

## BECK'S PROPHECY IN ACTU: COMPANY NETWORKING IN A RISK SOCIETY

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### ABSTRACT

According to Beck's classic work from the mid 80s the growth of the industrial society enhances the world risk society. In this process organizations are, as traditional economic power is challenged by a more symbolic notion of power, increasingly dealing with issues such as trust, environmental risk and social responsibility. Some argue that we are experiencing a new texture for organizing. This paper attempts to capture a portion of this texture and of how firms make sense of it. The empirical part is based on three case-studies of firms operating in the Swedish county of Västerbotten. The studies show that a risk society is evident in all three cases, although to different extents. In the conclusions, firms that enroll a broader range of actors seem to come out as more powerful. The study also identifies paths for future studies in the area.

**Key words:** risk society, symbolic power, green issues, networking

### 1. A PROPHECY

*"In world risk society, industrial projects become a political venture, in the sense that large investments presuppose long-term consensus. Such consensus, however, is no longer guaranteed – but rather jeopardized – with the old routines of simple modernization. What could previously be negotiated and implemented behind closed doors, through the force of practical constraints (for example, waste disposal problems, and even production methods or product design), is now potentially exposed to the crossfire of public criticism."* (Beck, 1999, p 34)

Beck's argument quoted above constitutes the basic idea which this paper plays with. The question is whether or not this new context for organizations, outlined in the mid 80s (Beck's Risikogesellschaft was published in 1986), is apparent in organizations today over a decade later. Are the foundations of corporate power changing from conventional market muscles to more symbolic forms? How are corporate networks and expert-systems enrolled and equipped for a situation where trustworthiness is not only about traditional scientific and business rationality, but also about emotions, values and attitudes? How do firms handle a situation where ecology enters the economy and opens it to politics?

The aim here is to touch upon all of these questions, although the paper will specifically focus on how issues related to our natural environment pushes, or pulls, businesses onto an arena where traditional economic power is challenged. Another ambition is to develop and

contribute to the theoretical framework for organizing in a risk society. A third aim is to raise issues for future studies.

Organizations and the natural environment is a topic previously touched upon by a wide range of authors which means that there are a lot to draw inspiration from. As a business administrator, management and organizational scholars are of particular interest. In the present case, however, attention is directed across scientific borders to scholars within the sociological field. The theoretical framework is based on the works of Beck (1992; 1999; Beck et al, 1994), Callon (Callon, 1986; Callon & Latour, 1981) and Latour (1986, 1999). These authors represent two very interesting paths of research, reflexive modernization (ex. Beck) and actor-network theory (ex. Callon & Latour). It should be noted that these paths have lately been crossing each others paths, for instance, in Beck (1999), Latour (1999) and Lee & Hassard (1999).

Following a theoretical discussion are three short stories of firms trying to make sense of their contemporary situation in projects focusing green issues. All the case studies are based on firms operating in the county of Västerbotten in the north of Sweden, which is also the location of Umea University. This regional selection of cases is not based on convenience or done by coincidence, but instead done through an effort to emphasize that it does not take a great deal of inquiring and travelling to find cases where the suggested texture is evident. The cases are presented individually and in latter parts cross-case analyzed drawing on the suggested framework. The method used in the paper is influenced by the works within actor-network theory, especially regarding analysis of power. In contrast to Beck's works, writings within actor-network theory are often based on in depth field studies (see for instance; Callon, 1986; Latour, 1999; Hetherington, 1999; Verran, 1999; Moser & Law, 1999). Although this paper does not have the same depth as many of those studies, in-depthness has partially been traded for quantity. This in order to illustrate different examples of the suggested texture and to make possible comparisons between the different cases. The cases are predominantly based on in-depth interviews and participating observation. Following the cross-case analysis a concluding discussion summarizes the findings of the paper.

## **2. ORGANIZING IN A RISK SOCIETY**

Organizations are today facing (and creating) a pressure to deal with issues such as ecological hazards and risks. One example of this pressure is the great interest in the Greening of Industry Network. Many of its members are also labeled experts in their respective fields and as green issues often depend on expert systems they come to play important roles in organizations' sensemaking processes. However, as recognized by a growing number of scholars (or experts), even experts and expert systems are infiltrated by emotions and values (Beck, 1992, chapter 2 & 7; Gergen, 1999, p 57; Tsoukas, 1999, p 517). Scientific "truths", then, also become dependent on how good a politician the expert is. For organizations this mean developing ways of dealing with situations where the black box (Callon & Latour, 1981, p 285; Beck, 1999, p 146) of scientific and business rationality is opened, such as when estimating the environmental impact of an industrial venture (Tsoukas, 1999). Studying such a situation, or opening, might be conducted in various ways. In this paper, attention is turned to how networks of power are constructed, organized and maintained by organizations as this is believed to be crucial when trying to

understand organizations' attempts to make sense of a risk society. First, however, a texture for organizing in a risk society is suggested. The discussion has its point of departure in the Brent Spar controversy.

## 2.1 An example of an economy of signs

In an article by Tsoukas (1999) the Brent Spar controversy between Shell and Greenpeace over a disposal of an offshore oil platform in the North Sea is analyzed (see also Grolin, 1997). What the article has captured in an elegant way is the process where Shell increasingly finds itself in a different agora where traditional market muscles do not prevail. Tsoukas raises the question of what happens when organizations do not just compete in a market of knowledge-intensive products, but put forward competing knowledge claims in the public arena (in this case related to environmental issues)? In such a process the business environment is de-materialized and winning the argument is decisive for the outcome. The case symbolizes a new organizational context drawing extensively on the theory of late modernity or reflexive modernization (Beck, 1992; Beck et al, 1994). In this context, the growth of simple modernization and its industrial emphasis undercuts itself in favor of a self-reflexive modernization (Beck, 1994).

Tsoukas (1999) argues that our contemporary situation shows signs of an economy of signs (especially risks in Beckian terms). The economy is de-traditionalized and new values, such as those represented by the environmental movement, constantly review actors behavior in a global agora. The production of risks also seem to dominate the production of wealth when risks are manufactured through the growth of the welfare project. Efforts to control emerging risks also seem to enhance latent side-effects of those efforts and thereby increases the risks. And as Hanseth & Braa (2000, p 48) note, increasing risk means decreasing control. This is also why Beck does not talk about a post-industrial society when it is the growth of the industrial society that simultaneously sparks a risk society. (For a different interpretation of this linked to management research, see Shrivastava, 1995, pp. 118-119, pp. 127-133)

Side-effects in a risk society are predominantly exemplified through environmental hazards, but there are also social "hazards" where people's workplace and family relations through individualization processes are shaken (Beck, 1992). The dilemma herein lies in the labor-market's demand for flexibility without considering the basic demand in the marriage or the nuclear family, which is stability. These risk processes, however, are not making a strong and immediate case. They are instead slowly growing into everyday life.

Risks, especially environmental risks, are also difficult to perceive and trace in late modernity. Substances which nature cannot break down are today found in breast milk and in polar bears. The process of tracing these substances back to a specified source is a difficult task for scientific researchers and company R&D departments. In fact, the more the scientific community learn about the issues, the greater the uncertainty seem to be. As Beck (1992, p 167) suggests: "*If three scientists get together, fifteen opinions clash.*" In the end this also tends to raise fairly schizophrenic messages in media which makes the situation difficult to interpret for non-experts. (For a consensus approach to this discussion see Robért et al, 1995)

In this process of a de-mystification of science, environmental risks become open to social construction (Beck, 1992; Tsoukas, 1999, p 504). They are enlarged, minimized or neglected, and all constructions are supported by scientific arguments. This also entails that organizations can always find a scientific argument supporting their specific claim when there is always an argument available, which might be a consequence of a politicization of experts and expert systems (Beck, 1992). Tsoukas (1999, p 517) concludes that expert systems are all judgemental and a question of facts, values and blindspots. From this view experts might even be perceived as obstructing security. Giddens (1994, p 86), however, argues that disagreement is the motor of science and places a larger trust in science as provider of safety (see also Lash, 1994, p 117).

So, how does all of this affect businesses? Returning to the Brent Spar controversy, Shell was not only in the oil business, but also a systematic risk producer. Dumping a platform in the sea provided experts with a diversity of scenarios (fifteen opinions?) when the consequences were difficult to foresee and the credibility battle was in full force. As the controversy developed, Shell found itself being perceived as a symbolic actor on an arena where competition was not about traditional competitiveness, but about who were more convincing. Greenpeace was in the end appointed the victory as Shell was not given a permission to dump the platform. From an environmental perspective, though, dumping the platform seemed to have been the best thing to do in the end when weighing the environmental impact of different alternatives. The idea of dumping it, however, did not appeal to the general public nor to Greenpeace.

One reason behind the outcome was that Greenpeace managed to push the controversy to the media agora and in the process enroll a great number of actors to their network. This successful enrollment process might partly be explained by Beck (1999, p 45) when he argues that: "*The Greenpeace people are multinational media professionals*". According to Tsoukas (1999) the underlying reason behind the decision to reject the dumping was the different rationalities underlying the public and Greenpeace response versus Shell's approach. Shell represented a more technocratic view of the conflict and the public a more common-sense rationality. "*Shell made sense of the conflict in terms of 'reason' against 'emotion', and 'head' versus the 'heart'...*" (Tsoukas, 1999, p 523). So, both the scene and the underlying assumptions were decisive.

## **2.2 Studying organizing in a risk society**

Isolating the two main actors in the process above the controversy circled around power. Shell obviously possessed the economic power and, in retrospect, Greenpeace proved to conquer this with its symbolic power. Greenpeace displayed a capacity to enroll members to a network that emerged around the Brent Spar conflict and their power grew. Based on this, it might be suggested that organizations should be more sensitive to alternative rationalities when trying to realize their projects. But, there are no ready made solutions for organizations stating that this is the way to handle or organize such processes. However, there are some overall suggestions. Hanseth & Braa (2000, p 50-51), for instance, argue that the general cry for more flexible and loosely coupled organizations where an increased integration of external actors (different rationalities) is encouraged is an effect of a risk society. This could be linked to the individualization processes touched upon earlier where a breaking up of tight couplings at the work place and in family relations also seem to be characteristics of a risk society.

However, even what is recognized as post-Fordist organizational forms seem to be based on a belief to increase managerial control (Fordism), which leads us back to the risk-control dilemma (Hanseth & Braa, 2000, p 51). In trying to find a theory or a method for studying organizing in a risk society, it seems that scholars in general tend to be influenced by a need of control. They also live intimately with the classic duality between nature and society. Following a post-Fordist trend, Murdoch (1995) discusses two of the most influential perspectives, regulation theory and flexible specialization. His analysis show that the two approaches are inherently “structuralist” in their attempt to explain current social processes and they should be considered ideal types. “*Thus we should not expect to find vast numbers of either in empirical research... but in both cases they tell us little about how or why the world is changing in the way it is.*” (Murdoch, 1995, p 740-741). So, what are the alternatives? Well, one alternative is to follow the actors and study what seem to hold them together (Callon & Latour, 1981).

As a symbolic pressure on organizations is growing concurrently with a risk society, organizations need to explore new dialogues and new networks, that is, search for power elsewhere. Credibility and trust among an expanded range of stakeholders could be singled out as important issues in such efforts. In order to study whether or not this symbolic pressure is evident and how it is dealt with (if existing), it is here suggested that studies of power of associations (Latour, 1986) is one way of understanding the efforts.

Power, though, needs a context and in order to mark the distance from simple modernization the word “symbolic” has been attached to both the context, *symbolic pressure*, and to power, *symbolic power*. Operating on, or being forced onto, an arena where a symbolic pressure is high, demands high symbolic power, for instance, through developing a high credibility with the general public. Otherwise organizations might loose what might be dear, such as competitiveness, market shares and shareholders. Acting on an arena, which is not characterized by constant revisions of a wider range of stakeholders (mainly through media), also presents less pressure to develop symbolic power. In this study, symbolic pressure is therefore tentatively defined as the extent to which an organization is feeling the side-effects of a risk society. An important part of this pressure is the extent to which an organization is under a crossfire and dependence of public opinion and criticism.

A tentative model for a risk society texture where symbolic pressure and power are emphasized is presented below. It aims at illustrating that organizations operating in a context where a symbolic pressure is high, ought to develop (or enroll) symbolic power to respond to this (following the diagonal line). In the Brent Spar controversy as told by Tsoukas (1999), Shell would be placed in the lower left hand corner of the model. In this case, retrospectively, the symbolic pressure was high, but Shell’s symbolic power was low. Greenpeace would be situated in the upper left hand corner of the figure. The model could be recognized as a further elaboration of a part of Tsoukas (1999) model.

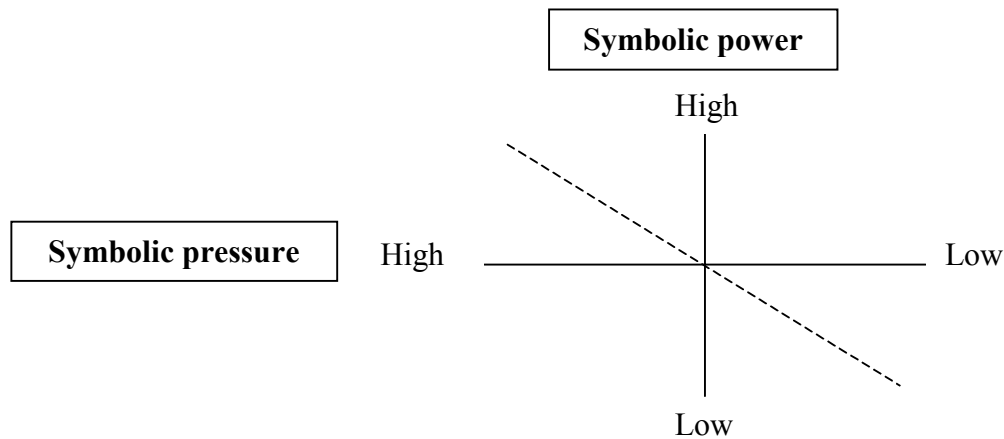


Figure 1. Symbolic pressure and symbolic power in a risk society

The notion of symbolic power deserves closer attention. Besides indicating a different notion of power from traditional economic power, the concept might imply that an organization possesses a certain pre-decided amount of power. This view on power is not the view adopted in this article. Instead, power is seen as an active process of carrying (or translating) an artifact, a belief or a direct order. Latour (1986, p 264-265) writes about the paradox of power that: *"when you simply have power – in potentia – nothing happens and you are powerless; when you exert power – in actu – others are performing the action and not you"*. So, if an organization is acclaimed to have power this is a composition of many actors actions. This faith in agency is also evident within the theory of reflexive modernization (Beck, 1994, p 23; Lash, 1994, p 111). Latour's (1986, p 265) idea about the notion of power further implies that if we could trace back the consequences of collective action, we could also explain what holds it together. Power thereby becomes an effect to be viewed in retrospect and analysis of networks, or actors constituting networks through their actions, then become analysis of power. Murdoch (1995, p 745) states regarding this view on power: *"Rather than considering economic structures as the determinants of economic activity, network analysis seeks to understand these structures as the outcomes of active attempts to construct and maintain power relations."* Power is the glue holding the network together.

In his article, Murdoch (1995, pp. 750-751) links enrollment processes to the diffusion of innovations. Here, the success of innovations is recognized as rooted in the capacity to build networks and to act at a distance. Successful innovations are therefore those which manage to expand their networks and size thereby becomes an outcome of network extension. Murdoch suggest that it should be possible for us to follow actors as they weave their networks together (see also Callon & Latour, 1981). Sizing up the conflict between Greenpeace and Shell, for instance, Greenpeace managed to enroll a great number of actors to their idea which led to a more powerful network than Shell's.

As suggested, when conducting analysis of power, networks are retrospective outcomes. This because: *"It is only in retrospect that we can understand how actors and networks have coevolved and how these coevolutions were maintained or undermined."* (Murdoch, 1995, p 753). In a networking process actors are enrolled, disregarded, overlooked and distanced. An assumption in this article is that the actors participating in the process of upholding power (acting power) are those actors the organizations lean against when

making sense of, for instance, green issues. As will be illustrated by the cases further on, organizations lean on different actors which tend to lead to different outcomes.

In order to clarify this it might be appropriate with some examples. Within heavy industries it is not unusual to see a lot of networking between firms themselves in, for instance, *industry associations*. The process behind the creation of the ISO 14000 family is rooted in an industry driven process and not in a legislative body as in the case of EMAS (Eco-management and Audit Scheme). Today ISO 14000 is by far the most popular environmental management system, except in Germany. During the 1990s there has also been alliances between firms and *Non-Governmental Organizations*, NGOs (Stafford et al, 2000). NGOs does not only tend to have a strong support among the general public, but they also tend to enroll specialists in subject fields which means that the alliances have a possibility of becoming mutual learning processes. Most important, though, when enrolling an NGO a large part of the general public is also enrolled. A traditionally strong actor is *legislative bodies* which has a great influence on how organizations interpret and concretized green work (Porter & van der Linde, 1995). It is common that large firms lean on regulators when making sense of green issues (Sandstrom, 2000), but this “leaning” is not a one-way process when also environmental legislation is socially constructed (Fineman, 1998).

Now, these examples of networking actors might be enrolled to an idea suggested by an organization. The idea could be about building a new bridge between Sweden and Denmark or about certifying a group of small firms in Sweden’s rural areas. In both instances, analyzing the actors enrolled in the process might provide an idea of why things developed as they did. It might also provide an insight into who were profiting from the way things developed.

Following the works of Callon and Latour, networks are not limited to human actors only (Callon, 1986; Latour, 1986). One of the unique characteristics of their work is the inclusion of both humans and non-humans, eradicating the division between a material world and a human world, and the platform for the science wars. In breaking this classic duality of “in there” and “out there” they seem to have stirred the scientific community. One interesting question for this study might be how this would affect the research process. Well, it would be revolutionizing because it means granting actor status to the ozone layer, carbon monoxide and gasoline. In two other ongoing case studies, I have been told by some of the interviewees how two animals, one in each case, have constituted important actors in symbolizing the organizations’ green work. It would probably be fair to grant them a place in the organizations’ networks because they have evidently been largely involved in deciding the outcomes. In one of the cases outlined further on in this paper, dioxins are enrolled by a local energy company. However, although this is a central aspect in actor-network theory it is not grasped by its fullest potential here. It is mentioned because it is an interesting path for future studies.

With the discussion so far in mind the idea of spotting these textures in the actions of firms is appealing. Studies on risk society, such as Tsoukas article on Brent Spar, much of Beck works and Shrivastava (1995), lack traditional case studies. The following section therefore attempts to illustrate some ongoing case studies of how firms make sense of their situations through green projects.

### 3. PROJECTS IN A RISK SOCIETY

#### 3.1 A note on method

The cases are located in the North Swedish county of Västerbotten, but the firms under study are not only local when some actors are also working on an international scene. The empirical descriptions are based on interviews with project leaders, company representatives, representatives of the municipal environmental committee, and on articles published in the county's two daily newspapers, Västerbottens Folkblad and Västerbottens Kuriren. The individual case descriptions are structured in order to first touch upon how a risk society might be evident in each case. This is followed by how the focal actor deals with the situation. Throughout the empirical part the focus is on projects initiated by the focal actor. Third, the descriptions tries to capture enrolled actors and fourth, the outcome is discussed.

#### 3.2 Green Zone – greening automobiles

The transportation sector is often singled out as a major villain in debates about our ecological situation. The project leader in this case argued that over 50% of the pollution originates from transportation (cars, trucks, planes etc). There is also a gloomy, or prosperous, future for the sector when it is expected that the industrial development in the Eastern hemisphere will double the market potential for transportation vehicles over the next fifteen years. The dilemma here being that if we already have large problems with transportation what will happen if we double the strain on the environment. This is the background to the following project.

An entrepreneur from the north of Sweden is turning the scene around. He argues that those who have the most to gain from a greening of transportation must be those who professionally work with and depend on the sector. Therefore he initiated and realized an ecologically sound automobile-block (car dealer, fast food restaurant and fuel station) in Umea. In the project he enrolled Ford, McDonald's, Statoil and a local car dealer in order to create the first **Green Zone** (see [www.greenzone.nu](http://www.greenzone.nu)). The whole project aims to be a symbol of how green issues could be integrated in the present way of doing business while simultaneously challenging those very ways.

Some information on the plant. It uses around 60% less energy and has reduced the load on the municipal water system by 90% compared to an ordinary establishment. It has reinforced grass in the parking lot, grass on the roofs, living filters and all components can be reused by future generations when no nails has been used. All the people working at the plant has gone through at least 16 hours of environmental training and they are to function not only as regular employees, but also as environmental ambassadors. The car dealer sells ordinary automobiles powered by petrol and diesel, but they also sell a model developed by Ford which is powered by ethanol. The entrepreneur was one of the main driving forces behind making Ford develop this car as he guaranteed a Swedish market for it. At the fuel station, Statoil, the ethanol pump has been placed at the most convenient location, closest to the register. The waste heat from McDonald's kitchen and Statoil's refrigerators is reused to heat the dealership. When servicing the car at the dealership you are also offered a bike or a bus ticket in return, and so on. As might be noticed, there is a lot to this establishment, but the point being that it seem to be unique and although the solutions have



individually been tried out before they have never been merged together. There is also an emphasis on not only using the latest technique, but a lot of work has been done to be perceived as credible when operating and marketing the establishment.

In the process leading up to the realization of the project, the entrepreneur had to enroll a wide range of actors. Ford, McDonald's and Statoil were crucial ones, but they were enrolled late in the process. One of the first actors enrolled was an architect with an expertise in ecological sound construction. He developed much of the entrepreneur's ideas and became an important actor in arguing that the facilities could actually be realized. In the early phases it was also important to establish a relation with the municipality when the project needed a piece of land and financial support. One of the politicians representing the social democrats, the ruling party in Umea, worked in favor of the project. He argued that the municipality has to support projects like this. Although the municipality did not hand out money to the entrepreneur, it assigned the project an attractive piece of land and reduced the fee for connecting the facility to the municipal water system. The politician also stated that much of the project's success from his point of view was the entrepreneur's ability to enroll people to his idea about greening transportation and about creating a state of the art example. *"He's very convincing."*

The general public met with the project mainly through local media when journalists covered the project several times before it was finished. These articles were predominantly favorable, touching on issues such as a high environmental concern, new jobs to the city and that Umea was in an international spotlight. This seem to have created a positive atmosphere around the project because there were seldom any critique in media, although there were at least two exceptions. The first occurred approximately half way through the construction when a union representative at the construction company argued that the working environment for the constructors were too monotonous when they could not use nails in their work. This critique never took off in a debate, however. The second critique created a larger buzz. It originated from the local competitors and focused on the fact that the municipality had shown partiality towards the project. Following this line of critique was also the political opposition, the Conservatives and the Liberals.

In media competitors officially stated that the new plant was clearly favored by the municipality in two ways: they received a reduced fee for the connection to the municipal water system and they were appointed an attractive piece of land. The piece of land offered lies right next to the E4-road at the northern approach to the city. Opposite the site lies one of the largest shopping precinct in town. The ruling majority in the municipality responded, however, by stating that any project that reduces the burden on the municipal water system with 90% will receive a reduced rate and any actor willing to develop a state of the art project in environmental technique will be met in a positive way by the municipality.

The project has been estimated to cost 70-80 million SEK (approximately 9-10 million EUROS). The entrepreneur had managed to arrange much of this amount himself, but the actors enrolled later on in the process, Ford, McDonald's and Statoil, all contributed financially to the project. According to the entrepreneur *"they got the knowledge cheap"*, but he has arranged the establishment in such a way that all firms involved has to rent the facilities from him. This has granted him an opportunity to include mandatory

environmental training for all staff at the site and a plan for how the knowledge gathered in the project will be integrated in the individual firms, in the leasing contracts.

Following the general perception of the project the wo/man in the street showed skepticism towards the project when McDonald's was enrolled. McDonald's had throughout time found it difficult to establish in Umea mainly due to protests from vegans and animal right activists. During the last couple of years McDonald's has, however, established two restaurants in town. The critique also had a flavor of a negative image of transnational corporations in general. Despite the critique (competitors, opposition and interest groups) the project seem to represent a positive image, both on a regional, national and international level. When discussing this with the interviewees they argue that people are not against the idea behind Green Zone as such. They are fond of it. It has more to do with the politics of the process leading up to its realization.

It was estimated by the project manager that the facility will guide bus loads of people every week and so far this has been the reality of the staff working at Green Zone. The symbolic value seem to be very high and the city seem to be proud of the facilities. The dealership has also increased their market share with over 50% since opening at the new site.

### **3.3 Dava heat station – greening waste and heat**

In this case, two issues are singled out as the background of the project: a growth in waste and a need for greener heating (less fossil fuels). As industry production and consumption increases so does industry and household waste. Simultaneously, taxes on fossil fuels and fees for waste deposit are raised which together with an increase in heat demand in general have led to efforts to search for alternatives. In Sweden, the government decided to make a national effort to build new heating stations based on incineration. The municipality of Umea was one of the early implementers and the station is expected to be both a financial and an ecological success. In early 2000 the **Dava heat station** (see [www.umeaenergi.se/dava](http://www.umeaenergi.se/dava)) was ready for production and it is suppose to meet much of the Umea-district's demand for heat. The organization responsible for its construction and management is one of the municipality's converted independent subsidiaries, Umea Energi. According to the company, Dava is *“currently the world's most energy-efficient and environmentally acceptable plant using waste as a fuel”* (Umea Energi, 2000).

As the plant's raw material largely consist of household waste, the project has not been met with all delight from the general public or NGOs. The municipality has during the last decade mainly due to a legislative pressure tried to establish systems for households to assort and minimize their garbage. They have initiated several stations, and even a commercial market for recycled goods, where people can unload their hazardous waste and recycle goods which they do not find useful anymore. All of this seem to have strengthened the signals to members of the community that garbage is not garbage after all. It is rather about resources, so when deciding for a new thermal power station based on garbage, the decision seemed to collide with earlier signals. Garbage is, however, marketed as a resource for warming people's houses and should not be perceived as garbage. A sticking point was, however, that when making households sort their waste, the quality of the waste used for incineration was reduced.

The project affects a reception area of over ten municipalities and will continue to do so for a long time. The project therefore received a lot of attention in local media. Before the station started its production local media published articles about how the new plant will have to import household waste from Norway in order to keep production at a sufficient level during winter time. Umea's garbage was not enough. There were also some anxious voices about what the plant might send through the pillar. In this phase Greenpeace entered the debate in a forceful way through articles about toxic pollution, but perhaps mainly through climbing up and occupying the 100 meters tall pillar. Following this was a heap of articles where the major actors in the debates were researchers at the department of environmental chemistry at Umea University, Greenpeace, Umea Energi, local media (and the general public), a mix of researchers at other departments at the university and the municipality.

Greenpeace claimed that the station could not guarantee that the smoke from the pillar would not contain dioxins which are harmful to people and the environment. Umea Energi argued that the station is based on the latest technique and should instead be perceived as a prototype for similar projects. Two professors at the department of environmental chemistry stated that what comes out of the pillar is not any more harmful than what comes down with the snow every winter. One of them even withdrew his membership in Greenpeace to demonstrate his point of view. The general public was split in the debate. One group thought the plant was good enough and agreed with Umea Energi and the researchers. Another group followed Greenpeace's line and some even argued that the station was a bad investment from day one. Obviously, there were groups of people that based their view on different assumptions and on different information. Who was right and who was wrong? Could it not be scientifically decided what comes out of the pillar? As it turned out, the more people got involved in analyzing the content of the smoke, the more the uncertainty grew.

What is interesting when following the case in media is that the project did not become a matter of intense discussion in local media before it was realized and visible for the local community. The debate also focused on dioxins, but there is more to the project. It seems as if the process leading up to the decision to build the plant was not under any critical media coverage.

Umea Energi has claimed itself as a winner in the debate and has even planned to sue Greenpeace for hindering production during the time they occupied the pillar. In a short note delivered to their customers, which are the majority of Umea's inhabitants, they argue that the customer should not have to pay for the Greenpeace demonstration. The public was still split, however. A debate on national television also brought the subject up with representatives from Greenpeace, the Swedish Government and "independent" consultants. The host of the program asked the Greenpeace representative: "*Now that Greenpeace lost the debate up in Umea, will this shake Greenpeace's credibility?*". The answer from Greenpeace was that they had not lost the debate when they had not received any convincing arguments from Umea Energi. Talking to an associate professor at the department of chemistry, there also seem to be a split within the department concerning the debate. Some favored Greenpeace's standpoint. In the end, though, the project was realized and the firm argued that the dioxins were not dangerous. New technology had seen to this and the station will be an economic success for the tax payers.

### 3.4 The Green Guide – greening “the other”

This next project has its origin in the rural areas of Västerbotten. People living here are experiencing a downside of the welfare state (see also Onyx & Leonard, 2000). The region is depopulated when young people are moving to the dynamic urbanized regions. Companies have little access to a competent work force and there are large distances between actors. This demands an efficient transport system which is not the case today. Railroads are closed, airlines will not take the area serious and trucks seem to be the only alternative. Large companies are also laying further areas of forest under their control and small sawmills are struggling. This area of Sweden might be to Sweden what the third world is on a global scale, namely “the other”. Much of Sweden’s wealth is based on natural resources from these sparsely populated areas, but the region do not feel justly treated when the dividends are shared. The region is more focused on surviving.

The project in focus was initiated by two municipalities and financed by a European Union-program and the governmental Small Business Initiative. The project was labeled “Miljovisaren” (**The Green Guide**). The aim was to assist small businesses with environmental management issues as those were perceived as important for the survival of the business community in the area. It was also seen as a chance to increase the firms’ competitive advantage through working with green issues. One of the tasks for the project management has therefore been to shift focus from large companies’ view of green issues to how the community (including the respective firms) can benefit from working with the issues.

Inherent in the project is therefore a natural connection to the rest of the society, which is mainly explained by the size of the community. Beside companies, actors such as the local municipalities and local schools are involved in the project by the project managers. It is hard not to involve them, though, because running a business in this region seem to be directly dependent on the community as a whole. This also ensures that in a project like the Green Guide different rationalities are mixed as businesses, the public sector and family life interact simultaneously and interdependently.

The project also differ from the other two when the participating companies are relatively spared from the critical analysis of media, researchers and competitors. Here, it is a question of the survival of the region and if the farmers have to use a small portion of artificial fertilizers than this is not put in relation to the uncertainty raised by a battle in media. However, the general situation in the rural areas is often a matter discussed in national media and this project also has its roots in this problematic situation. The project had at its closure in July 2000 assisted over a hundred companies in enhancing their environmental competence, which indirect led to an increased competitiveness through stronger credibility in the contacts with customers, suppliers and government officials.

As the companies often function as subcontractors to larger corporations they are often asked to fill out questionnaires about their environmental work. Have they implemented an environmental management system? Do they have an environmental policy? A strategic plan? Do their products contain any of the following substances...? The general perception of these questions is that although they demand some kind of environmental work what matters in the end for the large companies is not the natural environment, but the price tag. The ambition to engage in green work on behalf of the large customers are low, but

perceived as necessary. The motivation to do it for the sake of one's own region seem to be larger.

The project managed to enroll several hundred organizations and individuals. The majority of them were small firms, but the municipality, local schools, cooperatives and industry-municipality interest organizations were also enrolled to the idea. The support was strong, although local. This was seen as a downside by some of the enrolled actors. They felt that they were doing something good, but the people making the decisions which affect the region are located elsewhere and not reached by the project. Throughout the project a sense of resignation was mixed with a sense of willingness to fight.

### **3.5 Automobiles, heat and “the other” – links and distinctions**

The three cases all represent different examples of organizations dealing with issues singled out as characteristics of a risk society. However, the *symbolic pressure* seems to be different in each case. The transportation sector is today integrating green issues in their operation, but much of the current development regarding automobiles is targeted towards increasing the power of the engine while keeping fuel consumption at the same level. The automobile industry is also dependent on large investments which result in a situation not open for radical, or in some case even modest, change. Arguing the reasons behind the merger between Daimler and Chrysler, a Daimler executive stressed that you have to be among the two or three largest manufacturers in the world in order to survive in the long run. No, in the case of Green Zone there is one actor, the entrepreneur, who seem to believe in a risk society and is also willing to take a risk himself. It might therefore be adequate to argue that it is a case of one actor increasing a symbolic pressure on the industry through enrolling actors to the Green Zone project. This might be concluded partly from the critique from the competitors which indicated some uncertainty about what Green Zone was all about. However, the car-dealer has, as mentioned, increased its market share with 50% (there has been no explanation if this was due to the new location or new image, or both). The market for new cars in Sweden has also been rising since a new legislation on cars for official use was enforced some years ago. This might also be seen as strengthening industrial developments, which means a strengthening of a risk society and not an example of dealing with its growth.

In the second case, Dava Heat, waste and heat have been issues dealt with by almost all actors in the region. The present increase in waste and the long winters' demand for heat are issues dear to the region. In trying to deal with them, Umea Energi and the municipality have managed to increase the uncertainty among the general public. What are the side-effects of using garbage as fuel for heating houses? There is no single answer and the symbolic pressure has increased since realizing the project. Media has again proved to be a crucial actor in the development when allowing the debate to develop in local papers and even national television. The investment is huge, the consequences are long term and the doubt is evident.

In the third case, the Green Guide, there seem to be an awareness of a risk society. This might be explained by the fact that those living in the area are experiencing the downside more obvious than people in urbanized regions. The symbolic pressure is not the same as in the case of Dava Heat where Umea Energi received heat from media or in Green Zone where a new block of buildings were constructed right next to a major highway. Instead the

pressure seem to be on all regional activities and constitute the center of any project, even one aiming for environmental management. Ecological deterioration, de-population, social exclusion, and so on, are all part of the picture. Based upon this reasoning it might be concluded that all the projects are linked to a risk society, although in different ways.

Regarding the basic *idea for enrollment*, Green Zone's vision concerns an ecological sustainable automobile industry. In focus are new technological solutions both in service and maintenance, and in manufacturing processes. There is also a link to a change in behavior and values when present attitudes are not coherent with a sustainable transportation. The idea is also stretching the industry borders which seem to appeal to actors both within and outside the industry. However, a critical view might argue that it is just a better way of making profits and that the idea is developed through a neoclassical lens within the routines of simple modernization (for such a perspective see works on ecological economics, for instance, Costanza et al, 1997; Soderbaum, 2000).

In the case of Dava Heat the idea is to through new technological solutions solve the risk problem when handling waste and producing heat. Thereby a part of the idea is also to reduce the use of fossil fuels in the long run. The station is based on the latest technique and it is the best one available. However, the idea does not deal with risk problems upstream. On the contrary it demands a continuation in waste production and although the technique is state of the art, Umea Energi cannot guarantee that the content of the smoke will not harm humans and nature. The idea seem to have been created on a techno-economic platform, that is, the investment has to be economically viable and the way to solve the problem is through newer and better technologies.

In the Green Guide project there is an idea of linking environmental management in firms to the rest of the community and to the conditions of the rural areas. The idea was to work with environmental management seriously, but not in isolation when it cannot be separated from other activities This idea appealed to the community as the people living in the area seem to live closer to a holistic view of society. The rationalities underlying the idea seem to be more socio-economic, characterized by a tolerance towards alternative rationalities and by a holistic and long-term perspective on the development of society.

Focusing on the projects' *networks*, Green Zone was dependent on a wide range of actors in its realization. A large number of actors needed to be enrolled by the idea. Some of the more crucial ones were the architect, the politician, the employees and the media (and thereby the general public). As the idea appealed to a lot of actors who perhaps found it difficult living without their car, they were here given a straw legitimating continuous use of cars as a satisfier of their needs. A positive perception of the project therefore emerged. According to one of the politicians representing the Social Democrats the opposition was not against the idea as such, but against the role the municipality was to play in the process. All of this might indicate why the idea has been well accepted by such a wide range of actors. It changes at the same time as it does not. In the end it led to a diverse network of actors both outside and inside the firms' traditional networks.

The situation was different in the case of Dava Heat. As the project did not make it to a symbolic agora before it was realized the enrollment process leading up to the decision should be of interest too, but the empirical study is a bit thin here. In this pre-process, however, a smaller amount of actors were involved and the network enrolled was mainly

made out of politicians in order to make the decision. These actors effectively spoke for (silenced) the larger crowd. When the project was practically irreversible and the station was ready for production a debate was created. Here, Umea Energi and its critiques started enrolling actors to win the argument raised by Greenpeace. Umea Energi drew heavily on their own experts and on the two professors at the department of environmental chemistry. The critics was a scattered group to some extent headed by Greenpeace. Through the powerful symbolic impact of the two professors, where one of them made an exit from Greenpeace and both of them seem to have enrolled the dioxins, the debate was perceived as over by Umea Energi. However, there were a lot of actors who were affected by the project who were left outside the network. The network came to be dominated by experts and in effect strengthening a risk society. There was also an obvious lack of holistic perspectives in the process.

Perhaps the most successful enrollment process was the one undertaken in the Green Guide project. Here a diversity of actors with different rationalities joined the idea, but the major problem was the reach of the network. As the issues as perceived by the respondents living in the rural areas do not seem to affect people outside the rural areas in the same way as those living there, the network did not reach far. It stayed in the region.

The network enrolled is also a sign of how the project has succeeded. The *outcome* in the case of Green Zone is in a way successful when the project has been realized and visited by thousands of people already. There also seem to be a strong consensus on the idea itself, although the way it was realized seem to have sparked some debates. The strong consensus might be explained by the idea itself being a right idea at a right time. It is visionary enough without being a stranger to present conditions. Due to all the actions of a wide range of actors carrying the entrepreneur's idea it was, in retrospect, powerful. Through the actual Green Zone site he also managed to manifest this power in a non-human (Callon, 1986; Latour, 1986), although it can all be reversed when everything is being screwed...

The Dava Heat project displays a weak consensus and many actors still think the idea was poor from the beginning. Umea Energi has not succeeded in enrolling the actors affected by the project. However, the project has been successful from at least two aspects: it has been realized and according to traditional economics it will most likely be a success. Chances also are that the symbolic pressure will be lower in the future when it is difficult to reverse the project. Umea Energi, however, found out that in future projects they have to be ready to play on a symbolic arena in order to enroll support for their projects.

As mentioned in the Green Guide case they had a strong, but local network with a strong consensus concerning the project's idea. The locals do not, however, have a strong voice on a national level and are to some extent dependent on people speaking on their behalf. The project might therefore be considered successful when enrolling the actors necessary for carrying the project through in a good fashion. However, it might also be suggested that for the enrollment process to be successful, actors outside the rural areas making the decisions affecting the region ought to be enrolled too. In this respect the project was a failure as its network did not reach far. The results from the case studies are presented in the table below. The table summarizes the discussion in a set of simplifying key words.

Table 1. Three cases of company networking in a risk society

	<b>Green Zone</b>	<b>Dava Heat</b>	<b>Green Guide</b>
<b>Symbolic pressure</b>	Transportation – a villain	Waste-handling & heat-production	Living in a rural area
<b>Idea for enrollment</b>	Sustainable transportation	New heating technology	Community survival
<b>Network enrolled</b>	Diverse	Expert-led	Diverse, but local
<b>Outcome</b>	Strong consensus	Weak consensus	Local consensus

#### 4. BECK’S PROPHECY IN ACTU?

Returning to the prophecy suggested at the outset of the paper there is time to link the cases to the theoretical framework. Beck (1992) argues that as a risk society grows, industrial projects become a political venture and as large-scale investments ought to be based on long-term consensus a different perspective on who to include in the decision process might be needed. In other words, the decision processes need to be opened up. Also, as the processes become political, organizations’ traditional financial power are disturbed, or conquered, by a symbolic notion of power. The cases in this study all represent signs of a risk society, that is, affirmations of Beck’s prophecy, although in three different ways. A pressure is perhaps most evident in the case of Dava Heat. It is a large-scale investment which ought to be based on long term consensus. In simple modernism, Umea Energi would, tentatively, not have a problem implementing such a solution without considering enrolling a wider range of stakeholders. As the case suggests, Umea Energi fell in the same type of risk-trap as Shell did in Brent Spar (Grolin, 1997; Tsoukas, 1999), although Umea Energi to some extent came out on top.

In the case of Green Zone, the entrepreneur seem to have “jumped the gun” when he argue his awareness of a risk society. He has more or less increased a symbolic pressure on the automobile industry when showing that there is a high potential in greening the industry. He has in the process also created a pressure on McDonald’s and Statoil. Why should their new facilities look any different? The entrepreneur has raised the issue of integrating part of the knowledge gathered in the project in McDonald’s franchising handbook. Green Zone has also raised the uncertainty around industry and the natural environment. One can argue: if these actors get involved in such a project, are they not saying that something is wrong about the way they and others are conducting business today? Through recognizing their own impact and their own capacity to do something about it, the pressure on the rest of the community increases.

Following the Green Guide, the awareness of a risk society seem to be high. In Beck’s line of argument he develops a discussion concerning sub-politics, or self-organization (1992, chapter 8; 1994, pp. 37-47; 1999, chapter 5). In sub-politics the techno-economic



development, or corporatism, is invaded by political and moral dimensions and it all becomes a hybrid. Politicians are in the hands of companies and must find ways of standing up to the decisions they more or less have to make. Firms on the other hand are increasingly confronted by questions about increasing side-effects. Following the argumentation, Beck (1999, p 146, pp. 148-149) continues: *“A society that perceives itself as a risk society becomes reflexive, that is to say, the foundations of its activity and its objectives become the object of public scientific and political controversies.”* And further: *“In risk society theory ‘environmental’ problems are no longer conceived as external problems. Instead they are theorized at the centre of institutions.”* A suggestion here is that a growth in sub-political activities is evident in the rural areas of Västerbotten. They seem to be aware and the issues are to a large extent placed at the center. Beck’s discussion on sub-politics could also be linked to the development of the third sector, or the social economy, and a bottom-up perspective on social change (see Beck, 1994, p 23; 1999, p 18). Much of what is considered sub-politics could also fall in the category of social economy.

At the outset of the paper a figure aiming to capture the symbolic pressure and symbolic power in a risk society was suggested. Below is a repeat of the model with a tentative suggestion of the locations of the case studies. Green Zone is here placed in the upper left hand corner where the symbolic pressure is high and the symbolic power is high. Dava Heat obviously acted on an arena where the symbolic pressure was high, but they did not manage to enroll any significant amount of actors, although enough to realize the project. In the case of the Green Guide, a critical reader might wonder why the case is placed where the pressure is low. Basically, the actors in the project operate on an arena where a risk society is apparent, but in this particular project the pressure was not high. The way they worked with it nevertheless seemed to indicate an awareness of a pressure. Their symbolic power, however, is here considered high when the credibility developed towards customers and the rest of the region seem to be relatively high.

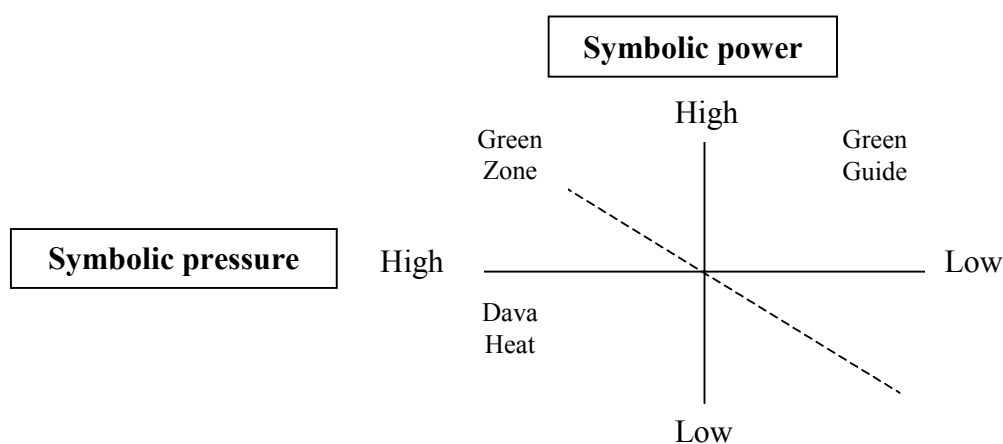


Figure 2. Symbolic pressure and symbolic power in a risk society – cases included

As mentioned earlier a basic assumption in this study is that the actors carrying power also are those who together with the project managers make sense of green issues. In the cases there are three different views of green issues which might be considered a result of the networks enrolled. It might also be the other way around, that is, the existing view leads to a certain actors being enrolled. Whatever perspective one choose, following the process gives a good idea of the different perspectives. Low

In the cases of Green Zone and Dava Heat there was a clash between rationalities and although it might be perceived as categorizing in black and white, one side seemed to be more techno-economic. In the Green Zone case this side was represented by the competitors and the opposition, and by Umea Energi in the Dava Heat case. On the other side there seemed to be a more socio-influenced, or common sense (Tsoukas, 1999), rationality. In the Green Zone case represented by the entrepreneur, the Social Democrats and the general public through media. In the Dava case, Greenpeace and a mix of other actors represented the common-sense rationality.

The techno-economic side of these projects seemed to be dealing with the issues through a set of black boxes created by and for a simple modernization. When one is in danger, such as in a debate on a public agora concerning a new heat station or a car-block, solutions are searched for within the same box which created the problems in the first place. When one of the boxes of simple modernization are opened up, for instance, the one on ecological consideration must be economically viable (traditional economics), there is a period of uncertainty. This is symbolized in Green Zone where “profits” seem to be made both outside the business in non-quantifiable terms (sounder environment) and, not to forget, inside the business in quantifiable terms (market share). All too often the quantifiable measures get the overhand, but in Green Zone the green profits are seldom acknowledged. Again, our modernistic heritage guide our analysis.

Arguing between rationalities should not be perceived as a problem, however. Here is where the Green Guide project constitutes a good example. The project inherently involves continuous conflicts, or clashes, when actors from different backgrounds, with different experiences and different occupations meet to discuss the future of their region. In the project there is a move to what Gergen (1999, p 154-164) refers to as a *transformative dialogue*. When deciding on issues which have consequences on the region everybody who wants to ought to be informed and a change to influence the process. Following the Dava Heat case, if Greenpeace and the other researchers at the university are right, that is, the dioxins are harmful to the environment and to humans, should not the inhabitants of Umea sue Umea Energi? The logic of simple modernization does not work this way, however. Winning such an appeal would also mean that the tax payers, the members of the community, would have to pay their own costs. Leaning on Beck again, society might be perceived as a laboratory and if something should go wrong, god forbid, responsibility cannot be allocated (Beck, 1992, pp. 62-69). There are, however, efforts made to allocate responsibility. There are examples of firms violating environmental laws and consequently instructed to pay a certain amount of money. This might be a way to deal with environmental problems, but basically it reinforces the view on nature as a pantry of resources for us to use.

#### **4.1 Company networking in a risk society**

In conclusion there are some findings which are considered demanding further highlighting. They might be considered both as practical advice and as ideas for further studies. As mentioned, it has been an ambition to raise issues as well as try to shed some light on important topics.

- **Enrollment of actors outside the traditional economic arena seem to enhance the power of the organization.** As the cases illustrate, firms have a lot to gain if a wider view of the stakeholders model is adapted. For firms in the rural areas this goes without saying as it is the only way to run a business. For Green Zone, the entrepreneur early on realized the importance of a wide acceptance and therefore started “campaigning” long before the project was realized. The Dava Heat case might conduct an example where neglecting this point became a lesson to consider in future projects. These three examples illustrate that corporate power is not solemnly about the balance sheet, but about enrolling new experts and new stakeholders.
- **Organizations rooted in rural areas seem to illustrate an awareness of a risk society more obvious than organizations situated in larger urbanized areas.** In urbanized areas there are high economic growth in a neoclassical sense. In Swedish national media these areas are singled out as what holds our country up. New jobs are created through a dynamic labor market and the growth in general (mainly measured as GNP) is high. In the rural areas, the situation is to a large extent the opposite and it is common knowledge that reflection is usually lower in times of success than in times of adversity. There are low dynamics in the rural economy and through a neoclassical lens the best cure is to export the things growing in the region, trees and people, as fast as possible. In these areas there are time for reflection and a suggestion here is that these people have in the process become aware of a risk society. One of the engines of dealing with a risk society is by Beck referred to as sub-politics. When analyzing the situation in the rural areas of Västerbotten a sub-political trend is evident.
- **Studies about organizations and the natural environment (including this) does not seem to grant actor status to nonhuman actors and their role in constructing reality.** There have been studies referring to this as a shift from an anthropocentric to an ecocentric management (Shrivastava, 1995; Gladwin et al, 1995; Purser et al, 1995). The point here is neither. Evidently we are humans which means we could hardly be anything but anthropocentric. However, we could grant meaning and actor status to our fellow co-constructors, that is, nonhumans. After all they are actors helping and steering our joint ongoing construction of the world we live in (and the scientific research we conduct). Latour (1986, p 277) argue that: “...why it is that we are linked together and that some orders are faithfully obeyed while others are not. These forces are heterogeneous in character: they may include atoms, words, lianas and tattoos. They are also, themselves, bound together to create machines and machinations that keep us all in place.” I keep pondering how this study might have developed if I had followed this method more closely.

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