Temporality and joint commitment in railway planning

CEFOS Working Paper 10 2010

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Abstract

Decisions are seen from a phenomenological lens focusing on their characteristic temporal and flexible structure of meaning. In a bureaucratic social setting emphasizing procedural rules, legal constraints and formal rationality the temporality of decisions can prove to be problematic. The physical planning of transport systems infrastructure projects is characterized by high level of social, material, technical and regulatory complexity. Drawing on ethnographic observations of railway planning meetings this case study explores how decision processes over time are shaped by the inter-dependency of planning actors, their co-ordination of action and adaptive expectations. The paper contributes to the understanding of the interrelatedness of decision processes in organizational contexts, following a "messy" logic of practical and material considerations, negotiations of what is to be considered to be of value, and not the least, post-hoc rationalizations.

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CEFOS Working Paper 10 Temporality and joint commitment in railway planning

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ISSN: 1653-3895

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"The decision itself is neither something in the past nor something in the future, and it is neither the one side nor the other of the alternative" (Luhmann 2005, p. 88)

Introduction

A cornerstone of Edmund Husserl's phenomenology of time is that, in terms of consciousness, time is subjective, immediately sensed and lived within a 'temporal horizon' that structures perceptions and action (Gell 1992, p. 221f). Influenced by Husserl's theory on the restriction of experience and determination of meaning, in his theoretical account of the ontology of a decision, Niklas Luhmann focuses on the frame of reference and reflexivity of the observer's perspective (1995, p. 82 ff., 294–7; 2005). What is or what is not a decision depends on the relationship between actions and expectations, and on the attribution of intentions within a time dimension (Luhmann 2005, p. 85). According to common sense, decisions are acts of selection and choosing between alternatives. However, decision making has a complicated temporal structure, and a decision can change in quality depending on when it is observed, i.e., before, during, or after the decision making (Luhmann 1995, pp. 296–7; 2005, pp. 85–9).

... the decision before the decision is a different decision from that after the decision. Before the decision it is an open alternative; in other words, it is an open contingency. Several decisions are possible, or so it is said. After the decision the contingency becomes fixed; and we only see that the taken decision could have been different. (Luhmann 2005, p. 89)

The emergence of 'alternative horizons' of a decision implies a reframing of choice, and thereby of the decision and its meaning structure (Luhmann 1995, p. 297). A decision is thus inherently flexible, having both an open and closed meaning structure (Luhmann 2005). According to its paradoxical ontology, a decision is closed since it freezes a choice between a selection of identified alternatives; at the same time, the choice and the alternatives can be reassessed, opening them up for reinterpretation and restructuring the meaning of what a decision 'is'. The temporality of decisions and decision making therefore offers multiple reference points for an observer, pointing to the past (no longer changeable), present, or future (still in flux) (Luhmann 2005, p. 89) and allowing flexible, relative horizons of choice.

Another fundamental idea in Luhmann's theory is that decisions instigate action, in turn creating expectations about future action. The crucial point is that a gap exists between decision and action, since action does not follow from decisions in any logical or causal sense. A decision indicates commitment to future action by confirming an intention to act (Bratman 1999, 2007); in doing so, it 'absorbs' uncertainty about future courses of action. As it confirms an intention to act, a decision directs future action by accepting the premises for a decision and using them as conditions for new decisions to follow (Luhmann 2005, p. 96). However, the temporal continuity of decisions generating succeeding decisions from the original premises can be broken; decisions are often reconsidered and changed, so that new choice horizons are created from which new decisions arise. This is part and parcel of the reflexivity of the human mind (i.e., reasoning and communicating according to multilayered external and internal perspectives on self and other) within an 'ecology of life', enabling the adaptive planning of action in the face of changing environment and life circumstances (Ingold 2000).

In everyday life, reopening decisions is not always a major problem. We often change our decisions and intentions to act, due to new information as well as altered preferences and priorities, and by re-evaluating decision stakes, options, and benefits (Bratman 1999). In collective action, when we do things with others and depend on their actions to reach goals, changed decisions can be more problematic. In collective action, we must communicate reopened decisions and any changes of plans. For example, we are planning to paint a house together and have a collective intention to carry out this project; if I decide that I want to paint it red instead of blue, as originally decided, reopening the house colour decision must be considered and negotiated. Everyday life is full of such events, when we reopen collective decisions and negotiate what new decisions should or should not follow from those already made.

Social conventions govern how collective intentions are remade; for example, any change of plan affecting others' commitment to action should be justified (Bratman 1999). In everyday circumstances, demands for such justification are not very strong, and that a person simply no longer feels commitment to an earlier collective decision (e.g., to lunch at a particular restaurant or draft a research application with colleagues) can constitute a bona fide argument for a changed line of action. However, the stronger the commitment of the others to a joint decision, the stronger the demand for accountability and for justifying the reopening of a previous decision. If I know that my colleagues have spent considerable time working on a joint research application, the argument that I no longer feel committed to the application would create hard feelings. I would be expected

to present a much more reasoned argument for the group to decide to stop working on the proposal.

In the administrative bureaucracy domain, reopening formal decisions is even more cumbersome. Bureaucracy is a form of hierarchical, task-specific social organization driven by formal rationality adhering to explicit procedures and in which decisions must answer to criteria of rationality (Simon 1947). In a bureaucratic organization, issues are dealt with according to a legislative order of principles, by officials with jurisdictional authority to make decisions (Weber 1978, Vol 2. p. 956 ff.). Although signed by an individual official, a bureaucratic decision is collective in that it is anchored in an organizational hierarchy: (nontrivial) decisions must be in line with the opinions of key administrators or experts (Simon 1947). Since legal justice norms prescribe that similar cases should be treated similarly, and that decisions must be stable, transparent, and reasoned, reopening official decisions made by a bureaucratic organization cannot be done ad hoc, but must follow precise standardized procedures, being processed as formal complaints or legal appeals. A bureaucratic organization is also characteristically text based, generating masses of stored and filed documents that capture most organizational operations, decisions, and reasons for decisions (Weber 1978, p. 957). The files constitute a kind of collective bureaucratic memory of past decisions, choices, and reasons for selecting one alternative rather than another. They comprise a storehouse of documented 'fixed contingency' or (frozen) past horizons of choice (cf. Luhmann 2005, p. 89).

In the public domain, policy implementation generally requires decision making processes that build on communication and on the cooperation and coordination of administrations and organizations (O'Toole Jr 2003; Pressman and Wildavsky 1973). The complexity of joint action (Pressman and Wildavsky 1973) derives from the many critical 'decision points' at which decision problems, alternatives, benefits, and risks must be negotiated and agreed on. The sequencing of critical decision points according to an 'assembly line structure' of interdependence (O'Toole Jr. 2003, p. 147) offers veto points to key agents. In the planning context of an administrative and bureaucratic organization, many participating agents are interconnected within a complex institutional framework. Planning can be viewed as a 'shared cooperative activity' (Bratman 1992) in which decisions are nested in past decisions that condition current commitments, thereby framing what new decisions can or cannot be made. Policy implementation planning therefore incorporates an inbuilt 'path dependency' deriving from actor interdependency, the need for action coordination, and the role of an actor's 'adaptive expectations', in that they

must plan their own actions in light of how they understand other actors' planning (Pierson 2000).

This paper presents a case study of reopened decision making in railway planning. The reopening of decisions is problematic in railway planning, since decisions are nested and have consequences for other decisions (Kleindorfer et al. 1993, pp. 12–3). We will examine the social conditions necessary for decision reopening, especially how planners' expectations about the planning of others affect their understanding of prior decisions and their motives for reopening it and putting the issue on the decision table again. This actualizes sense making, reaching agreement, and the assigning of responsibility and accountability in decision making (Vidaillet 2008). We will do this by exploring the nested structuring of a temporal trajectory of decisions emerging in the planning of a new railway route. By following the framing and reframing of a decision problem through a planning process, this study addresses the reframing of the decision premises of a railway planning 'problem' and how this contributes to the restructuring of a choice horizon. The aim is to shed light on the social establishment of a horizon of choice, the construction of its validity, and its re-evaluation during a planning process.

The specific case to be addressed concerns the creation of a material structure, an 'engineering artifact' (Suchman 2000), that is, a road/railway crossing. The decision is clear-cut, since there is only one problem and two alternative solutions: the road and railway must not cross on the same level (according to transport policy goals for road safety), so the road should cross the railway line either under the tracks or on a bridge going over them. The decision problem must be solved and no third alternative is available. This railway planning project has a limited capacity to accommodate ambiguity deriving from conflicting interpretations or goals, since the road must cross either under or over the railway line. Other policy areas, such as education, often harbour a variety of conflicting goals and procedures without giving rise to glaring policy failures. To reach a bona fide policy solution, the planners (representing various authorities and stakeholders) must agree on one solution, and the choice will have consequences, including logistical ones, for further planning.

What initially appears to be a fairly simple decision problem (i.e., mapping the pros and cons of the two alternatives and selecting the optimal one), given that the decision is part of a history of past decisions generating future decisions, turns out to be complicated. The temporal trajectory of the problem, previous decisions made, the existence of veto points, and the fact that decision making is a shared cooperative activity involving several mutually committed interdependent agents (Bratman 1992) who make decisions based on

their interpretations of the commitments and intentions of other planners and stakeholders, add up to a complex social dynamic far from interest-based calculations of 'hard facts' as the game theory model of group decision making would predict (Kleindorfer et al. 1993, p. 241).

The case

The Swedish government has decided to invest SEK 10 billion (about EUR 1 billion) to upgrade road and rail capacity on the Norway-Väner Link north of Göteborg in western Sweden. An existing single-track railway will be upgraded to a double-track line dimensioned for X2000 trains at speeds around 200 km/h. The new railway line promises reduced travel time, shorter intervals between departures, commuter stations, and environmental benefits. Among several sub-projects is a route comprising approximately 14 kilometres of double-track rail, including three tunnels 124-200 metres long and a 400metre-long bridge. The route traverses rural farmland as well as hilly areas covered with dense pine forest and it passes through two rural communities having just over 500 inhabitants each. The area is rich in archaeological and historic heritage and in natural conservation sites, including the Slumpan river that passes through a spectacular canyon. The railway currently crosses the canyon on a steel bridge, built in the 1950s, that will be replaced by a new railway bridge; the construction and building of this bridge in a highly sensitive natural environment presents a major challenge for the project.

Another challenge for the project is that the railway line crosses an open landscape of pasture that, according to geological investigations, consists of unstable clay. This particular landscape was noted in the railway investigation to be of unique value. The new railway line will cross several roads where all level crossings must be replaced by overpasses or underpasses to avoid collisions between road traffic and trains. One road is the 2018, which will cross the railway line where it passes through open pasture a few kilometres north of the community of Upland. The passage through forested hills calls for several tunnels and deep mountain cuttings. The local communities and municipality generally favour the project and the selected route.² Some citizens and affected landowners are critical, but mostly regarding specific features that affect their own interests con-

¹ Dnr F07-2988/SA20, 2007-03-13

² Building commenced in 2009 and is planned to be completed by 2012. The railway investigation report was completed in June 2006; the matter was referred by the National Rail Administration to the government in March 2007 for permitting, which was finally granted and announced in May 2008. In the meantime, the Rail Administration project management team of planners and designers has worked on the railway plan for the selected route. The project budget is SEK 1.2 billion.

cerning access to land, land use, and crossings with roads in the area (the last issue has been a major source of local contention).

This study builds on fieldwork conducted between March 2007 and mid autumn 2008 by means of participant observation of project planning meetings, reference group meetings (including authorities such as the County Administrative Board, the municipality, the regional public transport company, and the Road Administration), and consultation meetings with stakeholders, all concerning planning for the railway project. The meetings were documented in field notes taken during observation. Data also include internal documents, minutes, official reports, National Rail Administration (henceforth 'Rail Administration') handbooks and standards, and records of informal discussions with officials, planners, designers, and consultants. In all, 23 meetings were observed.

Railway planning in brief

Land use planning for infrastructure facilities such as railways, for power plants, waste disposal facilities, or other technological facilities, actualizes many possible consequences. Planning must take into account an array of intended outcomes, unwanted side-effects, and uncertainty (Boholm and Löfstedt 2004). Furthermore, the societal benefits or harms associated with a project, including risks to humans and the natural environment, are seldom understood and prioritized according to a single frame of reference (Boholm 2009). Planning entails complex joint action (Pressman and Wildavsky 1973) involving many stakeholders, local communities, citizens, and authorities with diverse sectoral responsibility, power resources, and rationales for making decisions (Boholm and Löfstedt 2004; Flyvbjerg 1998; Suchman 2000). The coordination and cooperation of institutions and agents over time is crucial for successful ordering of the material 'engineering artifact' (Suchman 2000).

Railway infrastructure is state owned in Sweden, and the national government determines investments in new lines and decides whether to upgrade or close down existing lines. The Rail Administration³ (RA) is responsible for the railway system, including provision of railway tracks, the signalling system, and electricity for trains, while the trains are run by private or state-owned companies that rent rail capacity from the RA. In 2001, the RA production unit was deregulated and opened to market competition. Railway planning is regulated by the Railway Building Act (SFS 1995:1649) and the Envir

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³ The Rail Administration was an independent government authority up to 1 January 2009, after which several Swedish transportation authorities (for road traffic, aviation, railway, and maritime transport) were merged to form the Swedish Transport Agency.

ronmental Code (SFS 1998:808), while numerous other regulations and standards apply to a variety of railway planning responsibilities – technical, organizational, economic, legal, and environmental. The Railway Building Act states that consultation with affected property owners, municipalities, and regional boards and 'others who might have a substantial interest in the matter' (SFS 1995:1649, Ch. 2, section 5) is mandatory. Although providing stakeholders with certain legal rights, railway planning adheres to a Swedish technocratic regulatory style of consensual negotiation between governmental interests and elite stakeholders but involves limited public participation (Löfstedt 2005).

The regulatory framework for railway planning establishes a number of major official decisions, such as licensing, as veto points (O'Toole Jr. 2003) that bear on the legality of a project. Large decisions grow out of numerous internal negotiations that involve the Rail Administration (including officials, planners, and experts), consultants, agencies, governmental bodies (including municipalities and County Administrative Boards), and various stakeholders (including local residents). Major decisions that require legal licensing call for successive decisions in which planners are expected to consider various factors: benefits to society, local communities, and the environment; negative consequences, risks, and uncertainties; technical alternatives and solutions; costs in terms of time and money; and – not the least – legal and administrative demands and conditions. 'Large decisions generate nested series of smaller ones. This is the typical "decision in principle" followed by elaboration and implementation in even more narrowly focused choices' (Langley et al. 1995, p. 271).

The railway planning stage is preceded by an investigation to identify several alternative spatial corridors for the railway line. These alternatives are described, compared, and assessed in terms of their consequences for traffic and society, environment, landscape, and building technique. The railway investigation also includes viewpoints and opinions on the alternatives from a broad array of stakeholders (i.e., other authorities, local citizens, and interest organizations). After the RA has selected one corridor as the 'best' alternative for a future railway line, it presents the supporting arguments and applies to the government for a permit to continue with detailed planning of the chosen corridor. This railway planning stage includes the design of the line, bridges, tunnels, barriers, road crossings, and electrical installations, taking into consideration land use, landscape, and the environment. The plan must also take into account safety issues regarding future train traffic, technical installations (e.g., overhead lines for electricity and signal systems), construction logistics, and construction facilities (e.g., construction roads and locations for storing excavated material) along with organizational, technical, economic, and prop-

erty rights issues. An environmental impact assessment according to the Environmental Code is mandatory. The property rights of owners are topical in this stage. Consultation with property owners, municipalities, regional boards, and other authorities are vital to the process of formulating the railway plan.

The railway planning process results in a substantial document that precisely describes the design of the line. The law requires that the plan be made public if it entails substantial consequences for the environment, public health, or nature resources or if it encroaches on private property. After being made public, the railway plan can be legally approved by the RA board on the condition that the County Administrative Board has no objections. The County Administrative Board is the public administration unit at the regional level with a mandate to coordinate various interests from a national perspective. It has supervisory powers to ensure that legal requirements are met, and it is an environmental licensing authority issuing permits and setting conditions for permits for activities that are potentially harmful to the environment, in accordance with the environmental code.⁴

Like other railway projects, the studied railway planning project is managed by a project leader responsible for ensuring that the consultants deliver a plan according to the contracted agreements. The Division South of the RA has contracted planning services, in this case for the railway plan, the environmental impact assessment, and the so called "systems document" describing the new rail way line in detail, from the firm Rail Administration Consulting (RAC). The project leader is accountable to the RA hierarchy and is responsible for the financial and time planning of the project. Other Rail Administration officials taking part in the project include various experts on economics, environmental monitoring, quality control, information technology, purchasing, safety, and traffic control. The RA specialists possess competence in, for example, technical coordination, environmental impact assessment, and property and land management. The RA Environmental Impact Assessment (EIA) co-coordinator and the land negotiation specialist participate in the project on a regular basis. The RAC head consultant is responsible for delivering the following: plans for the physical routing of the railway line; designs for the signal system and contact cables, railway bridges, tunnels, and overpasses or underpasses; and

4 See http://www.lansstyrelsen.se/vastragotaland/English/Departments.htm for a description of the

Västra Götaland County Administrative Board.

⁵ Rail Administration Consulting (RAC) was founded in 1998 and its competency in railway projecting and planning formerly belonged to the Rail Administration. Since 2001, RAC has operated on the market, competing with other consultancies for rail planning contracts from the RA.

the EIA document and all investigations pertaining to it, such as risk assessments and impact on flora, fauna, landscape, and cultural heritage.

The social organization of planning work

Railway planning is carried out under strict organizational and bureaucratic conditions, involving administrative logic (including schedule, budget, and legal constraints) and decision logistics, with a strong interdependency between decisions within a formal sequential planning process. Numerous planning problem-solving decisions must be made for the process to continue. The planners spend much of their working time in meetings that constitute the modus operandi of railway planning, since they serve to coordinate planning and action to ensure that agreement is reached regarding the interests of authorities, stakeholders, and expert advisors. The railway project planning group is multiprofessional and incorporates a broad range of expertise. At meetings, participants can express reservations and articulate demands, making viewpoints and positions transparent in a semi-public space. Much of what is discussed at meetings concerns cooperation and the coordination of planners' intentions and actions.

Inside the group of planners: The project meetings

Apart from numerous smaller meetings to coordinate work and discuss solutions for specific tasks, the project meetings considered matters relevant to the entire project. These meetings were generally monthly and fulfilled several functions: coordinating planning among specialists and sub-tasks, detecting critical issues by including a broad competency in discussions, and allowing the RA project leader to control and supervise the planning process in terms of scheduling, cost, and consultant 'deliverables'. The meetings were structured using a formal agenda, provided by the RAC contract manager, that included a checklist covering numerous items; every meeting included going through this list to check whether or not the issues had been dealt with, and the current status of each item was noted.

The project meetings were led by the RA project leader and the RAC contract manager. The meeting agenda came with the invitations, which were e-mailed to participants in advance. A project meeting normally included RAC project leader and contract manager, the RA land negotiator, EIA co-coordinator, and occasionally other 'in-house' RA experts with competencies in relevant fields; additional participants included consultants sub-contracted by the RAC in the fields of, for example, geology, tunnelling, hydrogeology, or environmental assessment. A total of 50 consultants were contracted by RAC to

complete various tasks pertaining to the railway planning project; not all were present at all the project meetings. These consultants included experts in geology, hydrogeology, tunnel engineering, railway construction technology, risk assessment, and 'comprehensive' planning (i.e., competence in how various parts are integrated into a whole planning document). The project meetings covered a wide range of perspectives: practical, technical, theoretical, political, administrative, organizational, legal, and informational. The issues discussed included construction and design of roads, tunnels and bridges, flora and fauna, the behaviour of wild animals, landscape characteristics and values, geological investigations of ground conditions, farming and agricultural conditions, future traffic safety, stakeholders and their claims, and what opinions other authorities might have on the project..

I attended the project and reference group meetings regularly. The participants took little notice of me, however, when controversial remarks or comments were made around the table, when someone might ask me jokingly, 'Are you writing this down?'. At the meetings, I took a seat at the conference table along with the others and opened my notebook. I never considered using a laptop for note taking, because I wanted my presence to be as inconspicuous as possible. I took notes almost constantly during the meetings, even when the topics under discussion were highly detailed and technical and seemingly far from what I was interested in. Since the meetings were also attended by a secretary who took minutes, which were distributed to all participants including myself, I could compare my own much more detailed notes with the minutes. A problem I initially encountered was the highly specialized nature of the topics of discussion, the unfamiliar expert terminology and internal jargon. After a while, I became more accustomed to this world of expertise and to the technical aspects of railway planning, and was able to follow more easily the subjects discussed, at least in broad terms.

Communicating with other planners: The reference group meetings

Another type of meeting was the reference group meeting, a forum for various outside agents and stakeholders, such as the County Administrative Board, the municipality where the railway was to be built, represented by a senior official from the technical and planning administration in charge of municipal planning and zoning issues, and by officials from the environmental administration in charge of environmental protection and biodiversity, the regional public transportation company, and the Road Administration, together with leading project members, such as the RA project leader, the RA environmental expert, the RAC project leader, and the contract manager. While the County Ad-

ministrative Board and the municipality were represented at every reference group meeting during the study period, the regional public transportation company and the Road Administration participated only occasionally. The reference group meetings were chaired by a RA official who had led the pre-investigation of the studied railway line project. The chair was thus well acquainted with the project background, and he demonstrated this knowledge by occasionally intervening to remind discussants of past concerns and considerations.

The minutes of the reference group meetings were distributed to participants, and each meeting started by reviewing the minutes of the previous one. These minutes were sometimes revised if someone thought that what had been recorded was not entirely accurate. The minutes were not considered official documents; rather, they constituted semi-official documentation for internal use that confirmed project status and history and, most importantly, displayed the various actors' positions and concerns regarding the myriad of issues discussed. The reference group took an interest in many matters, such as the transformation of the old railway line into a cycling route, what to do about central Upland and the area near the future station area, how to access local bathing lakes, how to organize the transportation and storage of excavated materials, and how to design road underpasses and overpasses.

What to do with road 2018?

Preliminaries

The railway investigation planning stage, which aimed to identify, specify, and weigh the alternative routes for the proposed line, had included substantial consultation with the County Administrative Board, municipalities, public authorities, stakeholder organizations, and members of the public. In the railway investigation report the open landscape north of Upland was identified as possessing value that should be protected from encroachment by the new railway line. This landscape was described as follows:

North of Upland is vast open landscape around the Lillån watercourse. The landscape is essentially a flat outer part of the canyon landscape surrounding Slumpån ... The landscape is characterized by long unbroken views. Farms are situated at the edges bordering on the forest. (author's translation)⁶

Later in the same section on environmental impact, the report characterizes the open agrarian landscape as follows:

The landscape has great potential as a source of knowledge of the agrarian and settlement history of the area. ... In general, this district has been treated gently by modern society. The major change in the landscape was the construction of the railway in the nineteenth century, when the station in Upland was built ... The railway was located on ... ancient farmland dating to prehistoric times. (author's translation)⁷

To protect the 'open agrarian landscape', the railway investigation report argued that road 2018 must cross under the railway line to minimize its visibility in the landscape.

The public road 2018 needs to be relocated under the railway. The line of the road and its design needs to be investigated in greater detail in further planning (author's translation).⁸

This decision regarding road 2018, set forth in the railway investigation report, posed a complicated decision problem in the railway planning stage. We will now examine in detail how the planners came to disconnect their upcoming decision concerning road 2018 in the railway planning stage from the previous decision in the railway investigation stage, and how they succeeded in reopening the decision that road 2018 must pass under the railway line.

Road 2018 is going under

At a project meeting early in the railway planning process on 24 April 2007, one RA official stated, referring to the the railway investigation of road 2018, that it would be 'advantageous to have the road passing under the rail track'. However, he also noted that ideas

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⁶ BRVT 2006:01, 2006-01-25, Norge Vänerbanan. Dubbelspår Velanada-Prässebo Järnvägsutredning inklusive miljökonsekvensbeskrivning (MKB), utställningshandling., p. 37.

⁷ Ibid., p. 45.

⁸ Ibid., p. 37.

diverged within the project as to whether this was actually the 'best' alternative, since 'geotechnology wants to have it pass over the track, but an overpass would be too dominant in the landscape'. At this project meeting, a conflict between preserving the undisrupted view of the landscape and geotechnical considerations was implicit, since the dominant view was that the railway investigation decision should determine further planning.

At the next project meeting, on 29 May 2007, when the road was discussed again, the RAC project leader stated 'We are going under'. In discussing a local landowner who wanted to modify the railway route to accommodate a private road, the RA's environmental coordinator emphasized the value of the area: 'The open landscape is Upland's most valuable asset. This area must not be unnecessarily subdivided. There must be access to the area for walking. It is very beautiful down there'. The underpass solution was not questioned at this meeting and, at the reference group meeting on 11 June 2007, the RAC project leader stated explicitly: '2018 is not going over! We are going under'. No objections were raised.

However, two months later, at a project meeting on 22 August 2007, the solution for the 2018 underpass was discussed more thoroughly; this time, the conflict between the value of the open landscape and the geotechnological issues hinted at the earlier April project meeting was openly addressed. The RAC project leader said: '2018 goes under. The Road Administration has looked into this. There may be geotechnical problems. The underpass road would be expensive. It will go into stiffer clay. The groundwater can be lowered with pumps'. It was now recognized that there were geotechnical problems to be solved, but it was not suggested that the decision should be reopened due to these problems. A discussion followed about what technical investigations and measurements would be needed and about local landowners, who had started asking questions about what was going to happen with the road and railway crossing. At this juncture, four months after road 2018 had first been raised as an issue at a project meeting, the underpass solution emerged as problematic, due to several factors: geotechnological difficulties, groundwater, economic factors, and local resident concerns. However, these problems appeared solvable and the underpass solution was not questioned.

At the reference group meeting on 18 September 2007, at which participants discussed the upcoming EIA public consultation meetings for the railway plan, the RAC project leader stated that road 2018 was going under the railway but that groundwater was a problem. It was also mentioned that a Road Administration representative would be present at the public consultation meetings to inform about the alternatives for the roads and crossings (as noted earlier, the project involves several road crossings apart from

2018). A hydrogeological expert would attend the consultations to answer questions about groundwater. The Road Administration representative pointed out that the arguments for roads going over or under the railway line had to be clear. After discussion of road/railway crossings, the County Administrative Board official raised a question and said that he had a message from Deputy County Governor Göran Bengtsson, who had given 'clear signals regarding the Trollhättepaketet9 that the County Administrative Board should be supportive and adaptable. We are the long arm of the state. Göran Bengtsson has spoken to the Department. This does not have to be in any notes'. By this statement, the County Administrative Board official signalled that his administration was not intending to make trouble, meaning vetoing the railway plan, but was committed to mutual action (Bratman 1992, 1999). After further discussion about the roads, the RAC project leader commented regarding 2018: 'Of course it is possible to construct a bridge, but there would be terrible embankments. The County Administrative Board would have a fit. The line is kept as low as possible in the open landscape. It is under two meters [high]'. The chair commented on this, saying that the solution reached by the railway investigation was excellent; the road passing under the railway. This was the first time at a project meetings or reference group meeting that the road overpass alternative was even mentioned (although rejected).

Snow, rain, and hydrogeology

A month later, at the public consultation meeting in Upland on 23 October 2007, the solution for road 2018 was one of the issues presented. The RA message was that the road should go under the railway at a depth of eight meters; a higher profile was undesirable, since the train traffic would then produce too much noise. Interestingly, the 'open' quality of the landscape was not mentioned at the public consultation meeting as a decision parameter for the underpass; the focus was instead on train traffic disturbing noise. Presumably, this negative effect was deemed to be of more interest to local residents than the 'open' landscape quality, understood to be of more concern to the County Administrative Board. Lively discussion ensued, and there were many comments and questions from the many local residents in attendance (around 100 people had come to the meeting) about

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⁹ In 2004 the Swedish government decided to invest 10 billion SEK in road and railway infrastructure to support the SAAB car industry in Trollhättan from the threat by General Motors (the then owner of SAAB) to move car production abroad. This deal is popularly described as the "Trollhätte package".

road 2018. Issues raised related to risks of flooding during heavy rains and of snow drifting in winter in the road underpass.

At a project meeting just a few days after the EIA consultation meeting of 26 October 2007, lessons from the two EIA consultation meetings were reviewed and discussed among the planners. The solution for road 2018 was discussed extensively and, as can be seen from the following dialogue, the process was now moving towards reopening the rail investigation decision.

RAC consultant: The consultation meeting wants 2018 to go over. There were a lot of questions about snow and water.

RA project leader: This will be difficult with the County Administrative Board!

Geologist: The preferable solution is for the road to cross on a bridge. On the west side, there is a small hill with firm ground. The problem is hydraulic – pressure from the ground. The road will cut into rock. A trough solution [for the underpass] must be sealed. It must be watertight. The rock can be blasted, but then water can leak under the trough. We can permanently lower the groundwater table, but that might affect the surroundings. I have always believed that the road should go over.

RA project leader: I think this has gone very far!

Geologist: There are no tightening layers of clay.

RA project leader: We ought to have given geology a higher priority from the beginning.

Someone: What is the cost?

Geologist: It costs money to build an embankment. The embankment must be high and must be strengthened. All alternatives cost money. [The embankment] will not affect the railway line or the groundwater. If we go under, there will be wells, pumping stations, additional strengthening of the railway embankment, and maintenance measures for lowering groundwater. This is a risk.

RA project leader: We said earlier that there would be enormous embankments 8–9 meters [high]. The main argument was the open landscape.

Geologist: It is my duty to point out complications.

RA project leader: The values are the fields and the open landscape. We need to evaluate this very carefully. We need to sit in a group and decide on the best alternative.

EIA consultant: The problem with passing over was dealt with in the railway investigation.

RA project leader: Those who live nearby will have a huge bridge quite close.

A discussion developed about what a possible road bridge would look like.

RA project leader: The pre-investigations of the roads were poor. I was not involved. The one who did the railway investigation has quit. Can't we just make the railway plan public without including the roads? We need to sit down soon and take into account landscape and geotechnology and sharpen the arguments.

This meeting initially saw conflict between the geologist and the RA project leader. The geologist identified several difficulties pertaining to the underpass alternative, while the RA project leader was concerned about the change of course in the planning process, i.e., reopening the decision to choose the underpass and the RA's commitment to the County Administrative Board on this issue. The County Administrative Board was expected to favour the underpass option, since it values the open landscape, which would be obscured by a huge road bridge. Another complication for the RA project leader was the local stakeholders, both those who favour an overpass, since they perceive the underpass as risky for traffic, and those who favour an underpass, since they live nearby and it would not encroach on their view. Economic considerations entered the discussion but did not resolve the choice, since both alternatives would be expensive. The project leader then distanced herself from the railway investigation, arguing that it was poor in quality and noting that the person in charge had left the organization (leaving no one from the RA in a position to defend the underpass alternative). The matter was resolved consensually, via new meetings to determine what to do with the problematic crossing and to identify new arguments for and against the decision alternatives.

Re-evaluating the open landscape: An emerging new horizon

At the next reference group meeting, on 30 November 2007, the RA chair noted that road 2018 was a 'difficult question'. When the road and underpass solution were discussed in more detail, the RA EIA coordinator said that the geotechnology was difficult due to the high groundwater table and that there was a risk of snow drifting in winter; she said that 'The Rail Administration has a problem, since it [i.e., the road] will go under and geotechnology does not want that'. Some pictures were shown to illustrate what a road bridge over the railway would look like. The bridge depicted was said to be six metres high. The RA EIA coordinator, when looking at the pictures, said, 'I feel that the bridge

gets [visual] support from the terrain behind it, if you look at it from the perspective of the meadows'.

This marked an important shift from the earlier position that a huge road bridge would be devastating to the landscape view. The initial argument in the rail investigation was that the landscape was an invaluable asset that must be protected, so an underpass was decided on for road 2018; a highly visible and aesthetically dominant construction such as a road bridge was deemed out of the question. The municipal official supported the new perspective on the road bridge as no longer in contradiction with the landscape, by saying that the solution for road 2018 was 'not a big issue' for the municipality. The RA chair then asked the County Administrative Board official the critical question, namely, what he thought about the matter, but did not receive an answer. This juncture marked a turning point for the decision about what to do with the 2018 crossing: the County Administrative Board, which, in the railway investigation, had expressed such strong concern for safeguarding the open landscape north of Upland, was now silent. Discussion continued about how to deal with road 2018, and the government officials from the County Administrative Board and the municipality clearly had no interest in starting a dispute over the solution for 2018.

At the project meeting three weeks later on 18 December 2007, the possibility of an additional public consultation with local stakeholders regarding road 2018 was discussed, but no date was mentioned. The RA project leader hinted that a decision on road 2018 was going to be made by the administration 'this week'. The discussion about road 2018 continued at the project meeting on 29 January 2008, when the RA project leader announced that the administration had decided that road 2018 would cross over the rail track on a bridge. She also acknowledged that the other principal agents, the Road Administration and the County Administrative Board, had not yet taken a position: 'We will go over! The Road Administration is looking into this. The County Administrative Board is looking into it. If the County Administrative Board says stop, we have to accept that'. A public consultation meeting with local stakeholders regarding road 2018 was again on the agenda, but it was now discussed whether an additional consultation was actually needed; this could be taken to mean that, since other key actors were leaning towards the bridge crossing, no additional support from local stakeholders would be needed. At the reference group meeting a month later on 29 February 2008, some time was spent discussing road 2018, and it was announced that consultations with local stakeholders had been held. The RA project leader then summarized the decision problem: 'We recognize that it is not good to go under. We have lowered the profile [of the line] in this area. The

geotechnological conditions are not good. There is a lot of water. And then there is the landscape. So we will go over instead. We have reported to the County Administrative Board and, luckily enough, the County Administrative Board has the same view'. The County Administrative Board official supported the project leader by stating that the issue of the open landscape had been reconsidered by the Board: 'To dwell on landscape values – nothing to quarrel about'. The municipal official in charge of environmental monitoring, however, made the point that road 2018 constituted a delicate matter for the municipality due to local public concern.

Reopening and closing the decision on 2018

At this point, the road 2018 question seemed to have been settled in the project. The County Administrative Board was not prepared to fight the bridge proposal for road 2018 by advocating the protection of landscape values, which was what the RA officials had feared. The controversy between the geotechnical experts and the project leadership could then be resolved when it became clear that the County Administrative Board was unwilling to oppose the project on this issue.

Initially, the road 2018 underpass alternative, advocated by the County Administrative Board in the railway investigation phase to protect the open landscape, was not reconsidered in the railway planning project. Although the geotechnological experts voiced reservation about this alternative in the beginning, the technical arguments alone were not strong enough to reopen the decision at this juncture. A problem built up in the EIA public consultation processes when it became clear that the local stakeholders had strong arguments against the underpass (i.e., risks of flooding and snow drifting), arguments that reinforced the geotechnical arguments (i.e., high groundwater table, complicated and expensive technology, and uncertainty about the construction process). Resistance to the underpass solution from both the technical experts and the local stakeholders had built up and was becoming difficult to manage. A problem for the project was that the County Administrative Board was understood to be very much in favour of the underpass since it wanted to protect the open landscape from the intrusion of a highly visible road overpass.

At the February 2008 reference group meeting the matter was closed, since it was clear that the County Administrative Board was unwilling to make an issue of protecting the open landscape. The County Administrative Board had come to a point at which it had to prioritize between a) protecting the open landscape and b) commitment to the railway planning project. These two objectives were not in conflict in the railway investigation phase. The conflict emerged and mounted in the railway planning stage, when more

detailed planning decisions were considered and when the board prioritized commitment to the project rather than the landscape. The 'stable alignment' (Suchman 2000) of the project was thereby resumed; the agents tacitly agreed that the decision that road 2018 should go under the railway line was reopened and a new decision was made: that it should go over. The decision, however, was not explicitly reopened. Instead, there was a transition from one decision state to another; arguments built up opposing the original decision, and agents organized to promote an alternative. When it was established that no forceful agents opposed the bridge alternative, choosing the bridge was established as a necessary step to continuing the project planning. So the reopened decision was not the outcome of a decision but of a changed decision context; the question of road 2018 became embedded in a different context, creating a new choice horizon and demanding another solution.

Concluding discussion

This case study illustrates how railway planning decision making involving officials, consultants, and experts, organized within a highly regulated administrative setting characterized by strong demands for efficiency and legality, emerges through interaction and anticipation of the intention of Others. Expert competencies as well as stakeholder interests and priorities are negotiated and balanced in accordance with an administrative logic of efficiency, i.e., producing predefined outcomes given a set budget and timeframe and following standardized rules. In this setting, decisions develop, interact, and are redefined (Langley et al. 1995, p. 276) as negotiated interim achievements rather than definite final choices resulting from a rational process of assessing identified decision alternatives in accordance with set preferences, as assumed by normative social science planning theory.

The establishment of a socio-technical order achieving a temporarily stable organizational alignment between arrays of elements is decisive for the development of the planning process. In railway planning, along with other technical infrastructure such as bridges, 'material stability is inseparable ... from the networks of social practice – of design, construction, maintenance and use – that must be put into place' (Suchman 2000, p. 316). Decisions serve to stabilize the project in terms of agreements on design, construction, technical solutions, modes of cooperation and responsibility, and schedule. All these decisions fit together, so that reopening one could well change the project significantly.

Carrying out a complex joint action as an instance of cooperative activity requires some basic conditions for success (Bratman 1992, p. 328): Agents must trust that they are responsive to each other's intentions; they must be committed to supporting and helping

each other carry out the joint activity to realize a common goal. Communication between participants (i.e., stakeholders and planners) is therefore crucial in railway planning. The actors must continually review their actions and ensure that the mutual responsiveness – the joint commitment to mutual support that conditions their joint activity – still exists. For the joint activity to continue, they also depend on continuous updates regarding the intentions and plans of the other actors in order to continue their own planning. In complex joint actions, decisions derive from negotiated agreements between various organizational agents that are reached only after considerable time and effort. This means, as the present case illustrates, that strong commitment underlies decisions. Apart from the formal and technical problems of reopening decisions, social and communicational consequences, such as loss of trust, arise from breaking agreements and violating commitments (Bratman 1999).

The public administration literature treats accountability as a form of control serving to counteract government abuse of power or failure to fulfil public obligations (Gregory 2003). Public managers are subject to various accountability relationships and face diverging accountability expectations; accountability therefore is fluid in that it can shift from one relationship to another (Romzek and Ingraham 2000). The production of 'accounts' and mutual reference points serves to schematize expectations and manage contingency. In this case of railway decision making, accountability is both specialized and general: a planner must satisfy demands for technical, legal, environmental, economic, and political accountability and must also be accountable for the project as a unit. A geotechnical expert, for example, regards it as his or her professional duty to identify the geotechnical difficulties and risks associated with a particular solution. Accountability is produced through talk at meetings, particular lines of reasoning, and comments, and through standardized procedures for project administration.

This study has approached decisions and decision making via an open-ended enquiry (Strathern 2000, p. 285) into the flow of social interaction, seeking to understand the 'balancing' of action and accounting, doing and saying. The ethnographic study of decisions, decision processes, and what it means to make decisions can provide a comprehensive understanding of intentionality and context in which 'the anthropologist's kind of ethnography grasps not just the contingency and unpredictability of social life, then, but how description and self-description contribute to it' (Strathern 2000, p. 287). This approach sheds light on the practical reasoning (Bratman 1999) occurring in planning decision making, by conveying the agent and observer perspectives and their interaction in producing a social reality.

This study examines collective decision making in a public administration context, finding decisions to be intrinsically social, dependent on how power relationships are understood and influenced by expectations of the intentions of planners (who are codecision makers) and by expectations of how decision parameters might be socially construed by stakeholders and other planners. It is from this social context that decision rationality derives (Flyvbjerg 1998). These findings add to organization research demonstrating that decisions are interrelated according to a 'messy' logic of power rationalization rather than a rational pattern of decisions and consequent actions, goals and their implementation (see Flyvbjerg 1998). Instances of actors' 'strategic agenda building' (Dutton 1986) and 'issue connectedness' (Langley et al. 1995, p. 270) make decision problems fluid and shifting, depending on how decision makers associate and disassociate issues and how they interpret and negotiate decision contexts and processes (Vidaillet 2008).

Acknowledgements

This work is funded by research grants from the Swedish Research Council, the Swedish Rescue Services Agency, the Emergency Management Agency, the Swedish Governmental Agency for Innovation Systems, the Swedish Road Administration, and the Swedish Maritime Administration. I wish to thank Per Binde, Max Boholm, Hervé Corvellec, Annette Henning, Vicki Johansson, and Ragnar Löfstedt for valuable comments and suggestions.

References

- Boholm, Å. 2009. Speaking of risk: matters of context. *Environmental Communication: A Journal of Nature and Culture* 3(2): 335–354.
- Boholm, Å. & Löfstedt, R., eds. 2004. Facility siting: Risk, power and identity in land use planning. Earthscan: London.
- Bratman, M.E. 1992. Shared cooperative activity. *The Philosophical Review* 101(2): 327–341.
- Bratman, M.E. 1999. *Intentions, plans, and practical reason*. CSLI Publications: Stanford, CA.
- Bratman, M.E. 2007. Structures of agency. Oxford University Press: Oxford.
- Dutton, J.E. 1986. Understanding strategic agenda building and its implications for managing change, *Scandinanivian Journal of Management Studies* 3 (1): 3-24.

- Flyvbjerg, B. 1998. *Rationality and power: Democracy in practice*. University of Chicago Press: Chicago.
- Gell, A. 1992. The anthropology of time. Berg: Oxford.
- Gregory, R. 2003. Accountability in modern government. In *The handbook of public administration*, eds. B.G. Peters & J. Pierre. Sage: Los Angeles, London.
- Ingold, T. 2000. The perception of the environment: Essays in livelihood, dwelling and skill. Routledge: London, New York.
- Kleindorfer, P.R., Kunreuther, H.C., & Schoemaker, P.J.H. 1993. *Decision sciences: An integrative perspective*, Cambridge University Press: Cambridge, UK.
- Langley, A., Mintzberg, H., Pitcher, P., Posada, E., & Saint-Macary, J. 1995. Opening up decision making: the view from the black stool. *Organization Science* 6(3): 260–279.
- Luhmann, N. 1995. Social systems. Stanford University Press: Stanford, CT.
- Luhmann, N. 2005. The paradox of decision making. In *Niklas Luhmann and organization studies*, eds. D. Seidl & K.H. Becker. Copenhagen Business School Press/Liber: Kristianstad.
- Löfstedt, R.E. 2005. Risk management in post trust societies. Palgrave: Basingstoke, UK.
- O'Toole Jr. L.J. 2003. Interorganizational relations in implementation. In *The handbook of public administration*, eds. B.G. Peters & J. Pierre. Sage: Los Angeles, London.
- Pierson, P. 2000. Increasing returns, path dependency, and the study of politics. *The American Political Science Review* 94(2): 251–267.
- Pressman, J.L. & Wildavsky, A. 1973. *Implementation*. University of California Press: Los Angeles.
- Romzek, B.S. & Ingraham, P.W. 2000 Cross pressure of accountability: initiative, command, and failure in the Ron Brown Plane Crash, *Public Administration Review* 660(3): 240–253.
- Simon, H. 1947. Administrative behavior, 4th ed. The Free Press: New York.
- Strathern, M. 2000. Afterword: accountability. In *Audit cultures: Anthropological studies in accountability, ethics and the academy*, ed. M. Strathern. Routledge: London & New York.
- Suchman, L. 2000. Organizing alignment: a case of bridge building. *Organization* 7(2): 311–327.
- Vidaillet, B. 2008. When 'decision outcomes' are not the outcomes of decisions. In *The Oxford handbook of organizational decision making*, eds. G.P. Hodkinson & W.H. Starbuck. Oxford University Press: Oxford.

Weber, M. 1978. *Economy and society*, vol. 2. Ed. G. Roth & C. Wittich. University of California Press: Berkeley.

Regulations

Swedish Environmental Code, SFS 1998:808 Swedish Railway Building Act, SFS 1995:1649