

**Making Sense of Business -
Reorganizing Processes in Swedish Rail***

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Introduction

In Sweden, as in many other countries in Europe, there is an ongoing process of making old, bureaucratic public service organizations, such as Vattenfall (heat and electricity generation), Sweden Post, Swedish Rail and Telia (telecommunication), more business -like and capable of operating on a deregulated market in competition with other service providers.

This paper focuses on Swedish Rail and its line maintenance operations in particular. We analyse the efforts of line maintenance management to construct a business organization in accordance with the intentions and values expressed by top management, and within the web of interdependences which constitute Swedish Rail.

We see (re)organizing as an ongoing process of social construction among actors both internal and external to the organization. Internally, interaction cuts across hierarchical levels which cause problems of translation and interpretation (Czarniawska and Joerges 1996). The social construction of a new business organization include several dimensions, such as redefining the relations to significant others such as top management, internal and external customers and suppliers who will determine its autonomy, boundaries and social identity, the construction of internal coordination and control, and the definition and measurement of results.

Social (re)construction is interactive, which means that ideas and initiatives must be reciprocated by others for the new organization to gain legitimacy. We will illustrate and analyse communication in the line maintenance management team, and interactions between managers at the division level and those at the shop level. We will also analyse communication from top management, and the views which are expressed mutually by the line maintenance and its customers and suppliers. Our analysis will show how making sense of business and business organization, which is fundamental for social construction, is approached differently in different parts of the organization.

The purpose of this paper is to show that in spite of good intentions, organizing runs into a circular process which is sustained by the differences in sense-making but produces little change. On the contrary, since the new identity of the line maintenance is not reciprocated, change in work methods and behaviour does not take place and there is a tendency towards polarization and lack of trust. In this case it escalated up to a point where management was replaced and a new reform program was introduced.

We will first give a historical and organizational context for the study of (re)organizing, and then summarize the key theoretical concepts which will guide our analysis. The social construction is presented in a narrative fashion where the stories will be intertwined with additional references to theory.

The historical and organizational context

The railway system was started by private initiatives in the middle of the 1850s, and until 1937 some parts were still built by private enterprises and some by the state. Thus, the idea of railway traffic as a private business is by no means new.

In 1939 the Swedish Parliament decided to nationalize the railways and the modern Swedish Rail was born. The main argument for nationalization at that time was to ensure a stable economic base for railway transport for military and industrial purposes.

From the very beginning railway companies operated on an open transport market in competition with boats and horses. The competitive advantages of railway traffic were obvious until the middle of this century, and railway traffic reached its peak during 1930-1950. The competitive advantages in price, transport time and flexibility have declined since World War II compared with cars, buses, trucks, ships and aircraft.

Political priorities have shifted over time, which has changed the conditions for the operations of Swedish Rail. Parliament has presented a new traffic policy approximately every decade, with somewhat different economic and social aims. The policy decision of 1963 emphasized economic criteria and stated that all types of traffic systems should bear their own costs. In 1979 this was replaced by a policy of stimulating people to leave their cars at home

and take the train instead. It might be said that identity crises are a normal state of mind in Swedish Rail and something one has learned to cope with.

Brunsson *et al.* (1990) show that Swedish Rail, practically since its start in 1939, has been criticized for being too bureaucratic, not sufficiently market-oriented, and for a lack of effectiveness. Management's response has been to introduce reform programs to reorganize operations and stimulate a change of attitudes and behaviour. The administrative reforms have oscillated between the principles of centralization/decentralization and functional/regional organization. The researchers describe a reform tradition, quite stable over time and with the same problems and the same solutions recurring during the history of Swedish Rail (Brunsson, 1990; Brunson & Olsen, 1993) Their conclusion is that top-down reform programs, in this type of institutionalized organization in a rather institutionalized environment, are not likely to be successful in terms of the reformers' intentions.

The most recent reform program was initiated in 1988 with the aim of creating a market-oriented, competitive and effective organization modelled after private enterprises. Our study has followed this process closely on different management levels in the Line Maintenance Department, from September 1996 to October 1997.

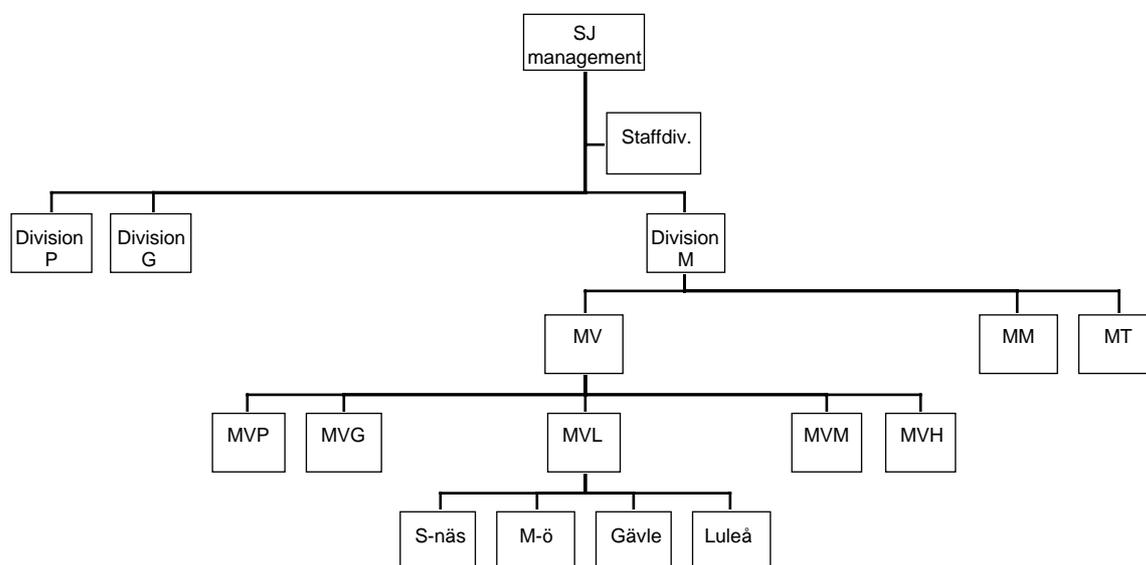
Line Maintenance

The organizational structure of Swedish Rail has been basically the same since 1988 when business divisions were formed, but within the divisions several structural changes have taken place. The Line Maintenance Department (MV) is the largest unit of the Machine Division (M). MV's chief task is to supply maintenance, repair and cleaning of trains and wagons to the Freight and Passenger Traffic Divisions. Technical (MT) and Material Supply (MM) are the other departments of the Machine Division.

The present structure of MV was introduced in 1995. Before 1995 maintenance work was organized in regional departments, all reporting directly to the division manager. In 1989 there were four regions which became two, North and South, in 1994. In 1995 maintenance was reorganized according to types of vehicle – locomotives (MVL), cargo wagons (MVG), passenger cars (MVP) and (MVM) – with shops located all over Sweden. In addition, there is one shop which is not specialized and continues to work with several vehicles (MVH). The business volume was about 1.5 billion SEK in

1996 and the number of employees is about 1, 800. See Figure 1, which identifies the organizational context of the Line Maintenance Department.

Figure 1. The organization of Swedish Rail



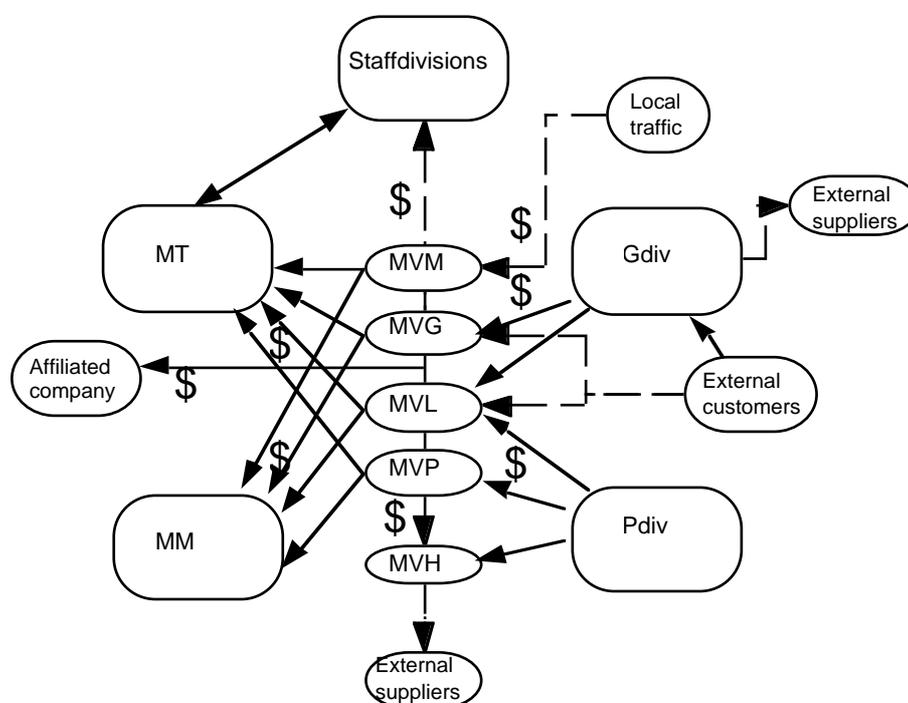
The Line Maintenance management team consists of the MV manager, the four vehicle managers called business line managers, and the manager for the separate big shop. Staff managers for accounting, human resources and quality development also attend the meetings.

Line Maintenance in a market perspective

The concept of market orientation was one of the guiding principles for the 1988 organizational structure. Business relations were defined between the divisions and also between different units within the divisions, resulting in a rather complicated pattern of customer-supplier relationships. MV is not only a supplier of repair, maintenance and cleaning services to the Freight and Passenger Traffic Divisions. It also supplies the same services to external customers such as private wagon owners, which accounts for approximately 10 % of the total turnover. The Freight and Passenger Traffic divisions also buy services from limited liability companies. The major ones are wholly owned by Swedish Rail. There are private companies who compete with MV for repair and maintenance service. Within the M division, MV is a customer of Materials Supply (MM). The business relations could be related to different levels in the organization: e.g. MV is also a customer of MM, MT, and central units like SJ Data by buying material, expertise or service. Work performed

by Line Maintenance is invoiced according to the internal contracts. The customer-supplier relationships are illustrated in Figure 2.

Figure 2. MV in the marketplace.



Guiding theoretical concepts and framework

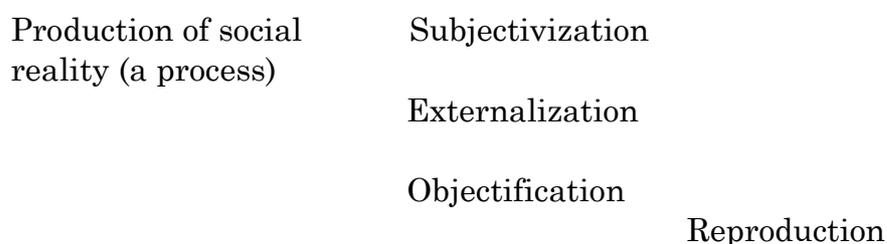
In our own sense-making of what goes on in Swedish Rail, we rely on some key theoretical concepts and frameworks which have been developed in earlier research.

Studies by Brunsson *et al.* (1990, 1993) used a wide-angle lens in time and space to give an account of the interplay between Swedish Rail and its environment. Various reforms initiated from the top were the outcome of this process. The reforms, similar in character, followed each other at regular intervals and the researchers coined the phrase "Reform as tradition". In this work we study how middle management engages in one of these reform programs. We will give a more detailed picture of how change is created in daily life among middle management. The focus is on how to construct a business organization and at the same time how organizational members construct an identity of being business-minded and doing business. We are trying to understand how change is constructed, rather than its content.

To organize activities is to give them meaning, structure and direction. Creation of meaning includes reconstruction of management roles and social identities. This is a process with no final result; hence, meaning or direction is not stable over time. Organization is more of a verb than a noun. We agree with Law (1994) who states: "There is a lot of ordering but no order." There are different modes for this process and according to Law (ibid.) one can distinguish between at least four modes – enterprise, administration, vision and vocation. The change in Swedish Rail is an attempt to change from the administrative to the enterprise mode. The administrative mode is the agency of the passive civil servant, which follows rules and formalities striving to generate the perfectly regulated organization. The enterprise is the agency of the active entrepreneur, taking opportunities, pragmatic and devoted to performance and results.

Norén (1995) gives a model for how to categorize different views of construction, that is, how the process of construction is working, what is produced, how it is produced and how construction changes over time. He distinguishes between production or reproduction and differences in time perspective. The production includes stages ranging from subjectivization to internalization of "objective" facts. To maintain an externalized and objectified reality, it has to be reproduced and becomes ever more institutionalized and taken for granted as long as the reproduction is functioning.

Figure 3. Model for construction.



Time

Time Internalization

Referring to this model, we would position our study along the line of production, in contrast to earlier research which is more concerned with reproduction and institutionalization.

The production process functions mainly through dialogue, which externalizes the subjective representations to yield objective facts, which in turn become internalized. Some authors regard talk as the only interaction to be studied in order to understand this process (Boden, 1994); but here we are also interested in other forms of action and interaction, such as texts, structuring of time, and rituals.

Sense-making

We use the concept of sense-making as presented by Weick (1995) as the main tool to structure our observations. According to Weick, sense-making is a process of active agents structuring the unknown so as to be able to act. There are several characteristics or dimensions of sense-making. The characteristics help us produce questions for our observations.

Sense-making is rooted in the construction of identity through interaction with others. To change your interactions is to change your identity. To define yourself is to define "the other" and vice versa. The main task of sense-making is to establish, confirm, test and maintain your identity. In Swedish Rail, one aim of the change process has been to transform interactions from an administrative mode to an enterprise mode, and to change identity to one of being customers and suppliers operating in a market. Do key actors see themselves as parties in such a relationship?

Sense-making is retrospective: we know what we are doing only after we have done it, when reflection and interpretation can start. We are living in a flow of experiences and information, and attention is focused on aspects which help us to create meaning. We need values and priorities to be able to direct attention and to interpret. The desired change in Swedish Rail also implies

developing new values and priorities where customer value, competitiveness and economic performance seem to be essential. Are these the values which are actually used to guide attention and behaviour?

Enactment is important in sense-making. Identity and retrospectiveness are connected with "sense". Enactment is related to "making", the activity of interplay with the environment, which is the process of choosing signals, interpreting and responding to the environment. Through enactment we construct the environment, and hence we get what we expect. Do key actors react to different signals, interpret differently and respond differently?

Sense-making is a social act in relation to, and together with, others. Even an internal monologue has a listener – the representation of the other. Social interaction works primarily through the language – the dialogue, conversation and texts. Weick has discussed the importance of shared meaning, but we also refer to Czarniawska-Joerges (1992) and agree with her statement that it is action rather than meaning which is shared. Shared action means that enactment and identity is reciprocated by others. How do shared meaning and actions develop during the change process?

Social interaction and thus sense-making are an ongoing process, and we are always in the middle of something. Tension arises when we are interrupted or disturbed by what we perceive as signals of change. The more rigid and standardized the organization, the more sensitive it is to disturbances. Organizations with looser structures and more flexible modes of organizing provide more alternatives for action and are less sensitive to disturbances. Emotions also awaken earlier memories, and the sense-making process will be affected by previous experiences. Swedish Rail is an old institutionalized organization with many experiences from reforms. What experiences impact on the current change program?

Sense-making is focused on cues extracted from all ongoing events and information around us. We choose the cues we recognise, the cues which fit in and help us to find a frame of reference. How cues are to be interpreted is often a subject of political power struggles between different positions and domains. The most important criterion for a cue's importance is its contribution to action. Sense-making is driven by plausibility and pragmatism rather than accuracy. We use what is attractive, useful and relevant. Which are pet ideas are used easily, frequently and with pleasure?

The above questions have guided us in the interpretation of our observations, sometimes explicitly but also implicitly.

Observations

This first phase of the longitudinal study has been of an explorative character, and primarily made in order to get to know the unit we study and to develop a design for further research.

During Sept.1996 to April 1997 we have mainly observed, recorded or videotaped the interaction between managers on three levels in MV during their scheduled, monthly meetings.

These meetings take place at different locations in Sweden, resulting in much train travel for the managers. Accompanying the managers and staff on these travels has given us an opportunity to follow some of the interactions off the record.

We have also conducted open interviews with managers and staff from MV and representatives from one of the customers, the Freight Traffic Division. The observations and documents from MV have so far been concentrated on MVG and MVL. To get to know the top management's official intentions, we have studied documents with special attention to the annual reports of 1988-1996.

We will first briefly describe the efforts of reorganizing from the top. We analyze how the new identity is communicated by the messages from the GD in the annual reports of 1990-1996. Which values and priorities are used? Which ideas are used easily and frequently? We then focus on Line Maintenance and present the story of the change process as it is told by middle management.

Going from an administrative to an enterprise mode of organizing creates several conflicts and dilemmas for managers on different levels. We will describe some of the dilemmas which we have identified and give examples of how they are perceived by the managers.

The dilemmas create a lot of tension which affects the construction of an identity and the enactment of an environment possible to cope with. We will show how this process is embedded in the interaction between the managers by reporting two observations from management meetings, and give some possible interpretations.

Finally we discuss how the differences in the construction process, between different levels and positions in the internal market, caused a breakdown and the initiation of a new process of reorganizing.

Reorganizing from the top

The construction of a business organization began again in 1988 after a long period of planning and consultancy work. A new General Director (GD) was appointed and he presented the new ideas under the slogan "New Swedish Rail". In the annual report from 1988 the change is described as "*a totally new business organization adapted to the market's demand.*"

Next year the GD describes the organization as "*becoming a modern, efficient and customer-oriented company*". The word "company" indicates that one is abandoning the image of being a state-owned public service institution, although formally the latter still applies.

When reading the GD's message in the annual reports of the 90s some words appear more often and we use them as a tentative answer to the questions "Who are we? Which values and priorities? What environment? What actions? Which ideas?". (See Table 1. A count of key words in the GD message in the annual report of Swedish Rail).

There are three dominating ideas communicated from the top. "We are effective in rationalization, changes and improvements (the reform tradition). We are steadily improving the results. And we are highly aware of our customers and competitors on the market."

Table 1. A count of key words in the GD message in the annual report of Swedish Rail.

	90	91	92	93	94	95	96	Total
Customer, Market Effectiveness/rationalization Result	6	8	7	7	5	6	9	39
Competitiveness Company Improvement, better Change State business agency Deregulation Environment Control Employee Business area Decentralization	7	8	6	2	6	4	3	35
	2	7	7	3	2	2	6	33
	2	2	12	3	3	1	8	31
	2	7	7	2	4	1	6	29
	8	5	2	3	4	1	3	26
	3	8	3	1	1	3	1	20
	2	6	6	2	0	1	3	20
	0	2	8	2	1	2	1	16
	1	0	4	3	1	4	1	14
	2	0	0	0	0	2	0	4
	1	0	0	0	0	2	1	4
	0	1	1	1	0	0	0	3
	0	1	0	0	0	0	0	1
Lines of text approx	80	120	120	70	60	80	130	

GD's voice on who "we" are:

1990 - *SJ is now becoming a modern, effective and customer-oriented company.*

1991 - *The business approach implemented is now a model for many railways in Europe.*

1992 - *...was the last of the reconstruction years as stated by the government.... The change program is carried through and the aim of result improvement is achieved....market-oriented organization introduced....characterized by an extensive rationalization and modernization phase.*

1993 - *...starts to give a positive effect on the business company's competitiveness...*

1994 - *During 1994 the train for the first time gained a higher market-share than the aircraft on the important route Göteborg-Stockholm.*

1995 - *A strong SJ strengthens Sweden and the competitiveness of Swedish industry on the European market...*

The above messages are all in the beginning of the text, and communicate an identity of being an independent company operating successfully on a market. Most of the texts end with discussions of political decisions and the importance of good conditions for railway traffic.

1988 - *There is a need for more money in Banverket for new desirable investments in the railway system. It is essential that the government and other stakeholders can provide these funds in the following years.*

1990 - *After Parliament's decision on EU it becomes even more important for Swedish Rail to perform international transport effectively. Therefore, it is necessary to improve the Swedish railway network.*

1991 - *The base for the interregional passenger and cargo network can diminish drastically if the deregulation is implemented in the wrong way.*

1992 - *The purpose of the deregulation, to create competition for Swedish Rail in all areas, has been achieved in practice. The debate over further deregulation of the strongly integrated rail traffic rests on unrealistic belief in positive consequences.*

1993 - *Social, economic and environmental aspects ought to guide the conditions and payments, which are levied on different transport media, more strongly in the future than they do today.*

1994 - *The previous government's decision to pursue a complete deregulation of the railway traffic in Sweden has not been implemented, and the question will now be studied further. Already today there is free competition on the regional lines. The same goes for the government contracts for unprofitable traffic. Parliament's decision to invest in the railway infrastructure is of great importance for the future development of Swedish Rail.*

1995 - *Parliament decided in December 1995 to deregulate the railway traffic in Sweden. The future will show whether it results in more and better rail transport. The competition is already very intense between trains, airplanes, trucks and automobiles.*

1996 - *If traffic tariffs for the different transport media take account of the environmental advantages of trains, the railway will acquire a stable base for the future.*

Here we see the contradiction between the ideal identity communicated in the beginning of the text and the perceived dependence on governmental policy, which influences competition, expressed in the end.

Which actions are reported?

1988 - SJ was reorganized from a functional to a divisional form, with decentralized responsibility for the result in different geographic profit centers.

Parts of the operations were organized into separate limited liability companies owned by SJ.

The infrastructure of railways was given to a separate civil service department. Instead of planning and controlling the infrastructure, SJ now pays for using it.

1989-1993 - New systems for financial control are adopted and an internal market for selling and buying services and materials between different units takes form. Managers on different levels are supposed to make up their own balance sheets and profit-and-loss accounts. Additional operations are put into separate companies.

1993 - The organizational structure is changed from geographic to functional, and new structures for customer communications are built up.

1994 - A quality program is launched.

1995 - Parliament decides on further deregulation of railway traffic. Freight traffic is now completely deregulated. SJ is planning for expansion of passenger traffic.

Technical development programs and investments are reported every year. Most actions are explained in terms of increased market orientation and competition. The ideals which are communicated are to be active, ahead of market demands, technologically sophisticated and in full control. However, there is an implicit contradiction between being active and the dependence on infrastructure, controlled by another government agency, on the declining Swedish economy and on the "unfair" competitive conditions decided by the politicians.

The change process - retold from the middle

Managers from different levels in the M Division give practically the same picture of the reorganizing process. Interviews, conversations and observations converge on the following account (direct quotations are in italics).

1988 - This was the year "*everything changed*". The M Division was formed. The maintenance was structured in five geographic regions. Most of the heavy maintenance was organized in a separate company.

1991 - Two new regional managers were externally recruited. "*My main task was to introduce some industrial behaviour and to make people business-minded.*" Shop managers were trained in accounting and business economics. Each shop was defined as a profit center with its own result budget. The shops competed with each other for volume of work.

1992-1994 - Regions were merged. In 1994 there were only two, North and South, managing the shops in each region. The transformation to a business organization was then said to be complete. "*People had learned to think business. We now knew how we spent the money.*" During these years competition increased. The internal market stagnated and the repair shops were fighting for volume.

1995 - The geographic structure is abandoned and a new hierarchical level, MV (Line Maintenance), is created between the M Division manager and the managers of the different vehicle types which organized the shops. There are four types of vehicles - freight cars, passenger cars, motor wagons and locomotives. The union at one big shop strongly objected to breaking up in different organizations, and this shop was allowed to remain as a separate profit center with maintenance of several types of vehicles. This shop was formally defined as a supplier to the other shops.

One of the externally recruited regional managers was appointed head of Line Maintenance. For most of our respondents, he personalized the change to an identity of *business-mindedness and cost-consciousness*.

The explicit motive for this reorganization was that shop managers had learned the new behaviour, but there were still problems with resource allocation, high costs and low productivity. Some also add that the competition between the regions and shops was too strong and better coordination was needed. In the new structure, managers of the maintenance

shops were supposed to distribute the volume among the shops to maximize the result for each vehicle type. The shop managers, though, were still making performance budgets and were responsible for their profit-and-loss accounts. The negative effects of competition were supposed to be taken care of on the vehicle business level.

A plan for the future shop structure was also produced, including where to expand, where to specialize and where to close down. At this time many shops still had mixed operations using people, competence and equipment for different vehicles.

Conflicting values present dilemmas for management

The identity of being business-minded, market-oriented, competitive, cost-conscious, efficient, and producing improved results has been strongly communicated top-down on several levels – both in words and in actions such as forming external companies, internal profit centers, recruiting people from the organizational field one wants to identify with, intensifying accounting and cost control, internal invoicing and relating to each other as customers and suppliers. In summary, it is an idea of organizing in the mode of enterprise.

However, Swedish Rail is still a public utility governed by political decisions. It is also an institutionalized organization with a tradition of top-down changes and organizing in the mode of administration, using large staff units, a lot of accounting and cost control people, many investigations and studies.

Different dilemmas for managers can be identified on different levels. The essence of these dilemmas is a conflict between institutional ideals. We have previously commented on the conflict between the ideals of an independent company and a utility which is still politically controlled. We will now turn to the findings from the middle management and maintenance shop level.

The first dilemma we call "Being business-minded without doing business". This dilemma refers to managers on both shop and vehicle business levels. The message from the top is clear: "you are responsible for the economic results, and we expect you to think business and to behave as in private industry". To be business-minded normally includes using your skills and capacity to take all the opportunities for business that you can. But according

to the structure and principles for distributing work among shops, shop managers were supposed to refuse to vehicles of the wrong kind, that is, reject work they still had the capacity and possibility to handle. It became obvious that this was a difficult principle to implement, and the vehicle business managers sometimes had trouble in allocating volumes where they wanted them. *"The only way to stop them working on those wagons is to close the shop."*

Local shop managers had good personal relations with people working on the trains. Sometimes the ideal of being market-oriented was then also used to obstruct the central adoption of the vehicle principle. *"They want to have their cars maintained here and we have to listen to the market."*

Maintenance activities are upstream in the value chain, and depend on internal customers on the internal market who are closer to the "real" customers. Many trains in traffic give a high volume, but it is not up to this department to get many trains in traffic. Work on the external maintenance market was also restricted by Swedish Rail's competition with other traffic producers. On both shop level and vehicle business level, the possibilities to increase business volume are small. The internal prices were supposed to be negotiated on the vehicle business level, but could be revised on the division level. This happened at the end of 1996, when payment which had been invoiced was paid back to one of the customer divisions. Obviously it was very difficult to do real business for managers on both levels, but during meetings and interviews this dilemma was not recognized. The "we" was identified as business-minded and this was never questioned.

The identity of being business-minded had to be constructed without doing business but through other actions. One way was to talk in business terms and to use the word "business" often. Business is measured in volumes, prices and costs. On both shop level and vehicle business level, one spent quite a lot of time and energy in counting, writing and talking volumes, prices and costs. These data processed in different ways were historical data in need of interpretation and explanation, but did not contribute to action by the maintenance shop.

The second dilemma we call "Being customer-oriented without any customers". It is related to the problem of being an internal supplier to customers under the same management. The message from the top was to be customer-oriented and to work on a market. This dilemma was explicitly discussed. Some voices from the MV management meeting and interviews about customer relations:

*"They can even go into our books and check.
We can't refuse to deliver and they can't refuse to buy."*

It is always problematic to be an internal supplier; the customer is always suspicious. How can we prove we are the best? They are customers and should not try to control us."

The customers also identified the problem but expressed it somewhat differently: *"They have not understood that we are their customer" or "We are not customers. We are the ones making the money for all of us, and their (MV's) task is to help us to do that by giving the service we need as cheaply as possible."*

The relation between MV and the Traffic Divisions is more like that of a subcontractor to one big company than a supplier-customer relationship mediated by a market. This is not the way managers on the MV management team defined the relationship. The "we" is a big industry doing business. That means to make a profit, to concentrate on profitable activities and to avoid the unprofitable ones.

The Traffic Divisions presented their plans for the future and demanded that the Machine Division make adjustments to their plans by special arrangements or/and investments. One could say that MV was forced to follow the market whether it was profitable or not. If it didn't believe in the plans, it could try to delay action but not refuse. If the Traffic Divisions didn't reach their targets and plans, this could (and did) create losses for the MV department.

All three divisions were profitresponsible and accountable for their profits based on the ideal of being independent and making agreements with others on a market.

The mistrust and dissatisfaction with each other was mutual on the divisional, vehicle business and shop levels, but could in some cases be coped with on a personal level. *"We are good friends, we don't bother about these business things, we try to find the best solutions together."*

We observed how managers within MV constructed the supplier identity. We did not have the opportunity to directly observe interactions between customers and MV. Talk about customers was mostly in negative terms, about not signing contracts, not coming in with the trains as planned, not paying what they should pay, not being able to make real plans, not respecting the structure for decisions and so on. This created and maintained a distance to the other divisions and a clear distinction between "we" and "the others". The dilemma of being customer-oriented without any customers could be coped with by redefining it to having customers who did not yet behave like customers.

The third dilemma we call "Being in control without having control". It is related to the enterprise mode of organizing and the ideals of effectiveness, translated into the existing structure by making all units into profit centers. Since there are few opportunities to affect revenues through pricing or quality, the ideal of cost control became the only practical one. The message from the MV manager was clear: *"The one who creates a cost should bear it."*

A principle simple and straightforward enough, but hard to realize. Swedish Rail is a big, complex organization with a network of actors mutually dependent on each other. A revenue in one unit is a cost somewhere else. How can one divide this in neat slices to make up separate profit-and-loss accounts?

M, MV, MM and MT are separate profit centers buying and selling material and service to each other. Most of the material was bought and stocked by MM, delivered to MV, and invoiced from MV to the customer. MT provided technical support but was also in charge of making up instructions for maintenance, routines and intervals for service on engines and cars. Some voices during meetings about this dilemma are presented below:

*"They (MM) don't buy from the cheapest supplier...
Now they (MT) have changed the routines so it takes five hours instead – who is paying for that?
One of my employees has been rewarded for a cost-saving suggestion. This improvement doesn't help us but somebody else – who is paying? He has been awaiting money for several months now."*

The problem of allocating cost was discussed on all levels, and the conflicts were pushed upwards in the hierarchy. A general opinion was that managers further up spent too much time talking about costs but on a very detailed level.

"They can spend lots of time debating who is to pay for cleaning up after a spew."

The dilemma of being in control without having control is well illustrated in this interview with a shop manager:

*"You are a shop manager?"
"No, I'm called 'profitresponsible'."
"How do you work to get a good result?"
"There's not much you can influence. The main thing is to keep the men busy, to look after the length of the breaks and so on..."*

Constructing an identity and an environment

The value conflicts and dilemmas caused tension and triggered a process of sense-making. According to Weick, the more rigid an organization, the more sensitive it is to disturbances and the greater the need to make sense of what's going on in order to be able to act. In a highly institutionalized organization such as Swedish Rail, we would expect intense interaction to establish both the identity and the environment in a reorganizing process with conflicting signals. We will illustrate this by presenting two sequences of direct observations of communication, with a suggested interpretation, and then also discuss how rituals are used in the process of construction.

Dialogues

The first sequence is from a monthly meeting on the shop/business line management level. The dialogue is somewhat shortened, and some parts marked with parentheses (....) are left out. SM is the shop manager, SE the shop controller, BM the vehicle business manager and BE the vehicle business controller:

(....)

SE: The staff costs are exceeded by only 68,000 kr.

BE: Why has the overdraft ceased like that? The forecast showed a much higher one?

SE: It is mainly the reduction of overtime. Direct costs – below budget. We haven't had any direct costs. Service and expenses – much below budget – we didn't buy any fuel oil last month. The electrical shop, though, has bought much more, laundry, working clothes. (....) (Every item from bookkeeping is commented upon like this).

SE: The depreciation is somewhat more than budget due to the wash...

BM: Have you made any postcalculation of the wash?

SM: Yes, we are now following that up.

BM: Will it give the money you estimated?

SM: Not really. (Interrupted by a knock on the door.)

SE: Concerning this wash, it is a bit difficult to follow up the direct benefits... We are washing the...but to do any proper follow-up is quite hard...how many washes and prewashes which are made in the system...rely on the orders but they are not made for, they are not making any priority of...when you wash it is called putting in a garage...you can't see by the code what....

BM: So it is not possible to do a follow-up, then?

SM: No, that's why it is hard to do a follow-up.

BE: It is not getting priority so that it's visible in the system.

BM: It is then you have to enter the Access system.

SM: Yes, exactly, and that's why we have asked for that program. Maybe we have been a little nagging about that.

SE: A is coming here tomorrow and I will bring it up again.

SM: Now we have to do the follow-up by hand, ticking off engine by engine, wagon by wagon...

BE: What does it look like, then, the follow-up done in that way?

SM: Yes, it is L who is keeping those figures. He is out right now.

BE: But what's your feeling? Is it a bad business?

SM: Oh, no, no, it's not.

BE: For some time it was a bit shaky?

SM: Yes, but it was because of the elks. How they were running...

BE: Yes, but there are other things too, aren't there,, e.g. the washing of baskets?

SM: Yes, of course, but still most important is...the baskets are coming in an even flow but the elks are the most important...

The dialogue continues and much time is spent on further questions and answers about what, how and when it's washed. Nothing helps to clarify if this was a profitable investment or not, or if something should be done to increase the benefits. Finally the actors seem content, and the dialogue turns to another item in the cost-accounting which is processed in the same way.

This interaction we interpret as an externalization of the subjective representation of being business-minded and in control. BM/BE are asking questions proving they remember the investment, earlier conversation about it, knowledge about washing activities and computer systems. They also externalize their demands for profitability and follow-ups. The responses are

reciprocal by giving answers and relevance to the questions. The process is only threatened by bringing up the elks. Who can control them? This response also triggers a very intensive and detailed dialogue about the washing activities. SM/SE externalize their ability to explain and give reports, showing that they attach great importance to follow-ups and control by doing it by hand. Implicitly they also blame the lack of computer support, not the elks, for not being in full control.

The dyads BM/BE and SM/SE also cooperate in confirming each other's actions. SM is indicating a problem but is interrupted by the knocking. SE takes over and changes focus to the computer system. Later on SM expresses satisfaction with the investment.

The second dialogue is from a meeting in the management group with all vehicle business managers and some staff people. The subject is a computerized system for control of work, orders, stocks and invoicing, called VOLF.

M 1: OK, how is it getting on?

M 2: Yes, that's a question but, yes, it is proceeding somewhat forward. He (P) has written something here (papers are distributed) and it is a lot about this...and operational codes and...they have to fit together. He also says he has been in shop A and in shop B, and now we have to get a decision telling that it is MT who is responsible for making up those packets of maintenance. What they are supposed to contain... So they don't make it up in each place... It has to be done in one place. The best is to get MT to do it. I suppose we have to get a decision about MT to take care of it (the group starts murmuring).

M 1: It will be brought up then, tomorrow, at the annual meeting?

M 2: Yes, and here is a part where one wants a decision so that the work can go on...

M 3: What does this mean, this about packets?

M 2: It is a packet containing both work and material, what you are supposed to do. Then you can just look it up in the book and then make the report...

M 3: But say you have... you divide the whole head in like 80 different actions, and you choose actions 1, 7 and 10. Then they form a packet?

M 2: Yes...

M 3: But what the hell, I don't think it is up to MT to decide that.

The group is very upset and debates the advisability of letting MT get the power over the content in operational codes. Some statements:

- *We have to be damned clear about the production issues. MT are not to pick at them... We give them the technical requirements.*
- *...if it is MT or the technicians here, but somebody has to take the responsibility...*
- *It has to be done in a practical way...at least we are working that way.*
- *I'm actually scared to death about MT putting their nose in this...*
- *I will use our technicians anyway, but then there is the question of responsibility...*
- *We cannot have the systems running the activities...*
- *Basical I think it is very important that we treat this issue productionally. I believe we can suddenly reach a position where the technicians get into the production again, which they did a while ago and would very much like to do again.*
- *OK, I take the debate with shops A and B. It is true they have recommended this, but OK...one puts the ball to each unit...*
- *Yes, the one who is responsible for the vehicle, an identified responsibility which is distinct...then who is doing what...but we are still the ones who are clearly pursuing this. This is a system for the shops.*

This interaction we interpret as an issue about identity and boundaries. "We" are the ones who are running this business and "they" are enacted as a threat to that. The suggestion about letting MT take care of the operational codes was raised on a lower level within MV and not from MT itself, but still triggered this process in the management group. It is on the MV level that it is most important to keep the boundaries to other units. The managers are the stakeholders.

The subjective representation of MT wanting to interfere and take control is externalized, as is the importance of not letting them in. This is agreed upon by the group. There is also an agreement that it is best to have the codes made up in one place, but this could not be solved within MV. The solution was to make up different codes in different places in MV.

For the observer, the group did not seem assured of this decision as a final solution of the problem of operational codes. The group still expressed some relief and satisfaction with the confirmation that they run this business and are able to resist the threat from the other technicians.

Rituals for meetings

Habitualization of behaviour, internalized and taken for granted, also communicates information about identity, "the way we are doing things here" (Berger & Luckman, 1967; Tolbert & Zucker, 1996).

The number of meetings and dialogues is a measure of intensity of interaction, and this was regarded as high by the respondents. There were many face-to-face meetings and often daily telephone calls between managers. This was at least implicitly questioned when the respondents asked the observer if it wasn't enough to attend one meeting since they were all the same. Some respondents were uncertain if it was good, and some were absolutely certain that they were close to the limit. The frequency of interaction could be seen as an indicator of the confusion and the need for developing a stable identity.

We have observed about 15 meetings in the unit. The structure of the meetings followed the same model and emphasized cost-consciousness and effectiveness as mentioned earlier. The agenda was made up by the manager in charge, and started with a follow-up of the previous meeting and information from top management. After that, one began to process the economic reports with a focus on explaining costs and deviations from budget.

Figures were often wrong due to the computer systems, wrong coding or time delay in accounting, and most of the time was spent on clarifying these "errors". Some time was then spent on reporting from different sub-units, preferably about improvements realized or planned. At the end there were one or more specific items for debate and/or decision. Without giving any explicit example we would assert that when an item included some dialogue about others, it was used in different ways to clarify the boundaries, to confirm the borders between "us" and "them" and to reinforce that "we" are doing the right thing and "they" are doing the wrong thing.

The meetings were intensive, about five hours long or more, and not much time was spent on coffee-drinking, eating or chatting. Every hour included a break of five to ten minutes for calls or personal business. In one extreme case the meeting lasted from 08.00 A.M. to 16.00 P.M. with nothing but coffee served. The atmosphere was informal, with lots of laughing and an attitude of straight forwardness and "we work well together". It was clearly allowed to openly criticize "the others", e.g. managers in other divisions and top management and their staff, but not to question each other in the meeting.

The rituals for meetings served as a mechanism for constructing the identity of being effective, cost-conscious and business-minded. Moreover, in the meetings the environment was enacted as hostile, not following or changing the rules, and trying to put MV in a bad position.

How to make sense – a summary

The above data show different characteristics of the sense-making process which were identified by Weick. It is not possible to present all material from notes, tapes and videos in this article, but a summary is provided below.

How are "we" and "they" defined? The "we" is an identity of being industrial, respecting the structure, thinking in business terms, knowing how and where money is spent and how to raise productivity. The "they", from different organizational units, break the rules, don't understand the structure, think more politically than in business terms and spend money without regard to productivity. The "they" which identify the "we" belong to the same organization.

Which values and priorities? Efficiency and cost control were emphasized most. Priority was given to the development of administrative systems to reinforce the control as a means to increase effectiveness.

How is the environment enacted? The environmental agents perceived as outside Swedish Rail, i.e. private customers and suppliers, were regarded as supportive, appreciative and good business-partners. The internal environment – other departments in the same division, other divisions, topmanagement and subsidiary companies – was seen as hostile, breaking the rules, being obstructive by not taking decisions, intruding in the activities, and not reliable as business-partners.

Which cues are extracted? The signals getting most attention were the ones from the immediate internal environment which were perceived as threats to the boundaries, or as deviating from the structure of where decisions should be made.

Which earlier experiences are used to interpret cues and to plan action? References to history are made to some years before, when the M Division was structured in regions and MT had more power. These are used to rationalize

the assumption that technicians are struggling for power and don't want to support MV. Other experiences relate to top management and its relations with politicians and unions. Mainly they underpin the prediction that the top won't take any decisions which are politically sensitive, and that top management and unions will cooperate to prevent negative political decisions.

What is shared action? Shared actions are closely related to values and priorities. To act as a manager meant to work hard, use time well, be cost-conscious and no enjoy luxury, no personal secretaries, no status symbols, no visible privileges. This contrasts with the shared view of staff and union – "they" don't work hard, they are always trying to get more and do less, they are spending time without working. Language is also shared action and here it was expressive, male, and a mixture of military and shortened Swedish/English business terms with some technical jargon.

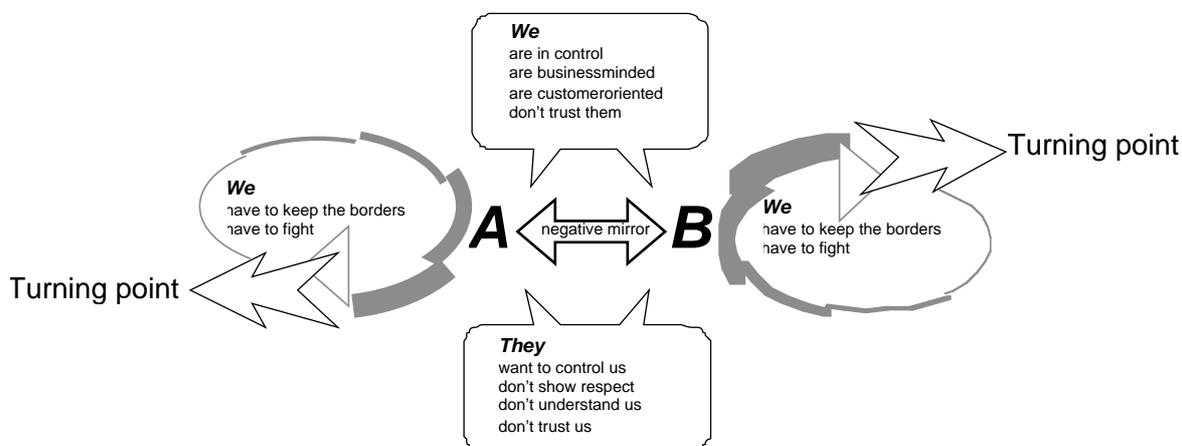
What ideas and interpretations evoke most pleasure and are used most often and easily? Most laughing occurs when talking about "them", about central staffs having a hard time, being too big, too inefficient and too far from reality, or about technicians afraid of losing power. It is notable that some of the managers are technicians themselves, and there are many technicians employed by MV, but there is a great difference between "the technicians" and "our technicians" which is how it is expressed in the dialogue.

The turning point

So far, we have described how managers on different levels in one unit coped with the value conflicts and dilemmas arising in the process of changing the mode of organizing from administration to enterprise. This was a top-down change process implemented by reinforced administrative instruments, which in itself was contradictory by organizing in the administrative mode to get to the enterprise mode. The dilemmas described intensified the need for sense-making and construction of identity. We conclude that the identity of being in control, being business-minded and customer-and market-oriented was constructed through intense interaction developing shared values and priorities, and enacting a hostile environment which functioned as a negative mirror to reinforce the self-image. (See Figure 4.)

Figure 4. Reinforcing the businessidentity.

The sense-making process



A and B could represent anyone - M, P, G, MV, MT, MM

Similar processes were reproduced, and other divisions and departments seemed to construct identity and reality in the same mode as the MV.

They are always the closest other actors. The ones further away, like external customers, are enacted as satisfied and appreciative.

We would make an idiographic interpretation of our data. The process we have identified on a micro level will thus be reproduced also on a macro level. We find some evidence for this in the annual reports, where the GD is implicitly and explicitly warning the politicians against further deregulation and is describing the competitive disadvantages for Swedish Rail in Sweden which follow from government regulations, but where he also refers to Swedish Rail's good reputation abroad and well-known effectiveness among railway companies. On the macro level politicians and government officials are the closest actors.

During the autumn of 1996 two events demonstrated the conflicts created by the mode of sense-making in different units. First, top management recruited a new manager for M externally without informing or discussing it with anyone in MV. Using earlier experience, this was interpreted as a devaluation of the MV manager and an attack on the identity of MV. Second, Swedish Rail met with an economic crisis and the identity of the whole organization was attacked in public. The pressure for cost reduction increased and Line

Maintenance became a target. This was also perceived as an attack on the identity of MV. A typical reaction was:

"Why only on us? We have made several suggestions about cost reductions, like closing down shops, but were not allowed to."

These events caused additional tension and intensified the process, as MV's identity was threatened and in need of defense. The relations with "the others" became more and more suggestive of an enemy, and the borders between "us" and "them" more and more closed. This process was mutual between departments in the division and between different divisions. For some time there were hardly any meetings on M divisional level but, on the contrary, even more meetings on the MV level.

During the spring of 1997 the new division manager hired consultants to analyse and diagnose the MV unit. In the autumn of 1997 a new change program, designed by the consultants, was introduced with the aim to reduce costs by about 15% in 18 months. At the same time there was a change in management of MV.

Conclusions

The turning point implies an interruption of the reorganizing process as it has been managed in MV. The breakdown is the result of a number of interacting events which have undermined the legitimacy of the reorganization process. The market downturn, particularly for the Freight Traffic Division, made it clear that a major restructuring of the maintenance system was required. Before the actual figures came out, there were complaints of the high costs of maintenance. The divisions refused to pay the internal invoices. The appointment of a new division manager for M was generally interpreted as a sign of the opposition against MV. Before the appointment of the division manager, one noted the unwillingness of top management to intervene and reinforce the rules for business and market orientation which had been communicated. Reorganization terminated when the new division manager indicated that he would start a new process with the support of external consultants. Despite intensive and honest efforts to shift to an enterprise mode of organizing, it did not succeed since the internal environment and the strong interdependences did not accept the new norms.

Even though the shift in organizing mode failed there was a rise in productivity during the period 1992-97 which allowed an increase in traffic without additional maintenance costs. In view of the new market developments, however, the improvement was insufficient, which was taken as an argument for initiating a fresh reorganizing process. We will never know whether the existing organization would have been able to handle the new situation. A program for reduction of maintenance costs by 200 MSEK in 1 year was presented to top management, but did not prevent the turning point in the existing process.

The initiation of the new process has delayed the savings which were foreseen by the existing restructuring scheme, but management has promised a higher figure for the savings in the new reorganization process. The outcome remains to be seen but according to the existing schedule, it should be realized within eighteen months.

References

- Berger, P. & Luckmann, T. *The Social Construction of Reality*. Middlesex: Penguin, 1967.
- Boden, Deidre. *The Business of Talk - Organizations in Action*. Cambridge: Polity Press, 1994.
- Brunsson N., Forsell A., Winberg H. *Reform som tradition - Administrativa reformer inom Statens Järnvägar*. Stockholm: Ekonomiska Forskningsinstitutet, 1990.
- Brunsson, N. & Olsen, J.P. *The Reforming Organization*. London: Routledge, 1993.
- Czarniawska, B. & Sevón, G. (eds.). *Translating Organizational Change*. Berlin: Walter de Gruyter, 1996.
- Czarniawska-Joerges, B. *Exploring Complex Organizations - A Cultural perspective*. Newbury Park, USA: Sage, 1992.
- Law, J. *Organizing Modernity*. Oxford: Blackwell Publishers, 1994.
- Norén, L. *Tolkande företagsekonomiska forskning*. Lund: Studentlitteratur, 1995.
- Tolbert, P.S. & Zucker, L.G. The institutionalization of institutional theory. In Clegg, S.R., Hardy, C. and Nord, W.R. (eds.) *Handbook of Organizational Studies*. London: Sage, 1996.
- Weick, K.E. *Sensemaking in Organizations. Organizational Science*. Thousand Oaks: Sage Publications, 1995.
- Weick, K.E. *The Social Psychology of Organizing*. Reading, MA: Addison Wesley, 1979.