

## **A planning theory perspective on the EIA**

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### **Abstract**

This paper is an extensive comment on five Nordic EIA studies from the perspective of planning theory. It is shown how issues raised and problems encountered in several of these studies relate to current debates in the international planning literature. The themes receiving most attention are the different functions of the EIA process as deliberative democracy and technocratic prediction of effects, EIA as managing uncertainty and locational conflict, EIA as a vehicle for public involvement, communicative distortions in impact assessment, the use and misuse of EIA results, and the relationship between EIA problems and organisational design.

### **Introduction**

The environmental impact assessment (EIA) often has a central position in the planning of large development projects. The EIA gives structure and content to important parts of the process, making it meaningful to comment on the practice of EIA from the perspective of planning theory. The purpose is to link the expectations and experiences reported in the Nordic studies to the problem areas and norms of familiar procedural theories or “styles” of planning. Several of these styles rest on quite broad theory constructions that can indicate problems as well as advantages of designing the EIA process in a particular way.

The aspects of EIA dealt with in this paper are drawn from five cases studying the role of EIA in the planning and decision processes of large development projects in the Nordic countries (Hokkanen 2001, Kjellerup 2001, Päiviö and Wallentinus 2001, Sigurðardóttir and Theodórsdóttir 2001, Stenstadvold 2001). Throughout the paper, I will refer to these contributions without repeating the year of publication.

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A very brief presentation of two rationality concepts will make it easier to grasp the structure of the exposition. The principal dividing line distinguishes the type of rationality appropriate for goal-orientated behaviour within a means-end structured problem area, and models of consistent reasoning when means and ends are not distinct categories. The first type is here denoted instrumental rationality, and it tells how best to combine the means to achieve the ends when no preferences are attached to the means. Applications of analytic techniques in planning are examples of the use of instrumental rationality.

The concept of communicative rationality was developed by Habermas (1990). Communicative rationality is found in speech aiming at agreement and meeting the validity claims of comprehensibility, truth, rightness, and sincerity. Whilst all conversation is not communicatively rational, dialogue in the Habermasian sense *is* so by definition. Within a dialogical speech situation, a community can rationally derive the goals to be collectively pursued. Values and norms, which could not be seen to have any rational foundation from the perspective of instrumental rationality, can be established in a communicatively rational manner. In dialogue no domination is to be present. The only force to be reckoned with is the valid argument. The interlocutors should ignore all motives except the common aim of reaching mutual understanding and agreement on what interests are to be considered general, i.e. not partial.

The ensuing sections are arranged as follows:

- *EIA as environmental protection and democratic stimulant* points to its widely different functions, serving both as technique and as a forum for dialogue. Different features of the EIA come to the fore depending on the model of democracy it is meant to serve, and the style of the planning process.
- *EIA as analytic technique* considers how the EIA supports instrumental rationality in the face of uncertainty, conflict, and shortage of problem-solving resources.
- *EIA as a vehicle for public involvement* comments on the analysis as a framework for encouraging dialogue between stakeholders and the general public. The EIA is assessed as a means for enhancing citizen participation, communicative planning, and fairness in the planning process – i.e. for approaching communicative rationality.
- *EIA and the political decision process* comments on experiences concerning the use of EIA results. Finally, the *concluding remarks*

*on context and style* link the EIA, planning, and organisational context.

## **EIA as environmental protection and democratic stimulant**

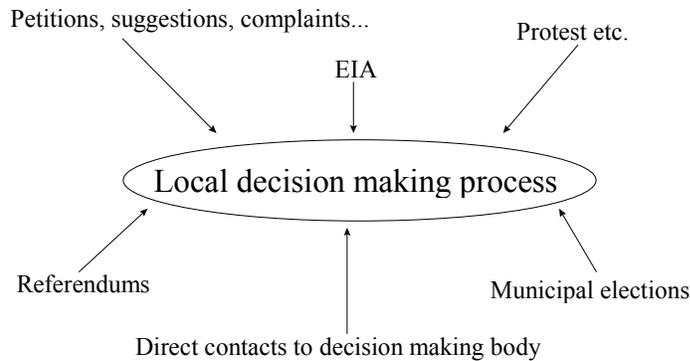
The diverging functions of the EIA are noted by Hokkanen and echo the main functions of public planning itself. Communicative planning theorists in particular have emphasised that the task is not only to produce well founded professional planning documents. A viable local democracy needs a continuing debate in the public realm about the themes that are of general interest to the community. Public planning should provide input to this discussion. In so doing, it helps the communities in question, and society at large to form preferences and to acquire a conscious view of the qualities of the physical environment. Note that the traditional idea of citizen participation is too narrow to incorporate the aims of communicative planning. A more macro-orientated notion of public involvement is called for, which is connected to direct democracy and to public dialogue. Moreover, communicative planning has a critical function, as it *does* matter how the public debate is organised, how it evolves, and how it reflects social power relations.

The above vision of communicative planning mirrors the recent turn towards deliberative democracy in political science (Bohman and Rehg 1997, Elster 1998). Collective decisions can some times be made by discussion and persuasion until a particular option gains general acceptance. Decisions can also be made by voting or some other technique for amalgamating individual preferences. These decision-making procedures are associated with deliberative and majoritarian democracy, respectively. Procedures based on discussion and voting are not mutually exclusive. On the contrary, preferences and arguments influence each other, and the associated democratic decision models are often reciprocally complementary (Manin 1987). Voting without a preceding exchange of arguments easily leads to the dictatorship of the majority. And one-sided emphasis on argument may prolong the process indefinitely and moreover give experts undue power. While Hokkanen states that the EIA process has a problematic position under models of democracy, this seems to be so primarily for representative, majoritarian models. The reason is that the expectations created during the participatory EIA process and the preferences expressed therein might be contrary to those of the

majority of the decision-making body. This is a general problem of a governance system running parallel processes of direct and representative democracy.

Although one does not escape from the above democratic problem, the EIA can strengthen both democratic models. Representative democracy gains when the legitimacy of the decision-making process is increased as a result of improved information flows from the affected people to their political representatives. Direct and deliberative democracy gains when arguments are tested in free and undistorted debate within the framework of the EIA process. When proper forums for discussion are not created, or when the deliberative process is severely restricted, it leads to a “democratic deficit” and erodes the legitimacy of the planning process, as noted by Stenstadvoid.

Hokkanen presents the following figure showing that there are several forms of citizen participation at the local level. Activities beneath the ellipse are related to representative democracy, while those above are related to direct and deliberative democracy.



The EIA process is correctly placed as a deliberative tool that can facilitate dialogue, although most of the Nordic studies dealt with here note the difficulties of carrying out a neutral impact assessment. In a representative democracy, the information aspect of the EIA is essential, and the important communication channel links those affected by the project to their political representatives. In a deliberative democracy, the openness of the discussion is important. No interest should be excluded, and they should all participate on equal terms. That is, filling in the items of the EIA is not the task to be left only to the experts. Each entry in the EIA can be seen as an

argument. These should be tested and balanced in the EIA process, and the possibilities of reaching a consensus should be examined. Still, with important conflicts remaining, one might have to fall back on majoritarian decision-making.

There is a mixture of positive and negative experiences reported in the five Nordic studies on which the present paper comments. When many opportunities of making the EIA process democratic and informative are missed, the entire EIA exercise may conceivably come to be regarded as little more than a ritual, “a theatre with roles and script fixed in advance” (Hokkanen). In later sections I return to some unfortunate procedural features giving rise to such an impression.

## **EIA as analytic technique**

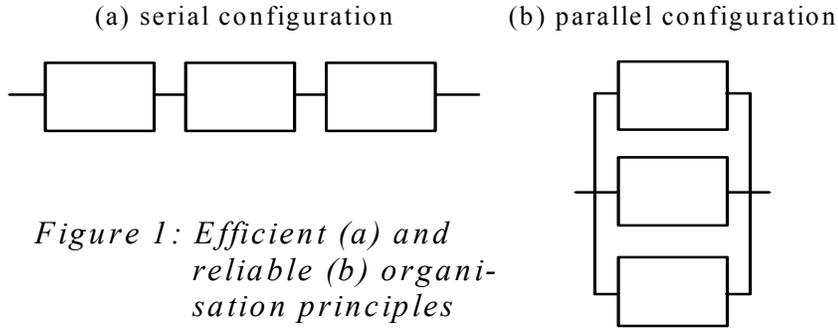
There are many aspects of EIA in the capacity of analytic technique. In line with the content of the Nordic case studies, I focus on the key-words uncertainty, conflict, and information.

### **Responses to uncertainty**

The concept of flexibility is discussed elsewhere (Sager 1994) and is given only sketchy treatment here to link it with redundancy. When planning under levels of high uncertainty, one will often find that assumptions do not hold, so adjustments must be made, and consequently the plan needs to be flexible. Flexibility is valuable under democracy, as the outcome of preference formation, public deliberation, and social conflict may not be known until late in the planning process, if even then. Indeed, preferences are also apt to change after people have experienced the outcome of the plan, so monitoring and amendments are often called for.

Robustness and resilience are the key aspects of flexibility needed here. Robustness is about keeping options open for the future, and resilience characterises the ability to recover from a decision that proved unsatisfactory. A flexible plan is contrasted to a rigid one, the last being low on both robustness and resilience. Redundancy, duplication, overlap, as well as reversibility and loops make a plan adjustable and flexible (Bendor 1985). The inverse characteristics tend to make the plan rigid, like streamlining and serial couplings (Figure 1), i.e., deploying the smallest possible number of people, vehicles, etc. needed to run an operation. Much of the attractiveness of a flexible plan comes from its reliability. The advantage of a rigid plan, on the other

hand, is the efficiency achieved in perfect conditions from a skeleton crew, staff, etc., unfortunately giving to a more unreliable solution.



A plan must successfully pass through each of the organisational check points to be effective, and the serially coupled agency will fail to implement the plan even if only one of the administrative units withholds acceptance. If an agency department fails to pass the plan along, then all the units later in the process are unable to act on the plan, and it cannot get through the decision-making system. In a parallel structure (Figure 1), a plan may pass through any of the parallel units in order to reach the implementation stage. Even if one or more units fail to pass the plan along, it may still be implemented. In this respect, plan-making is more reliable in an agency based on parallel coupling of the administrative units. Reliability is also increased by a redundancy of information channels and duplication of messages (Landau 1969). Even if Päiviö and Wallentinus assure us that the serious difficulties of the Hallandsås railway tunnel project are not due to inadequate control and management, my hypothesis is that a project organisation more thoroughly applying the principle of parallel couplings would have been helpful. This might also be the case for Romeriksporten, the railway tunnel on the new line connecting Oslo and Gardermoen airport, encountered very similar problems. We see the contours of a general planning dilemma. Sometimes it surfaces as a tension between flexibility and rigidity or between reliability and efficiency. It might, however, be disguised in other terms, as ambiguous versus specific plans or freedom of choice versus commitment. Levi and Benjamin (1977:405), in discussing conflict resolution, point to the necessity of balancing focus and flexibility: “Focus is the function of exclusion and constancy, flexibility

that of variety and variability. A central human paradox, which reflects itself in all applied behavioural science practice, is the simultaneous requirement for these contrasting functions.”

Not surprisingly, several of the Nordic EIA case studies report difficulties in the handling of uncertainty and risk. Stenstadvold concludes that closer attention should be given to uncertainty in the planning and implementation of large projects, aiming at the development of specific guidelines. There is no reason to believe that it will be easy to prevent the development of a risk-blind and self-reassuring management culture on all large projects, which is a worry of Stenstadvold's. However, increasing the awareness of “groupthink” might be a reasonable place to start (Park 1990, Street 1997). Groupthink describes the tendency to transfer responsibility to others in the group, the tendency to trust the judgement of good colleagues, etc.

In their concluding section, Päiviö and Wallentinus note that there might not be any legal demand for a supplementary EIA even if the basic assumptions of the analysis change. In the Hallandsås case, they found that the EIA quickly became obsolete. Experiences like this should stimulate the use of contingency analysis as a framework for the EIA. (The contingency approach was proposed in organisation theory by Lawrence and Lorsch in 1967.) A contingency is an event that may or may not occur, and the idea is to anticipate important contingencies and describe the planned actions for each alternative future line of development (compare the concept of strategy in economic theory [Dixit and Nalebuff 1991]). What if the pollution from Gardermoen airport penetrates to the aquifer? What if the leakage into the Hallandsås tunnel dries up the ridge above? What changes in building techniques, operation procedures, and equipment might become necessary? The insight that the plan should not be the same in all circumstances is quite banal. The conditions under which we should change from one plan to another, and hence from one impact assessment to another, need to be specified. And the planners should give advice on how to act in such contingencies.

Sigurðardóttir and Theodórsdóttir point to another strategy for managing uncertainty in their account of the aluminium smelter in Reyðarfjörður. The construction of the smelter was planned in three phases, producing 120, 360, and 480 thousand tons a year, respectively. There can be several reasons for planning in stages, but I comment on the procedure only from the perspective of risk management. “Staging” often aims at stability, i.e., rendering large

parts of the plan useful even if the conditions change significantly, and it is well known from road construction (Norgaard and Dixon 1986:310). There, staging means that a road project is divided into shorter links in such a way that the first links fit into the existing network. These links will then yield benefits even if the later stages are postponed, altered, or cancelled. The prime advantage is that financial expenses can be adjusted to changed budgetary conditions, and thus to more easily fit the structure of limited annual grants. To some extent, staging permits adjustments to be made in response to unanticipated environmental, social, and technical problems or opportunities. This is flexibility during the implementation of project or plan, and it is a practice in accordance with incremental planning.

In some types of project, managing uncertainty implies taking into account local citizens' responses to risk. This is the case when searching for depots for nuclear waste, as reported by Hokkanen. It is the task of the EIA to report the probability of the various forms of danger, and to describe the consequences once something goes wrong. According to Hokkanen, citizens from different municipalities potentially react rather differently to such information. Those accustomed to living with a similar risk without having experienced a catastrophe are usually more apt to accept the project. Otway and Wynne (1989:143) suggest that this is a general observation. However, they also remind us that the real meaning of a quiescent and thus apparently consenting public is an open question:

“Lack of protest does not necessarily mean that people are unconcerned about a facility or are content with the information provided. Rather, they may give it little credibility or relevance, but feel powerless and dependent until some otherwise insignificant “alerting event”, or the accumulation of evidence, crystallizes their latent alienation into a more active expression of hostility.”

The phenomenon of hostile public audiences who read the facts differently from experts is familiar to planners (Kartez 1989). It is a valuable insight that risk is defined differently by lay people and experts, and that it is perfectly normal and rational for people to view technologies and risks in terms of how their lives are affected, that there is no “correct” definition of risk.

## **Location and conflict**

The NIMBY syndrome (not in my backyard) is often used to characterise opposition to the siting of polluting industry, hazardous waste depots, and other unattractive facilities. It may be unfair, however, to blame siting failures on irrational and self-interested citizens. Sometimes little evidence is found for components of the NIMBY label, such as concern about property values and aesthetics. Value trade-offs rather than technical issues are often involved, and citizens can then be seen to be contributing to effective policy-making rather than being blamed for subverting a well-conceived and essential facility. This may be so also when it comes to nuclear waste management in the Nordic countries (Lidskog and Elander 1992). There are indications that trust in the government, early and continuous public involvement in the facility siting process, and an adaptive strategy that involves incorporating citizens' concerns into siting and operation decisions are associated with a higher likelihood of siting success (Hunter and Leyden 1995, Ibitayo and Pijawka 1999). It does not seem likely that NIMBY type arguments played a prominent part in the Nordic EIA cases dealt with here. The study from Iceland does not examine any alternative to Reyðarfjörður as the site of the aluminium smelter, and in the Finnish case the municipality of Eurajoki actually approved of the final disposal of high level nuclear waste on its land. In the Swedish Hallandsås case, local interests were allowed to control the location of the railway tunnel more than the geological conditions, but the arguments do not seem to reveal evidence of the NIMBY syndrome. In the Norwegian Gardermoen case the NIMBY arguments were quite easily overrun, and, as confirmed by Stenstadvold, the EIA failed completely in describing the actual social effects for the people being relocated because of the airport.

The EIA does not therefore seem to have played a significant role in handling the NIMBY syndrome in any of the Nordic cases. Had local protests grown stronger, the EIA may have been incorporated in a collaborative planning effort to search for project design and ameliorating measures that would make the proposed development acceptable to all stakeholders (see Driessen 1999 for an airport case). As Stenstadvold recognises, this is very important, as communication strictly limited to informing the stakeholders easily creates mistrust and loss of confidence in the credibility of government and developers. Of course, planners have tried to move beyond NIMBY for many years (Dear 1992, Lake 1993, Rabe,

Gunderson and Harbage 1994), though the collaborative approach is rather recent. Its most prominent advocates are Patsy Healey (1998, 1999) and Judith Innes (Innes and Boher 1999a,b). The approach focuses on win-win situations and harmony rather than continuing conflict of interest and hard compromises. As is the case for most communicative planning efforts, they aim at communicative rationality and consensus building. The conflict management is based on the getting-to-yes procedure (Fisher and Ury 1981). Collaborative planning tends to question assumptions and constraints that restrict and limit the search for agreement more than the fairness of collaborative outcomes. It is farther from advocacy planning and the critical theory perspective than is the “critical pragmatism” branch of communicative planning (Forester 1989).

The use of EIA as a basis for handling conflicts fits well with collaborative planning. The search for solutions is founded on an appeal to impartial analysis, fairness, empathy, and the public interest, although it is legitimate to look after one’s own interests. Kjellerup is in line with much of the recent literature when stating that the existence of a formalised procedure is beneficial as a mediator between different interests and as a forum in which these interests can meet. This might also be the case for similar techniques providing an overall picture of a plan or a project, such as formal evaluation techniques (Sager 1984).

### **Critique of EIA practice from an information perspective**

It is often expected that the EIA provides the basis for making comparisons and for choosing between alternative plans. If the proposed solution has no competitors, the future development is shown as more or less inevitable, as Hokkanen points out. Furthermore, when only one option is assessed, the EIA lays itself open to being viewed as simply a legitimising exercise on behalf of the developer, far from the aim of minimising environmental impacts (Päiviö and Wallentinus). Kjellerup holds the presentation of comparable alternatives to be the main success of the EIA procedure in the Danish case. Nevertheless, in the four other Nordic cases, only one solution was assessed. This practice tends to shape the public debate in for-or-against terms rather than arranging for choice between different lines of development. In the Finnish case, the single option analysis was criticised for decreasing public participation and interest. Stenstadvold points out that single option analysis makes the EIA less usable in the generation of alternatives. By comparing several

alternatives, one might be able to combine attractive features from different options and hence improve the quality of the final solution.

Another danger, which detracts from the EIA as an information pool, is its insufficient adjustment to the case at hand. This results in complaints that important impacts are left out of the analysis. Such lists of omissions are provided both by Päiviö and Wallentinus and by Stenstadvold. Furthermore, Sigurðardóttir and Theodórsdóttir make it clear that improvements are not necessarily made, even when recommended by the planners. Sanctions must then be available, although it is increasingly recognised by planners that they can be costly to carry into effect (compare Alexander 1992 on transaction costs). It may however have serious consequences if the omissions reveal a systematic bias and a lack of empathy with some interests. The reason being that EIA deficiencies, from an information point of view, may affect participation and dialogue in a negative fashion. This might, in turn, make the EIA a less effective instrument for selecting the best planning alternative. In other words, the boundaries of instrumental and communicative rationality can sometimes reinforce each other throughout the many steps and phases of the planning process and thus arrange for accumulated irrationality in planning. This process is denoted as “parapraxis” by Sager (1994:Ch.8), who offers an EIA-related planning example.

Stenstadvold draws attention to the negative impact of severe time constraints. Comprehensive analysis and meaningful citizen participation are time consuming processes. Accelerated pace tends to lower the quality of the EIA as a planning technique as well as a democratic procedure. Hence, time pressure can impose boundaries both on instrumental and communicative rationality, therefore triggering parapraxis.

Moreover, severe time constraints encourage a kind of incrementalism in which participation is reduced to interaction among agencies. Communicative planning is linked to the deliberative model of democracy, and the basis of this model is eroded when time does not allow arguments to be exchanged and evaluated in public debate. Neither is synoptic planning feasible, as it calls for a comprehensive study. In contrast, a series of incremental steps does only call for the examination of a few alternatives and selected consequences at any particular phase in the process. In favourable circumstances, disjointed incrementalism (Lindblom 1959, Sager 1997) gives room for feedback and loops throughout the process. Time limits can, however, prevent the planners from using the knowledge gained in later phases to

improve the outcome of preceding phases, thus impairing incrementalism as a learning process.

Stenstadvold explains that Gardermoen was planned according to a procedure previously used by the Norwegian Directorate of Public Roads. This “master plan” concept is not part of the Planning and Building Act facilitating the coordination of state, county, and municipal activity. A fully fledged example of parapraxis developed from

this situation. (1) The *ad hoc* procedures of the master plan format gave insufficient consideration to environmental factors and led to a general level analysis. (2) This did not fit the decisions to be taken and thus subtracted from instrumental rationality. (3) The general level of analysis alienated local people and discouraged participation. Moreover, the master plan format did not give local interests sufficient influence to rectify the lack of relevant information regarding local impacts, thus further discouraging involvement. The bounded instrumental rationality hence led to bounded communicative rationality. (4) The low degree of participation made it difficult for the municipalities to discover their insignificant influence before it was too late. This led to severe conflicts between the proponents of the airport and the adjacent municipalities. (5) These conflicts were time consuming and did also occupy other resources, further bounding instrumental rationality. (6) To the extent that conflicts were settled by the authority of allegedly irreversible political decisions, threats of State intervention, and other sanctions instead of mutual adjustments through dialogue, the communication between the involved parties degenerated further. Etc.

As demonstrated above, the process in which instrumental and communicative rationality are mutually bounding each other can seriously harm the planning effort, both in its democratic function and in its function as analytic technique preparing for construction. It is my belief that processes of parapraxis warrant further study.

## **EIA as a vehicle for public involvement**

This section comments on the EIA practice as part of an exercise in deliberative democracy. If involvement in establishing, interpreting, and using the EIA shall be part of a democratic practice, the public conversation, and the EIA as a medium for debate, must possess certain qualities. Moreover, the process must allow for multidirectional information, and there must be forums where

information streams meet, viewpoints are exchanged, and arguments are tested (Bryson and Crosby 1993). Kjellerup states that the EIA process has been quite successful in this respect. Päiviö and Wallentinus, on the other hand, mention the problem of different kinds of meetings throughout the process, confusing the public as to where and when to pose their questions.

Although the information aspect was touched upon in the previous section, I will follow up the theme here by considering some experiences from the Nordic cases regarding information as an involvement enhancing activity. Improvement of the democratic features of the planning process requires that information can be digested, processed, and exchanged by the lay groups. In the second sub-section, I comment on the EIA as a neutral analysis, and as an effective tool for weak groups. The section ends with some remarks on communicative distortions in the EIA process.

### **Transactive planning, timing, and model power**

It is expected that the EIA will lead to more developed options regarding project design and to a better understanding of environmental impacts, as is clearly expressed by Kjellerup. In the case of the aluminium smelter in Reyðarfjörður, it seems that the information stream was indeed two-way, and that the response both from experts and the broader public had effect on political decision-making. It is a favourable judgement of the EIA process when Sigurðardóttir and Theodórsdóttir conclude that it led to a comprehensive understanding of the main environmental impacts of the smelter.

Stenstadvold's account is less favourable in this respect. The EIA of the Gardermoen airport lacks a proper connection to local interests and problems. It does not allow local citizens to discern which of the described impacts are relevant to them. The analysis is too incomplete and put in terms that are too general. In these circumstances, it is difficult for those affected by the plan to assess the listed impacts and respond informatively to the analysts. The risk is that local citizens become passive recipients of information or find ways to protest outside the EIA process. In any case, the EIA process is impaired in its capacity as a transactive planning tool (Friedmann 1973), that is, as an exchange of the processed knowledge of the planners with the local knowledge of the affected citizens. One loses the respect of the other, as well as the democratising effect following

from the recognition that both groups have something to contribute to the EIA.

Public involvement can take place in various phases of the EIA process, and the practice differs across the Nordic cases. It is usually recommended that involvement begins early in the process to be effective, and the Danish Horsens-Skanderborg rail link confirms that this practice can be successful. A scoping phase was included, giving the public the opportunity to identify the problems to be analysed in the environmental impact study. In contrast, the Icelandic aluminium smelter case reports that comments by consulted people and participating citizens came relatively late in the EIA process. Even so, their response was significant in terms of the evaluation of the quality of the analysis.

It makes sense to let the various interests have their say before the developer's ideas about the project become set in stone. However, planning processes can take several years, and early input may be simply forgotten long before the issue is approaching the decision stage. There is also the question of how to maintain the interest of the participants over a long period. It may be expected that tiredness and exhaustion will eventually lead to low public activity, as in Kuhmo where the process lasted more than ten years (Hokkanen).

The long-lasting processes and the risk of being co-opted by political recognition and expert authority are good enough reasons in themselves for asking what are the most effective ways for lay people to influence the outcome. This question has been repeatedly posed in the context of advocacy planning (Davidoff 1965, Piven 1970) and is asked again by Hokkanen. Model-weak but well organised groups may well be best served by direct protests outside the planning and EIA process. Here, I offer only a brief account of the model power argument put forward by Bråten (1973). The term "model" should be broadly interpreted to encompass both more and less analytic and simplified mental pictures of a part of reality.

Dealing with citizen participation in local planning, one can usually assume that the model resources, i.e., the processed knowledge of planning, are unevenly distributed. Information about causal relationships and analytic techniques is primarily held by the planners. Now, citizen participation procedures can be imagined, which give all parties equal access to information and provide for open communication between the planners and the local public (transactive planning). The theory of model power aims to show that the influence gap is not necessarily narrowed thereby, provided a

severe bias existed in the initial situation. The ability of the model-weak party to acquire, discriminate, structure, and process the data has to be improved. This development is dependent on models. Without models of the phenomena to be influenced by participation, the information obtained by involvement in the planning process is of no use. When the planners have a model monopoly or are model-strong, while the local lay participants are model-weak, any information from the lay public can be processed and used by the planners. The local participants, on the other hand, can only utilise information from the planners to the extent that it fits the participants' own simple and partial models. Even if these underdeveloped models gradually improve during the open exchange of information, the planners may strengthen their influence. The reason being that, at any time, they have a higher capacity for data processing and model improvement at their disposal. The planners will be in full control if the local public, following a torrent of information from the planners, adopt the planners' image of reality and take over models formerly employed by them.

There is no unambiguous answer to the question of the effectiveness of public participation from the point of view of lay people, however. Although the Finnish and Norwegian cases report that citizens are displeased with the involvement process, Kjellerup characterises the participation in the Danish case as a success. The reason is that the public convinced the decision-makers that the project should not be implemented. I agree that this shows the effectiveness of the participation effort from the protesters' perspective. It is not a generally valid criterion from a societal point of view, however. Sometimes, the arguments of the protesters are based on misunderstanding or lack of information, and the implementation of the project may serve both the society at large and most local groups. In such cases, the difficult question of when to accept paternalism arises (Sager 1994:79-81, New 1999).

### **Neutral or distorted analysis?**

The common practice of making the developer responsible for carrying out the EIA begs the question of whether the analysis is neutral (Hokkanen, Päiviö and Wallentinus). The reviewer of the impact study should be free from any personal or organisational interest in the proposed project (Kjellerup). In the Finnish case, the dominant role of the developer was one of the main critical arguments of the environmental groups. Moreover, in the Swedish case it is

reported that the developer did not let the consultant form the EIA as neutrally as desired. Developer-guided analysis certainly ensures relevance, though there may well be a trade-off to be made between adjusting the EIA to the decision-making process and ensuring neutrality.

Openly partisan analysis is one thing, pretending to be neutral is something else. The first is the main tenet of advocacy planning, while the second is manipulation plain and simple, which is a central theme in communicative planning theory as it is contrary to communicative rationality. Communicative planning is probably the strongest current in contemporary planning theory. When proposing his “critical pragmatism” mode of communicative planning practice, Forester (1989) acknowledged that communicative rationality is always imperfect in practice. The planner is not a processor of facts, but a practical organiser of attention. Seen as organising, planning implies advancing some views and issues at the expense of others. As a critical pragmatist, the practitioner questions possibilities and shapes responses in the face of societal values and norms restricting openness and participation in decision-making. The planner ought to be aware that power relations maintain particular forms of domination, and that conflict can repress legitimate interests. This is the ethical framework for the everyday practice of planning analysts: to eliminate distortions, to foster open and authentic communication, to make true political discourse and dialogue possible. This is also the paradigmatic core of the critical pragmatism mode, and may be seen as a blueprint for communicative planning.

Forester (1989:46) affirms that there is a strong affiliation between his approach and advocacy planning: “progressive planning practice represents a refinement of traditional advocacy planning, a refinement based on the practical recognition of systematic sources of misinformation”. This recognition will help citizens reveal attempts at “misrepresenting cases, improperly invoking authority, making false promises, or distracting attention from key issues”. Forester’s questioning satisfies Davidoff’s demand that the advocacy planner point out the nature of the bias underlying information that is presented in plans set forth by the establishment, thereby performing a task similar to the legal technique of cross-examination. Shaping attention corresponds to Davidoff’s claim that the advocacy planner should be an educator, informing other groups, including public agencies, of the conditions, problems, and outlook of the group she represents (Davidoff 1965:333). With this affiliation to advocacy

planning, it is an important aim of critical pragmatism to counteract repressive uses of power in planning. Many power relations and the repressive mechanisms that go with them manifest themselves in what is said and written throughout the planning process, and so the communicative process is a good place to reveal them. Furthermore, the uncovering of the expressions of undue power is a first and necessary step in the process of fighting them. Hence, the identification of communicative distortions is at the core of the critical aspect of critical pragmatism.

Several examples of communicative distortions are found in Forester (1989) and Sager (1994), and manipulation in particular is dealt with in Sager (1999) and Wachs (1990). Definitions of manipulation usually include elements of secrecy and deception. Manipulated individuals are caused to do something they would not otherwise have done, unaware that an act of power has been effected upon them. The manipulator does not reveal why a specific message is sent, what kind of response is wanted, or why a particular reaction is desired. It is sometimes hard to know whether an action is deliberately manipulative or not. For example, a flood of technical information and research results may be given to the lay participants (as mentioned by Hokkanen), but we do not know whether the intention was to confuse or to inform.

The following points list a few of the communicative distortions mentioned in the Nordic case studies:

- Pretending to respond honestly to the demands of opposing stakeholders, while presenting the same information and unadjusted solutions throughout the entire consultation process (Päiviö and Wallentinus).
- Ignoring the views of affected people when writing the planning documents (Päiviö and Wallentinus).
- Starting the tasks of the EIA before the draft schedule is back from public review, making it impossible to adjust or expand the tasks in order to accommodate input from the hearings (Stenstadvold).
- Pretending to incorporate input from the hearings into the EIA, whilst in reality leaving the analysis unchanged (Stenstadvold).
- Falsely indicating that problems will be taken up later in the planning process, thus preventing stakeholders from presenting their worries on occasions where protests may have been effective (Stenstadvold).

Stenstadvold's conclusions give further examples.

I end this section by pointing to two main problems. The first is to ensure that the EIA is an honest piece of work. As Pääviö and Wallentinus state, contrary to the impression given by the developer, the EIA can be used to legitimise the project instead of minimising the environmental impacts. This problem has already been dealt with here in terms of manipulation and communicative distortions. The second problem is that even when the EIA seems to work as an environmental planning tool, it is necessary to monitor the use of the EIA results in the political decision-making process (Hokkanen). I comment on this second problem in the next section.

## **EIA and the political decision process**

In Norway, as in many other countries, the use of EIAs has strongly increased over the last two decades. It has also been institutionalised, as impact assessment is mandatory for projects of many categories over a given size. There has been a movement not only towards the more accurate calculation of each single effect of the project but also towards the more widespread use of economic evaluation techniques. The Norwegian Parliament has called upon the road authorities to undertake a cost-benefit analysis of every new link in the classified road system. This evaluation technique is increasingly also applied in the aviation and rail sectors as well. Common criteria and calculation practices are introduced to facilitate the setting of priorities between projects in different transport sectors. Against this backdrop it is paradoxical that the cost-benefit ratio does not seem to influence the actual ranking of the road projects (Elvik 1995, Nilsson 1991, Odeck 1996). One reason for this is that Members of Parliament usually take local priorities into account, and thus try to prevent possible local conflicts from emerging. They also lend weight to the opinion of the local branch of their own political party; local democracy being central (Nyborg 1998).

Planners know from a multitude of cases that thorough analysis does not guarantee that the results will play a crucial part in the final political decision. Neither would it be right in a democracy to use the result of formal analysis as the decisive answer in political problem solving. Nevertheless, the EIA results should be taken into account by decision-makers – and often to a higher extent than is the case. Sager (1995) found that the results of the EIA are presented in ways that do

not enhance public debate and informed political decision-making. Little is done to process the analytical results and to help the politicians focus on the salient questions. Furthermore, in the land-use and transport plans of many Norwegian cities, very modest use is made of the EIA results when forming the argumentative foundation of the planners' recommendation. The EIA is a central part of the professional analysis carried out by the planners. It seriously undermines the instrumental rationality of plan-making when the results of the analysis are not utilised in later planning phases. The weak link between the EIA results and the reasons given for the recommendation also distorts communicative rationality. The potential for mutual understanding is reduced when the results of the EIA do not constitute a discursive platform available to all parties.

The relationship between the EIA and policy-making is the central theme of Hokkanen's piece, and he contends that public recognition of the ineffectiveness of the EIA as a policy-making instrument is partly responsible for the low level of public involvement. From the preceding two paragraphs it should come as no surprise that I think he raises an important issue when asking whether it is more important to expand public participation or to make the content of the EIA more versatile. The planners need to improve their communication with the politicians as well as with the public. There is simply no point in increasing the resources used to produce analytical results that are likely to be ignored in the political decision process.

Some of the above results from the planning literature are echoed in the Nordic EIA cases. It is hard to read anything into the use of the EIA results from the Icelandic study because of the twists and turns of the process following a conflict between the planning agency and the Minister for the Environment. However, the other case studies report on the EIA results being insufficiently used:

- In the final phase, the EIA and the assessment of environmental impacts were not in the leading role (Hokkanen).
- The tunnel project's environmental influence was never tested prior to the decision to initiate the project (Päiviö and Wallentinus).
- Even a complete and well-conducted EIA would not have prevented the environmental impacts, because the EIA was neglected in the decision-making process (Päiviö and Wallentinus).

- Regarding decisions concerning the design and implementation of the project, there is little evidence that the EIA had a significant role (Stenstadvold).
- It is unclear whether the performance of the EIA procedure influenced decision-making (Kjellerup). (The Danish comments are ambiguous, as it is also stated that the final decision reflected the findings of the proposal for the scoping of the environmental impact study.)

Stenstadvold regards it as a major problem that the Norwegian Parliament made a decision on the Gardermoen airport that was too detailed. A mismatch was created between the strategic level of the EIA and the detailed information needed to sustain the parliamentary decision. Stenstadvold proposes a two-tiered process calling for a regional type of EIA at the first strategic stage, and a more detailed impact assessment to follow later as lower level decisions have to be made. The two-tiered process may lead to a more streamlined process of strategic planning (Bryson and Einsweiler 1998) and a better fit between the EIA process and the political decision process. Conflicts erupted in the Gardermoen case because important decisions were already made when the municipalities fully entered the process in the detailed planning phase. When the municipalities called attention to the EIA to induce adjustments to the airport project, the proponents would counter by referring to the parliamentary decision. So, one reason for the insufficient use of EIA results was that the Parliament's detailed decision included success criteria for the airport and the rail link. This severely limited the available options in the detailed planning of the project, to which the EIA was meant to provide important input. Stenstadvold also suggests that the establishment of an environmental monitoring programme for the implementation of projects might strengthen the use of EIA results in that phase.

Despite the above complaints, one should not underestimate the positive role of the EIA in giving the experts and the public access to the decision-making process (Sigurðardóttir and Theodórsdóttir) and in making the municipalities commit themselves to the plan (Hokkanen). Moreover, there are difficulties in determining to what extent the EIA results are actually used. A main task of the EIA is to inform the politicians, and they may have seen the results and considered them even if their final decision is unfavourable with respect to some environmental qualities.

## **Concluding remarks on context and style**

The EIA is often a central element in the planning process, and it can play an important role in defining and supporting it (Stenstadvold). Consequently, the organisation of the EIA process is linked to the choice of planning style – synoptic, incremental, advocacy, communicative, etc (Sager forthcoming). Stenstadvold provides a good example: The establishment of publicly owned companies (managed according to the principles of private business) to implement the project clarifies the question of accountability and enhances budgetary discipline. However, it also leads to a reduction in their responsibility towards those affected by the project. Thus, organisation may affect the incentives for creating involvement and hence affect the planning style.

Another example of the link between organisation and style can be built on the Danish practice of letting the county administration both produce and control the content of the environmental impact study. This practice gives ample opportunities for riding one's hobby-horses and thus developing vested interests in the analysis. In general, with much to protect, the incentive for opening up the process diminishes, and the effort of making it communicative and participatory are reduced.

A third organisation/style example is based on the practice of tendering (Päiviö and Wallentinus). When the tender encompasses not only pure construction work but even preparatory analysis, the disparate functions of planning as both a democratic exercise and preparation for building may pose a problem. It is easier to make clear and measurable specifications for the contractor's construction duties than for the democratic involvement duties. Furthermore, competition in tendering usually focuses on time and money. As the Swedish case illustrates, one usually chooses the offer that appears to be best on these two variables, as budgetary constraints are regarded as more absolute than participatory requirements. The practice of tendering may therefore push the democratic function of planning into the background, thus influencing planning style.

The fourth and last example of the organisation/style relationship concerns the appointment of an environmental monitoring team to prevent the project from developing in a wrong direction (Päiviö and Wallentinus). There is often a conflict between the economic interest of the developer and the environmental interests of

society. Consequently, it matters who chooses the monitoring theme and writes its mandate. Neutrality is best served when these tasks are carried out by a separate State body administering all controversial EIA cases. When the monitoring team is the developer's "baby", there is more scope for partisanship. The likelihood increases, then, that the planning style adopts some traits from advocacy planning.

Using examples inspired by the Nordic EIA cases, I have tried to shed some light on the link between organisation and planning style. Despite the documented interest of planning theorists in the interrelation of style and context (see Sager forthcoming), it has for long been a standard criticism of procedural planning theory that it is purportedly context-free. Mandelbaum (1979:60) contends that "normative procedural theories are often incomplete because they do not specify either the settings in which they apply or the anticipated outcomes". Thomas (1982:13) criticises procedural theorists for postulating "general theories of planning which seek to establish the existence of a distinctive type of thought and action without reference to any particular object which this distinctive form may be associated with in the real world".

The planning style does not come "out of the blue"; neither is it primarily the result of one planner's arbitrary or idiosyncratic improvisation. Style is linked - probably in some loose way - to the institutional environment via the characteristics of the planning agency. Because the EIA tasks are so central to the planning process, the question of planning style is to a large extent the question of how to design the EIA process. How much weight to put on technocratic analysis? How to open up the computational and analytic black box? How to balance refinements of the single items of the EIA against the advantages of making the analysis accessible to lay people? How to make the EIA an important input into the democratic process of community preference formation? And how to promote the use of the EIA results in political decision-making?

It is important to know that good solutions and answers to the above questions require thorough deliberation upon the organisational framework of the EIA process. The difficulties encountered in the five Nordic cases are not caused by the incompetence of one planner or the rigidity of one bureaucrat. The achievement of success depends on giving all the involved parties the right incentives. And doing this entails careful design of EIA procedures, planning agency characteristics, politician-planner relations, and the institutional planning environment in general.

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