and the persuasion by a charismatic leader and trials with positive outcomes. It was accomplished through training and enculturation, reward system adjustments. In addition, adoption was made easier by a) the unlearning that had taken place among the ranks through the prior period of normative confusion, b) the additional unlearning that was part of the entire organization's transformation, and c) the positive response to the solution that was received from external stakeholders including environmental groups, customers, the government and the public. The latter was further strengthened by the element of surprise of MB's change of heart and the thorough planning of the implementation of the new approach. From board members to forest workers, MB organization members commented on the ability to again be proud of their organization, after years of public shame.

***Proposition 7:*** *Institutionalization of exploratory learning is facilitated internally by official endorsement, persuasion by a charismatic leader and trials with positive outcomes.*

In the longer term, the variable retention victory proved bittersweet for MB, however. While environmental groups refrained from targeting MB specifically after the announcement was made, they began targeting the entire BC coastal forest industry, of which MB continued to be a part. From the new standpoint offered by their learning process, and using the new norms, MB executives became convinced that, unless solutions came at the level of the organizational field, they were not sustainable. Thus, they began to actively work towards a common institutional solution within the field.

#### **4.4 From Institutionalization in the Firm to Institutionalization in the Field**

During the period that MB was the principal target for environmental pressures, other BC forest companies encouraged MB to keep fighting. Not surprisingly, the response of these companies to MB's announcement of variable retention was mostly negative. The Forest Alliance, an industry association previously supported by MB, openly condemned the move.

Once the target of the environmental groups broadened to include the whole industry, however, other firms began to take notice of variable retention as a potential *solution to a common problem*. The positive press that MB received enhanced the attractiveness of the solution. MB also attempted to *actively persuade* other organizations to follow suit, by making the common nature of the problem salient and their solution accessible. By freely offering its data and analysis to other firms, MB made the solution easier for them to adopt. Two firms announced the adoption of variable retention in 1999.

TimberWest had not experienced significant environmental pressure until 1997, and thus had not been in a position of defending clearcutting for a long time. In 1997, TimberWest became a target for environmental pressure from communities, the tourism industry, its own employees and environmental groups on its private lands with the possible result that these lands would face significantly increased legislation. The company effectively had a scanning mechanism in the form of community liaison workers with relational ties in communities, who reported to the Chief Forester; thus, the company had direct exposure to alternate views. The criticism also came from sources considered more legitimate than environmentalists (communities, employees and the tourism industry). Furthermore, it was

acknowledged by TimberWest to be valid: in a cash crunch in 1998, TimberWest had deliberately overcut its forest resources to forestall a crisis. The cash targets had been met, and TimberWest could now return to its socially responsible roots. The adoption of variable retention was seen as a way for TimberWest to signal its environmental responsibility to stakeholders and thus avoid the application of the restrictive Forest Practices Code to its operations. Because the company was not caught in a legitimacy trap, it could pragmatically adopt variable retention *without the unlearning* that had been necessary at MB. In fact, TimberWest billed the change not as revolutionary, but as a natural and convergent evolution from its own experiments in partial cutting in the early 1990s. Because MB had validated variable retention as a solution with some success, TimberWest used MB's data and the components of its program to adopt the solution in full. The decision to adopt variable retention was made by the management committee and *endorsed by the CEO and the Board of Directors*. Because the change was seen as convergent, there was *no need for unlearning, charismatic leadership, or enculturation*. Training and reward system adjustment did take place.

TimberWest's experience strengthens the argument for an impeding effect of the legitimacy trap on exploratory learning. Because it did not exist here, the change happened with much less effort and required much less sophistication in implementation. TimberWest did benefit from *seeking divergent views*, and having *direct exposure* to those viewpoints via *relational ties*. Interestingly, though, TimberWest did not interpret issues with the same depth and comprehensiveness that MB did. TimberWest listened to its community and tourism industry stakeholders, and as a result, interpreted the clearcutting issue primarily as an aesthetic issue. Environmentalists were still seen as the enemy and ecological values were not internalized. While we might expect MB to continue with exploratory learning in the environmental area (and it did), TimberWest would not be expected to continue due to its limited interpretation of the issues as aesthetic, and its pragmatic adoption. TimberWest's learning could thus be seen as single loop learning, as opposed to MB's more extensive double-loop learning (Argyris & Schon, 1978).

***Proposition 8:*** *Where the organization is not caught in a legitimacy trap, and incentives exist in the external environment, field-level learning may be adopted pragmatically and convergently. The resulting learning process, which does not require adaptation of the dominant frame, results in single-loop learning and is less likely to generate further exploratory learning on the issue.*

Interfor was the second company that introduced variable retention, but it did so in a more limited way than MB.<sup>10</sup> The company reserved variable retention only for the most contentious cut blocks, and the practice was isolated from other parts of the organization. As was MB, Interfor was caught in a *legitimacy trap*. With MB no longer the clearcutter of rainforests, Interfor became the bull's eye of the environmentalists' attacks. Internally, Interfor developed strong normative commitment to its prior methods. Its commitment to clearcutting was probably reinforced by the fact that, despite MB's radical repositioning, clearcutting continued to be seen by many as the right way to log and they defended it

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<sup>10</sup> While MB claimed to be increasing its use of variable retention by 20% of its tenures per year with a complete phase-out in 5 years, and TimberWest claimed 25% per year with a complete phase-out in 4 years, Interfor claimed only to be using variable retention on 25% of its tenures in 1999, with no promise of more in the future.

publicly. From this standpoint, Interfor was legitimately defending the interests of the BC public, especially of those stakeholders that the firm considered to be the more legitimate part of the fabric of British Columbia society: communities, First Nations, employees and contractors<sup>11</sup>. Environmentalists were considered to be enemies of the province, and standing up to them was justified for the greater good. On the other hand, variable retention presented a fast, attractive solution to Interfor's problems with its customers, who were being intensively targeted by environmentalists. Interfor interpreted the increased customer pressure cynically, as being motivated solely by the fear of environmental smear campaigns – and such pressure was not considered legitimate. Neither environmentalists' nor even customers' *alternate views were internalized*. Interfor employees did not understand these alternate views, nor did they accept them as legitimate. Instead, the company showed symptoms similar to a bipolar disorder. On one hand, it strongly opposed the claims of the environmental groups as illegitimate and clung to its reasons for continuing to publicly defend clearcutting. On the other hand, for pragmatic reasons, it began implementing alternative practices to alleviate customers' pressure.

The company received no positive reinforcement from environmentalists or customers for what appeared to be a half-heartedly attempted change. To the contrary, instead of praising Interfor for its attempts at variable retention, environmentalists published pictures of cutblocks that were ostensibly cut using variable retention, but that looked very much like clearcuts. The lack of external recognition for its efforts at implementing variable retention reinforced the calluses of Interfor's legitimacy trap. The continuous fire from environmental groups increased the company's disconnect between old practice and externally accepted practice. Not fully understanding the latter, the company continued to rely on and defiantly defend its former ways.

Interfor did not use the processes of organizational learning effectively in its adoption of variable retention. The intuition and interpretation occurred elsewhere, and without its own learning, the company did not manage to integrate the new knowledge. As part of its learning experience, Interfor did not develop sufficient absorptive capacity (Cohen & Levinthal, 1990) allowing it to assimilate new knowledge by linking it with prior related knowledge. In contrast, MB and TimberWest had engaged in prior experiments and thus had developed the absorptive capacity needed to gradually accept the legitimacy of external claims, to fully shift from clearcutting to variable retention. We conclude that attempts to adopt and integrate field-level learning without prior individual-level intuition and interpretation processes are likely to fail due to lack of absorptive capacity.

Interfor also did not effectively integrate the divergent variable retention views at the group and organizational level. The suggestion to adopt variable retention came through the company's Chief Forester, who received official endorsement from the CEO. The adoption was not discussed at the board level, nor were operations managers involved in the decision. There was limited training in how to do variable retention for logging crews, and it was isolated to the crews who used variable retention methods.

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<sup>11</sup> These groups' economic interests would be hurt by the cessation of clearcutting.

**Proposition 9:** Attempts to adopt and integrate field-level learning without prior individual-level intuition and interpretation processes, and with a concurrent lack of absorptive capacity, are likely to fail.

**Proposition 10:** The failure to internalize alternate views throughout adaptive learning processes will lead to lower quality learning.

The final company in the studied sample, Canfor, chose not to adopt variable retention. The company had been working on an alternative solution (eco-system management), though it appeared to have been ‘scooped’ by MB’s dramatic public move. Canfor’s members felt that eco-system management was superior to variable retention both ecologically and socially, and the company began advocating for eco-system management within the organizational field.

**Proposition 11:** The decision to adopt of field-level learning will be weighted against the availability of preferred alternative solutions within the firm.

A summary of the facilitators and impediments to exploratory organizational learning discussed above is presented in Table 2.

**Table 2: Facilitators and Impediments to Feed-Forward Learning**

<b>Feed-Forward Processes</b>	<b>Facilitators</b>	<b>Impediments</b>
<p><b>Intuition</b> - <b>Interpretation</b></p> <p><i>Level:</i> <i>intra-individual</i></p>	<p><b>Situation:</b></p> <ul style="list-style-type: none"> <li>▪ Direct exposure to alternate viewpoints;</li> <li>▪ Relational ties with those holding alternate views;</li> </ul> <p><b>Person:</b></p> <ul style="list-style-type: none"> <li>▪ Unconstrained Actor;</li> <li>▪ Openness to Divergent Views.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Isolation/Buffering from direct pressure;</li> <li>▪ Prior public defense of the status quo;</li> <li>▪ Seeing a reversal as surrender or an admission of guilt/error;</li> <li>▪ Legitimacy trap (perception of the source of normative challenges as illegitimate); Normative commitment and moral indignation.</li> </ul>
<p><b>Interpretation</b> - <b>Integration</b></p> <p><i>Level:</i> <i>individual to group</i></p>	<ul style="list-style-type: none"> <li>▪ Autonomy or endorsement by powerful others;</li> <li>▪ Success at adaptation is enhanced by internalizing divergent stakeholder views.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Isolation of exploratory learning;</li> <li>▪ Lack of absorptive capacity.</li> </ul>
<p><b>Integration</b> - <b>Institutionalization in the firm</b></p>	<ul style="list-style-type: none"> <li>▪ Official endorsement at the organizational level;</li> <li>▪ Charismatic leadership;</li> <li>▪ Trial with positive outcomes;</li> </ul>	<ul style="list-style-type: none"> <li>▪ Cynicism about motives.</li> <li>▪ Buffering;</li> <li>▪ Failure to integrate on a broad enough base.</li> <li>▪ Inattention to processes of unlearning;</li> </ul>

<i>Level: group to organization</i>	<ul style="list-style-type: none"> <li>▪ Unlearning of the dominant frame.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Trial with negative outcomes.</li> </ul>
<p><b>Institutionalization in the firm</b></p> <p>-</p> <p><b>Institutionalization in the field</b></p> <p><i>Level: organization to field</i></p>	<ul style="list-style-type: none"> <li>▪ Positive outcomes to a shared problem;</li> <li>▪ Active persuasion.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Alternative solutions;</li> <li>▪ Learning failures in other firms.</li> </ul>

In summary, MB’s attempts at institutionalizing variable retention within the field were only marginally successful. TimberWest adopted variable retention pragmatically, with limited internalization of alternative views. Due to its prior attention to individual intuition and individual and group level interpretation, TimberWest had the absorptive capacity to adopt new norms. It managed to do so, despite the lack of internal processes of integration, because MB offered a turnkey solution that TimberWest could link to its prior knowledge. At Interfor, the field-level learning did not seem to ‘take’, resulting in only symbolic adoption of variable retention. Lack of sufficient absorptive capacity hampered the company's ability to adopt and successfully implement new norms, even though MB made its experience and information available. Canfor had already been working on an alternative solution, which it is currently promoting as a superior solution for the entire field (with initial success). It successfully completed all four phases of the learning process much earlier than MB, and had initiated a stream of environmental innovations. Once it became apparent that a field-level solution was necessary, Canfor, much like MB, was ready to push the new norm into the field and offer support to willing adopters.

## 5. DISCUSSION

In this paper, we have examined how the feed forward learning processes proposed in the Crossan et al. (1999) framework of intuiting, interpreting, integrating and institutionalizing applied in four organizations, identifying facilitators and impediments to these learning processes. A significant impediment of learning for two of the four companies studied was the legitimacy trap. Normative challenges from sources that were perceived not to have a legitimate claim led to moral indignation and an entrenched normative commitment to that which was challenged. The legitimacy trap involved conscious defiance of disconfirming information, and generated high resistance to change that is self-reinforcing. It also involved strong emotional ties on the part of organizational actors to previously institutionalized norms and organizational practices. Further research is needed to validate and explore the pervasiveness of the legitimacy trap. For managers, awareness of the legitimacy trap signals a need to very carefully examine any pressures in the external environment that might trigger moral indignation in the organization and subsequently lock the firm into a set of routines that no longer match the objective considerations from its external environment.

A learning process that was not identified by the Crossan et al. framework refers to the unlearning triggered by normative confusion. This occurs when an institutionalized, dominant frame is challenged by legitimate external claims, yet there appears to be no

viable alternative frame to adopt. While such unlearning may not be considered an active process of learning, it appears to facilitate the processes of intuition, interpretation, and integration, and the willingness of employees to adopt a new template when it becomes available. In the studied companies, normative confusion and unlearning processes were associated with fast and pervasive adoption of variable retention. Thus, unlearning was a facilitator of speedy institutionalization.

Crossan et al.'s framework addresses the individual, the group and the organizational levels of analysis. We extended this framework by showing how the template institutionalized at the organizational level can become targets for institutionalization at the field level. In this study, the institutional entrepreneur (MB) actively promoted the new template at the field level to attempt to solve a field-level problem. Even if it had not, the positive press associated with the introduction of the template may have been enough to stimulate adoption by other organizations. Field members chose to adopt or to deny the legitimacy of the new norms based on their pre-existing institutionalization and their framing of the new norms as legitimate or illegitimate. However, MB's willingness to offer its turnkey solution to other firms in the field illustrated an interesting dynamic: the successful adoption of practices from the field depends on each firm's feed forward learning abilities and its absorptive capacity. Thus, while the norms may be readily available, even actively promoted within the field, each organization needs to devote attention to its internal learning processes. When organizations have limited or poor processes of learning, they may not have the absorptive capacity to adopt field-level solutions. This points to a reason for symbolic adoption that has not been previously considered by institutional theory – inability to integrate the innovation into the organizational frame due to learning failure.

From a managerial standpoint, it may be useful to know that the capability for strategic renewal may exist within the firm at any given time as individuals and groups go through processes of intuition and interpretation. Official endorsement and joint sensemaking may be necessary, however, to integrate the learning of individuals through to institutionalization.

Institutional theory has suggested that template solutions to common problems are simply adopted by firms from their organizational field (Greenwood & Hinings, 1996), and that field level solutions are developed over time through negotiations and accommodations among field members. In the BC coastal forest industry, however, there was no template solution available in the field. Prior attempts to get to solutions through formal stakeholder consultation processes had largely failed because of players' incompatible values and their lack of willingness to compromise. Under intense external pressures, MB designed a novel solution from scratch. The internalization of stakeholder voices was an important means for MB to develop a palatable solution because it allowed incompatible stakeholder values to be aired in a setting in which each of the members also had a common priority: to achieve a solution which would bring respectability back to MB. MB's development of its own solution suggests the need for further development of active agency as well as individual and group level innovation in theories of institutional change. It is precisely in the areas where a multiplicity of institutional influences coexists that we see the need for agency in devising innovative solutions.

MB's integration experience beautifully illustrates how the quality of adaptive exploratory learning can increase substantially when stakeholders' perspectives are deliberately and

thoroughly included in the process. The identification of tacit stakeholder perspectives via direct exposure and relational ties, and the inclusion of these perspectives in joint sensemaking efforts within the firm, have the power to produce high quality solutions to adaptation problems. The use of formal modeling techniques in the joint sensemaking also contributed to the surfacing of unspoken assumptions. While the conflict that can be involved in such detailed sensemaking carries with it some significant risks, it also holds the potential of better learning.

This type of learning is very likely to be of increasing importance in the future, as we regularly nudge up against new interdependencies. For example, in areas like sustainable development, globalization, and genetic engineering, we experience multiple, competing perspectives with few existing templates available for adoption. New stakeholders must be admitted to organizational fields that have never been accorded legitimacy in the past. In order to navigate this increasingly complex world, organizations must find new ways to learn, adapt and even lead institutional change. In this paper, we take an initial cut at identifying ways to improve adaptive learning.

We also only scratched the surface on the longer term implications of the deep joint sensemaking that took place at MB. Compared to TimberWest, which did not internalize previously ‘illegitimate’ alternative views, MB had more potential for a stream of related innovations. Canfor had also internalized alternative views in the late 1980s, and a stream of environmental innovations had followed. Deeper processes of interpretation, integration and institutionalization may carry the risk of disruptive conflict, but may develop absorptive capacity in the organization that can be leveraged many times over. Further study is required.

## 6. CONCLUSION

We conclude that adaptive organizational learning is of higher quality when intuition and interpretation are informed by the explicit consideration of alternative viewpoints (including those that have not previously been considered legitimate), when processes of integration are deep, and when solutions are officially and broadly endorsed through the institutionalization phase.

This paper is exploratory in nature, and thus our conclusions are aimed at developing theory and offering new propositions to that end. We investigated a set of four organizations embedded in the same organizational field: the BC coastal forest industry. This is a field fraught with institutional conflict. The field’s criticality to British Columbia’s economy and the incredible natural beauty and biological significance of the trees and habitat involved mean there are numerous stakeholders with strongly held, interdependent and often conflicting views. We can confidently say the field is exceptional. As such, the possibility of *directly* generalizing to other fields is limited. Starbuck (1993) issued a call to study exceptional organizations in order to generate new insights. We have studied an exceptional organizational field. While its specific conditions distinguish this field from traditional industries, its characteristics (i.e. strongly-held values, far-reaching impact, and diversity and novelty of external claims) suggest that interesting inferences may be drawn to other fields, especially those in which interdependencies are high and institutional templates are underdeveloped. We hope the current propositions generate new

intuition, interpretation and integration in organizational learning, institutional theory and managerial practice.

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