Images of Environment and Management Practice

Conflicting priorities or platform for organizational learning?

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Images of Environment and Management Practice: Conflicting priorities or platform for organizational learning?

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Abstract
Different images of environment can be found in relation to various understandings of environmental problems and solutions, such as cleaner production, environmental management, cleaner products and sustainability. Ascribed to these images are: environment as a part of license to operate; environment as a part of quality management; environment as a part of corporate branding and environment as a part of customer relations. The different images are distributed and coexist throughout the organization, where they may be a potential for conflicting priorities or a platform for organizational learning supporting the development of sustainable business strategies. An analysis of the different images has been conducted related to a Danish case company based on an analytical framework with inspiration from Mintzbergs structures in five. In the case company, the understanding of environment as a technical issue as part of a formalized system created barriers for organizational learning in relation to sustainability, while the broader concept of social responsibility shaped a platform from which the employees could create meanings on sustainability more in line with their daily practices.

Keywords:
Images of environmental practice; organizational learning; sustainability; business strategies

1. Introduction

Over the years, the understanding of environmental challenges and their solutions has changed. In a Danish context, four concepts encompass these changes, where each of the concepts carries a certain image of the environment and related management practices in the companies. The different concepts include different perceptions of environmental and sustainability related problems and solutions, and of the key actors involved (Miljøstyrelsen, 1996; Schmidt et al, 2000; Remmen, 2001b; Remmen and Münster, 2002; Mosgaard et al, 2010). The four concepts are illustrated in Figure 1.

	Focus	Solutions	Actors	Business purpose
Cleaner Production	Emissions; resource consumptions	BAT – best available technologies	Companies and authorities	Resource and cost savings
Environmental Management	Organizational conditions	Continuous improvements	Managers and employees	Image
Cleaner Products	Life cycle impacts of products	Eco-labelled products	Product chain actors	Competitive advantage
Sustainability	The economic, environmental and social dimension	Cooperation and innovation	Companies and engaged stakeholders	Triple bottom line and global license to operate

Figure 1 Development of environmental concepts in companies (Based on Remmen, 2001)

Remmen and Münster (2002) illustrated the development of the concepts as a staircase with four steps representing still more complex and comprehensive environmental and social issues. Each step is supported by methods and tools, for example guidelines on implementing Environmental Management, conducting Life Cycle Assessments; or integrating sustainability aspects in supply chains. Even if many companies begin with relatively simple approaches, for example technical improvements to save water or energy, the steps do not represent a given way of developing the environmental effort as companies can take more complex challenges and thereby a higher step as their point of departure (Remmen and Münster, 2002; Schmidt, 2011).

As can be seen from Figure 1, in understanding the environmental responsibility of companies on the higher steps, life cycle thinking and sustainability become integrated elements. This is not a simple task to deal with in the companies, due to different perceptions and priorities across the company. Employees from various departments have different functions and are engaged in different activities and they don't have the same image of what environment and sustainability means for the organization and for their work practices (Baumann, 2004; Rex, Baumann, 2006; Holgaard et al., 2007; Mosgaard, 2009).

This paper raises the question: If such different, maybe even contradicting, images exist, is it then an arena for conflicting interests and/or a platform for organizational learning in relation to developing sustainable business strategies?

To analyze the issue, a conceptual framework for analyzing the images of environmental and sustainability related practices across an organization is discussed based on Mintzbergs' Structure in Fives (1983) and the different environmental understandings illustrated in figure 1. The framework has been applied in a Danish case company firstly to analyze if different perceptions and priorities could be found in relation to the environmental and sustainability related effort throughout the company and secondly, whether this gave rise to conflicts or created a platform for organizational learning in relation to the development of a sustainable business strategy.

The case study was conducted as a part of a larger project (Schmidt et al., 2007)[1] in a larger Danish company who has been engaged in environmental and social initiatives through more than 20 years. In addition to an analysis of the historical development based on policies, reports and internal documents, more than 15 interviews were conducted with employees in different functions and departments. The interviews gave an understanding of the employees' perception of their roles in the environmental effort and the meaning they created from the roles. This understanding was then translated and pictured into different images of environment and management practices. Furthermore, discussions and interviews with the employees also brought about an understanding of what can be seen as common values and priorities, and where there are diverging priorities and interests (Schmidt, 2011).

2. **Images of Environmental and Management Practices**

Henry Mintzberg (1983) discusses how the work can be divided into five structures in an organization. The size and importance of each of the structures vary according to the way, the organization is organized, but to Mintzberg, these five structures are omnipresent in all organizations except from very small organizations that are not divided into structures.

Of the five structures, the strategic management, the middle management and the production form the core business. Besides, the technostructure and the support structure handle different types of functions across the organization. The technostructure develops systems and rules for organizing the workflow, for example via quality management or guidelines to be followed in the daily practices of the organization. The support structure takes care of a wide range of activities, from public relations, human resource management, investor relations etc., and to the operation and maintenance of buildings, cantina, outdoor spaces etc. (Mintzberg, 1983).

In combination with the concepts in figure 1, Mintzbergs' structures in five can form a framework for analyzing the existing images of environment in an organization as the development of the environmental perceptions can be related to the five structures based on the meaning and purpose of the environmental initiatives related to the concepts.

The Cleaner Production concept with cleaner technology initiatives and minimization of emissions is closely related to the production and can be understood as an image of environment as part of the formal license to operate, i.e. by respecting legal requirements on emission limits and shifting to less polluting technologies.

The concept of Environmental Management aiming at continuous improvements across the organization opens for different images of environment depending on how the environmental effort is integrated into the daily practices throughout the organization and eventually combined with other management systems. In a Mintzberg perspective, the technostructure holds a central role as responsible for the

[1] CEMIP, Center for Effektiv Milljøkommunikation I Produktkæder (Center for efficient environmental communication in product chains) was a Danish project comprising three knowledge partners and five companies on developing tools and methods to further life cycle based sustainability in companies.

development and control of such systems which translates into an image of environment as a part of quality management.

Moreover, environmental experts within the technostructure may not only be responsible for the environmental management system but also for integrating environmental and social issues into theinnovation of new or environmentally improved products, corresponding to the Cleaner Product concept in figure 1. This effort can for example be guidelines for phasing out the use of problematic substances or for optimizing the energy performance of the products. In that case, an image of environment as part of product development can also be developed, either as a specific technical approach focusing on for example substitution of hazardous substances, or as a broader life cycle management approach also including cooperation with external partners.

Environmental management can be extended to include not only production and product innovation but also supporting structures like maintenance of buildings or operation of a cantina, which invites to an image of environment as part of daily operations, for example by minimizing waste and emissions or by choosing environmental friendlier products and services for the operations.

The support structure also includes functions where environmental initiatives are translated into communication and cooperation with external persons and organizations. For example in managing supplier relations; in responding to customer expectations, or in preparing marketing and public relations material, just to mention some. In these areas, the image of environment can be understood as a part of corporate branding and customer relations.

Different images of environment can also be found in relation to the management structure where an operational management approach (middle management in the Mintzberg structure) tends to focus on the daily, short-term priorities that can lead to cost savings and risk reductions. Here, the image of environment is as a part of the daily decision making and practices dealing with requirements in for example external regulation or internal policies. A more strategic, long term understanding of the potentials and challenges related to sustainability may on the strategic management level also foster an image of environment, or sustainability, as vision and strategy for a sustainable business development.

The different images of environment are summarized in figure 2. The images are not mutually exclusive but can be found across an organization at the same time.

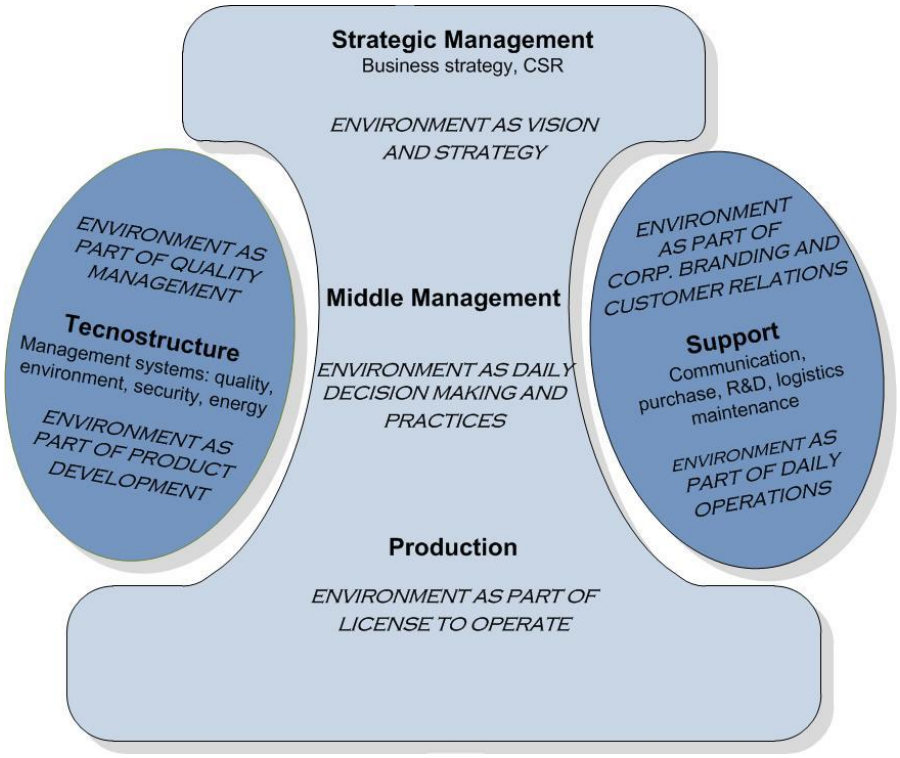

Figure 2: Images of environmental/sustainability practices related to functional structures in an organization. (Inspired by Mintzberg, 1983)

The different images relate to different meanings and perspectives on how the environmental or sustainability related initiatives make sense in the daily life of an organization. In the Danish case company in this study, the employees seemed to agree on a common value of behaving responsibly also in relation to environmental and social aspects, but whether the value is converted into priorities when it comes to the importance for their own work practices can be questioned. An overall life cycle approach could also be found in the company's policies and strategies, but is it recurring in the different functions of the company, or do the employees in these functions stick to the part of the life cycle where their own responsibilities are defined? And if so, what implications does it have for organizational learning in relation to developing sustainability based business strategies?

3. Contradicting Images in a case company

Coloplast, a Danish based, mainly family-owned producer of medical devices was established in 1957 from a value-based proposal of securing a better quality of life for patients with an ostomy surgery. Today, Coloplast is largely internationalized with production sites, supply chains and/or sales departments on all continents. The strategic management, the corporate communication, the corporate quality and environmental management, and the research and design of new or improved products are still primarily based in Denmark while most of the production has been outsourced (*www.coloplast.com; Coloplast, 2010)*.

3.1 The sustainability journey in Coloplast

The Danish debate on phasing out PVC in the late 1980'ies became the starting point for Coloplasts environmental effort. The management – supported by external experts – expected a ban or at least a severe restriction on the use of PVC, which initiated a development of alternative materials for the products (Reijonen, 2008). From the beginning, societal expectations play a role as a driver for the environmental effort, but internal values as responsible behavior and securing the quality of life for vulnerable people are also issues of importance (Reijonen, 2008; Interviews in Schmidt, 2011).

While the debate on PVC faded out, the driving force for the environmental effort shifted from expectations related to legal requirements to a broader societal agenda in the 90'ies related to systematic environmental management. Coloplast developed its first environmental policy in 1992, and the first production site was certified according to the ISO 14001 Environmental Management System standard in 1997. As a part of the development, an environmental organization was established in the company, coordinated by a central Corporate Environmental Department with reference to the Technical Director and with Environmental Managers at all production sites (Coloplast, 1995; Reijonen, 2008; interviews and materials from the Intranet of Coloplast in Schmidt, 2011). Parallel to implementing the environmental management system, the environmental experts in the Corporate Environmental Department continued working for substitution of hazardous materials and substances by developing guidelines for phasing out phthalates and hazardous chemicals (CEMIP, 2007 *unpublished*; Interviews in Schmidt, 2011).

Two important strategic management decisions were taken: The CEO signed the Global Compact in 2002, and the environmental management system was integrated into the company's quality management system also adding health and safety issues in 2004. The complete system was now run under the auspices of the Quality Manager and rolled out to the entire organization. As a result, the environmental initiatives and tasks became more structured and formalized in accordance with the quality management system. New procedures were typically added to the system based on experiences from specific projects involving a limited number of people (Interviews and materials from the Intranet of Coloplast in Schmidt, 2011). During the process of integrating environment into the quality management system, the environmental effort was consolidated in the organization but also became specified as a technical area primarily staffed with people with a (chemical) engineering background. This was especially the case in relation to Product Development, where the environmental experts were directly involved in the development process as they conducted the required environmental and biological assessments.

The sales and marketing departments were not included in the environmental parts of the quality management system. Moreover, the defined structures put a limitation on the Corporate Environmental Departments access to the market as they should contact the marketing or sales departments for market information and eventual market contact (Interviews and materials from the Intranet of Coloplast in Schmidt, 2011).

By signing up the Global Compact, the strategic management launched a broader and more global agenda in relation to social responsibility. This concept was rolled out top-down through the management at all levels of the organization and anchored in the Corporate Communications department with reference to the CEO (Interviews and materials from the Intranet of Coloplast in Schmidt, 2011). Thus, the social responsibility agenda was established in its own organizational track within the support structure and not as an integrated part of the quality, environment, health and safety management system, QEHS.

3.2 Images of environment and related management practices in Coloplast

The changes in the environmental initiatives of the company and the interviews with different actors inside Coloplast demonstrate that the environmental effort is highly systematized and defined in specific, especially technical, tasks. Environment is understood as a rationale to cope with existing and potential regulation, and on the strategic management level, environment is seen as a part of the company's risk reduction and as optimization of resources. The technical image has its roots in the technostructure including product development, but it is also widespread in other functions of the company. In these other functions, the image of environment as a technical rationale seems to exclude the employees with non-technical backgrounds from engaging themselves in environmental initiatives (Interviews in Schmidt, 2011).

Thus, the employees understand the specific roles of their colleagues in the corporate department of QEHS as technical rule-and-tool makers and controllers of the system. This image, though, has certain nuances. In daily practices, the environmental experts are also directly involved in for example environmental assessments related to the development of new products because from a resource perspective, this is the most optimal way and in line with management priorities. Such an involvement underlines the technical image as the assessments require highly technical skills and knowledge (Interviews in Schmidt, 2011).

Nevertheless, over time the environmental experts have developed the scope of their role in less technical areas as they also function as scouts for locating societal expectations in relation to environment and sustainability on a broader scale, not only related to formal regulation. In order to anchor these expectations in different functions across the company, they have become brokers and carriers of the environmental values and priorities. During this process, their own image of environment is undergoing a certain change to also include *environment as relations* with the purpose of building a more strategic understanding of environment as a potential for business development based on a life cycle approach (Interviews in Schmidt, 2011).

Changing the image of environment throughout the company from specific technical issues to a strategic business perspective takes time and a certain resistance was found during the interviews with employees from other functions. While the overall value of "putting one's own house in order" was widely accepted, some reluctance was found when it came to using the technical environmental effort - that is the traditional focus on the environmental impacts from resource consumption, use of

potentially hazardous substances, waste, and emissions - more actively and strategically. The type of reluctance varied according to the existing images of environment among the interviewees (Interviews in Schmidt, 2011).

For example, both in the production and in middle management, environment is seen as an obligation to fulfill legal requirements and to optimize on resource consumption and waste with as little effort as possible. Economic and business considerations simply have higher priority than the environment and the employees stated that this would only be changed if the strategic management asked for it. During the analysis, no such signs of changed strategic priorities related to the technical environmental effort were found (Interviews in Schmidt, 2011).

In marketing and sales, the reluctance was more related to the experiences from the actors on the market. As long as the market didn't focus on environmental issues, their priorities would be low, but they were willing to give it a higher priority as a response to growing market focus. Environment was seen as too technical to be useful on the market and the environmental issues were not interpreted into market value. For the employees in marketing and sales, emotions related to improved quality of life for the users were important sales arguments and the employees worried if the use of technical, chemical words and specifications would create negative emotions among the users. Thus, they preferred to refer to the environmental effort on an overall level in line with their image of environment as a part of the branding and reputation of the company where responsible behavior is a part of the company values and culture (Interviews in Schmidt, 2011).

On the business to business market targeted towards public purchasers and medical professionals, the technical aspects are not as problematic as in the marketing targeted at private consumers, but the image of environment as a part of customer relations seems to be limited to the mandatory documentation for the content of potentially harmful materials and substances demanded by the public purchasers. Reijonen (2008) showed how environmental aspects on Coloplasts market were translated into standardized documentation schemes but also that a good environmental performance was not important on the market. At the best, it was seen as an element of high quality but not as a sales parameter in itself (Reijonen, 2008; Interviews in Schmidt, 2011).

A broader concept of social responsibility and sustainability is under development within Coloplast, as the technical environmental issues have been supplemented by economic *and* social aspects when dealing with global business chains. For example, labor rights and anti-corruption policies and initiatives are now included (www.coloplast.com). From a strategic management perspective, risk reduction is still important, but an image of social responsibility, including technical environmental issues, as part of the globalized business strategy has evolved on a strategic level (Interviews and materials from the Intranet of Coloplast in Schmidt, 2011). For employees on the operational level this image is accepted as part of the value of securing the quality of life not only for the users of the products but also for the people who produce the products, for example in China (Coloplast, 2007; Interviews in Schmidt, 2011). The image was translated into daily activities in the purchasing department, that is, in relation to supplier

management, but it was not specified in the departments dealing with the customers (Interviews in Schmidt, 2011).

3.3 Discussion: Consequences of the different environmental images

Environment as a focus area within quality management has been consolidated as a technical discipline with a specific focus on reducing risks and providing documentation in relation to the products, and as optimization of resource consumption and waste handling in the production. The technical articulation and understanding of environmental issues has created a barrier for the non-technical employees in sales and marketing. Some interviewees stated that they would never use technical expressions like phthalates and DEHP in user information, even though the story of reducing health risks by phasing out these substances was a positive one. They interpreted the technical language in itself to create anxiety in the existing communication, which more has positive experiences and improved quality of life as focal points (Interviews in Schmidt, 2011).

As a consequence, the employees in sales and marketing gave little priority to environmental issues in their own work practices and were not seeing it as a possibility to develop or strengthening the business relations. It was taken for granted and valued as a part of normal behavior, but it should be dealt with by others – the technical, environmental experts – not by marketing and sales. The employees in these departments thus seemed to hold the same image of environment as a technical discipline - primarily targeted towards product development - as did the environmental experts. Per definition, this image makes sense in the environmental and the product development departments, but not in sales and marketing. As these departments are not included in the environment part of the quality management system, only few formal requirements or responsibilities related to documentation are put on employees from sales and marketing (Interviews and materials from the Intranet of Coloplast in Schmidt, 2011). The employees thus had no incentives, neither from the internal system nor from the market, to interpret the environmental effort into their own practice. Therefore, they rather ignored the initiatives, at least until market demands would eventually change.

Historically, the same image of environment as a technical aspect related to the product was also seen in the company's supply chain management where a few environmental requirements related to the content of unwanted substances were included in the general quality requirements to the suppliers. The requirements were specified by the environmental experts and afterwards handled by the employees in the purchasing department (CEMIP, 2007; Interviews in Schmidt, 2011).

This approach was however changed after the company signed Global Compact. The launch of the new strategic concept of social responsibility – which in Coloplast terminology is equivalent to sustainability – created a new and not necessarily technical platform from which the employees could create their images of sustainability. Moreover, in the organizational structure the corporate environmental department was no longer seen as *the* responsible unit. Instead, the department of communication has become the locus for the broader sustainability agenda, also relating the effort closer to the strategic management (Interviews and materials from the Intranet of Coloplast in Schmidt, 2011).

Supply chain management became the first area of effort under the renewed social responsibility concept introducing more issues into the dialogue with the suppliers – for example human rights and labor rights. Employees conducting supplier audits based on this broader concept experienced a dilemma of integrity in relation to a core value in the company – namely "securing quality of life". How could one work for improving quality of life in relation to the end users of the products if it was realized at the expense of the quality of life for those who produced the products (Coloplast, 2007)? This question led to an engagement of the purchasers in working for sustainability that were not experienced with a more narrow focus on technical environmental issues. The engagement was also supported by a revision of the procedures in the quality management system putting more responsibility on the purchasing department (Interviews in Schmidt, 2011).

Quality of life – or the more overall theme of Social Responsibility thus proved to be a stronger platform for creation of meaning and engaging in sustainability related issues across the company. It also laid the foundation for a new platform for organizational learning and discussion of values as employees on the strategic as well as on the operational level experience relevance for their own daily practices. Social responsibility was potentially relevant for all, not something to delegate to specialists, like the technical environmental issues. Therefore, training and discussions on understanding and assessing aspects related to for example corruption, human rights or labor rights have been scheduled on management meetings and involving key employees. This has not been the case in relation to environment as a technical issue.

Looking into the environmental effort, the approach has developed over time, though. The environmental experts have been, and still are, directly involved in conducting the specific tasks in other departments, especially related to product development. But they go more into a dialogue with their colleagues in translating the technical results of for example life cycle assessments into knowledge that creates meaning in the product development, or explaining health related issues for sales persons. Still, the tasks are highly divided through the QEHS system, and there is little formal room for exchanging experiences and finding ways to integrate environmental aspects into the development of the practices (Interviews in Schmidt, 2011).

Summing up, it can be argued that Coloplast is dealing with many complex issues related to environment and sustainability, and the effort has developed from an approach focusing on meeting legal requirements and dealing with improvements on a project base to a more integrated approach also involving life cycle thinking. As long as "environment" was understood within a technical rationale, the integrated approach was however limited to production of technical documentation and involvement of the environmental experts from the Corporate environmental department in carrying out environmentally related tasks in other departments. The broader and more complex concept of Social Responsibility seems on the other hand to engage more employees in discussions and creation of meaning in relation to sustainability.

4. Conclusion

The paper discussed how different images of environment and sustainability can be found in a specific case company even if there are common overall values and a systematic approach to managing environmental issues. The high degree of formalization of the initiatives combined with a technical approach in dealing with the environmental issues has importance for the development of these different images. In the environmental policy and strategy, a life cycle based approach was established, but in practice this approach is primarily sustained via the tasks, that the environmental experts in the corporate environmental department carry out in different functions of the company. The employees in functions like sales, marketing and purchasing do not integrate environmental issues into their own practices unless it is clearly specified in the system. In other words, environment has been seen as a technical discipline for mainly experts and it has been rather difficult to translate this image to something relevant for other departments.

The different images thus illustrate the diverging interests in environmental issues, at least when "environment" is understood as a technical rationale demanding technical skills to deal with. A shift of agenda in the company to a less technical and broader focus on social responsibility seems to offer a different type of platform to which the employees can better create meaning in relation to their own daily practices.

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