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Making room for the simultaneous use of different rationalities in transport planning: The case of Strategic Choice of Measures in Swedish transport planning

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Abstract

Strategic Choice of Measures (SCM) was established in 2013 as an arena for early dialogue between main actors and stakeholders at local, regional and national level to jointly assess transport related problems and develop solutions. This paper explores the presence and use of different rationalities in SCM with the aim to conceptualize its characteristics as a new step in Swedish national transport planning. The analysis of SCM from a rationality perspective is focused on the ways in which SCM makes use of, facilitates and enables different kinds of rationalities in giving reason for decision makers to justify decisions and courses of actions. Three types of rationality have been used in the analysis: Instrumental, communicative and strategic rationality.

The official SCM handbook and three cases are interpreted as simultaneously using different rationalities, but the relative weight and dominance of different rationalities vary from case to case, also with regards to connections between rationalities. The paper concludes that SCM is an example of a transport planning approach that has the potential to result in decisions that can be instrumentally, strategically and communicatively rationally motivated. Furthermore, the issue of conditions and context influencing each case is also noted, although not investigated, thus setting an agenda for further research.

Introduction

In 2013, the Swedish parliament decided to introduce a revised formal process for national transport planning. A major component of the new system was the introduction of an early preparatory study in which solutions to transport related problems would be analyzed and assessed according to the four step principle. Planning according to the four step principle implies the assessment of measures that reduce the need for transport (step 1) and make use of existing infrastructure more efficiently (step 2) before the consideration of large reconstructions (step 3) or new infrastructure (step 4) as the solution to transport related problems. This new preparatory study, "Strategic Choice of Measures" (SCM), (in Swedish: Åtgärdsvalsstudie, ÅVS), was developed by the Swedish Transport Administration (STA) as an arena for early dialogue between main actors and stakeholders to jointly define problems, goals and solutions prior to decisions on transport investments. The introduction of SCM, which coincided with wider institutional reforms in the Swedish transport sector at the time, was based on the perception that the potential for change and the ability to apply a multi-modal approach is greater at the early strategic stages of the planning process, where the opportunities for an open, creative and constructive dialogue with stakeholders are the greatest. With more emphasis on the four step principle, inter agency cooperation, multi-modality, and a more comprehensive and coherent view of the transport system, SCM was expected to contribute to a more sustainable transport system and a more efficient set of solutions to transport related problems (Odhage, 2017).

The objectives behind the introduction of SCM as a new step in Swedish national transport planning are thus several, representing a wider perspective on the potential benefits of this new approach in the planning system, beyond traditional efficiency aspects. Thus, the potential virtues of SCM will be unfairly described and assessed from a traditional instrumentally rationalistic perspective (see e.g. Alexander, 2001; Sager, 1999). Instead, a more fruitful view on what SCM may bring to national transport planning would be to scrutinize it from the perspective of different rationalities (see e.g. Odhage, 2017). With this view as a starting point, this paper explores the presence and use of different rationalities in SCM with the aim to conceptualize the characteristics of SCM as a new step in Swedish national transport planning.

The paper takes its point of departure in the view of Alexander (2000), who argues that "rationality is no more than a more sophisticated word for reason" (242), and concludes that "Rational planning means planning that has and can give reasons justifying a course of action" (243). In this view, analyzing SCM from a rationality perspective is not a matter of assessing whether the SCM approach to transport planning is rational or not, but rather in what ways SCM makes use of, facilitates and enables different kind of rationalities in giving reason for decision makers to justify decisions and courses of actions. To conduct the study, three types of rationality have been used to distinguish between different characteristics of the planning process: Instrumental, communicative and strategic rationality.

Methodologically, the study is based on empirical studies of the official handbook for conducting SCM (STA, 2014a¹), and case studies of three SCM's: Åredalen (STA, 2014c), Kivik (STA, 2014b) and Högtorpsgatan in Hallsberg (STA, 2015a). The cases have been selected to reflect different contexts and variations of how the SCM approach is applied in practice. The study of the SCM handbook and the case study of Åredalen are more fully developed and reported in Odhage (2017). The case study of Kivik is documented in a previous report to the STA (Tornberg & Cars, 2014) and has, for the sake of the this paper, been complemented by a smaller follow up investigation in the spring of 2017. The case of Kivik has also been documented by the STA in a short video clip as an example and best practice intended to be used for inspiration in future SCM's². The case study of Högtorpsgatan was conducted in the spring of 2017 as part of a larger study of

¹ The handbook was updated in 2015 (STA 2015b) but the changes from previous versions are minor in the context of this paper and for the sake of simplicity, we have chosen to only refer to the English version (STA 2014a).

² Accessible (in Swedish) on the STA website about SCM: http://www.trafikverket.se/for-dig-i-branschen/Planera-och-utreda/Planerings--och-analysmetoder/Atgardsval/

the benefits of SCM, financed by the STA. The technique for gathering material was document studies and semi-structured interviews with involved participants in the three cases.

The following structure is applied in this paper. After this introduction an analytical frame is developed, focusing on rationalities in planning. The study object – SCM – is then introduced, followed by an analysis of the use and occurrence of rationality types in the SCM handbook and the cases. Commonalities and differences that can be discerned from the analysis are then used to discuss the characteristics that constitutes SCM as a new step in national transport planning. The paper concludes with summarizing comments on the findings in the paper.

Rationalities in planning

The connection between rationality and planning has been a central theme in a large portion of the planning literature. Considering the vast body of conceptual discussions about rationality it should be no surprise that it has been used in a range of ways. In this paper, the concept of rationality is used in a way which is mainly inspired by Alexander (2000), seeing rationality in principle as the application of reason. In his paper on the connection between rationalities and planning paradigms, Alexander uses no less than 26 variations of terms to conceptualize rationality, and links different sets of rationalities to different kinds of planning. Following Odhage (2017), three principally different, yet related, types of rationality are explored and applied in this paper: instrumental, communicative and strategic rationality.

Instrumental rationality (IR)

IR is "a rationality of instrumentally efficient choice" (Alexander, 2000:245). It is a result oriented form of rationality underlying attempts to reach explicit goals at the lowest cost possible. Optimization is a key word in planning based on IR (Khakee, 1998). Although bounded in practice by e.g. limits to human capacities and a range of practical restrictions (Sager, 1999), it is based on positivism and scientific objectivism, and the epistemological conviction "that facts can be separated from subjective information and abstracted from complex social settings" (Willson, 2001:5). It is occupied with means, while goals are given. Planning based purely on IR therefore neglects the process of formulating goals, assuming that those are decided elsewhere and clear enough to need no further normative elaboration to serve as criteria for the assessment of most efficient measures. IR is the rationality most often referred to when talking about "rational planning" (Khakee, 1998) and when the result of planning is not perceived as optimal it may be perceived as irrational (Edwards & Mackett, 1996), or non-rational (Samset et al., 2014).

IR has for long been "the espoused planning theory" of the transport planning profession (Willson, 2001), typically expressed in the use of planning tools such as cost-benefit analyses and transport models. A typical indication of planning based on IR is the search for the most efficient (optimal) means to reach predefined goals, including the systematic assessment of costs and benefits of alternative measures.

Communicative rationality (CR)

CR is developed as a critique of pure reason, or IR, and should be understood as an expression of finding a common ground of understanding and mutual learning (Odhage, 2017). Based on the Habermasian theory of communicative action, CR is the rationality of the better argument and it implies the application of several perspectives; analytical, practical, ethical and esthetical (ibid.). Ontologically and epistemologically, CR reflects an intersubjective perspective, where knowledge is socially constructed in the interaction between actors. Applied under the conditions of an "ideal speech situation" (Healey, 1997;266), where statements are expressed sincerely and without inhibitions or constraints, CR makes room for shared understandings and consensus among those involved in the dialogue. In practice, CR is bounded by constraints such as power asymmetries, defective knowledge, and distorted information (Alexander, 2000).

With the influential entry of collaborative planning theory (Healey, 1997; Innes & Booher, 2010), CR has had a prominent, if not a dominant, role in planning theory and practice since at least the 1990's. To a

lesser extent, though, this has been the case in transport planning, where paradigms of IR has lingered (Willson, 2001; Isaksson et al., 2009), although there are exceptions in certain areas of the transport planning literature. For instance CR is found in an increasing volume of literature on the issue of transport and land use integration (Tornberg, 2011) and the need to transform the transport system according to a "sustainable mobility paradigm" (Banister, 2008). Typical indications of planning based on CR are interactive attempts to develop consensus on goals, problems and alternative solutions, where dialogue, e.g. in the form of meetings, public hearings, workshops, etc, constitutes the main features of the process.

Strategic rationality (SR)

SR is "the Machiavellian" (Alexander, 2000) rationality for actors concerned with reaching goals and getting things done. Planning based on SR aims primarily to produce "commitment packages" (Khakee, 1998) and is focused on means to produce desired and predefined ends (Odhage, 2017). In that sense there are similarities with the non-social IR in being result oriented. However, while decisions based on IR assumes a general, noncontextual decision situation, "the strategic actor is a rationally conscious agent cognizant of the local context and the specific situation with all their social and cultural conventions" (Alexander, 2000:246). Negotiations between strategically rational actors tend to have an integrative rather than distributive nature (Cars, 1992), resulting in win-win solutions for those involved in the negotiations. Lack of insight into other parties' priorities and naïve expectations on symmetric power relations as well as institutional constraints can constitute bounds to the ability to act in a way that is strategically rational. This critique is also articulated from both a post-structural and a critical social theory perspective emphasizing the conditions surrounding a strategic rational approach as excluding critical voices and shutting out affected parties with less capacity (Odhage, 2017).

Several studies of the political nature of transport planning and policy decision making are highlighting the strategic rationalities of such processes (Flyvbjerg, 1998; Sager & Ravlum, 2005; Hultén 2012). Typical indications of planning based on SR are considerations of political viability, consistency with related policies and strategies, coordination of actions from different actors and a concern with conditions for implementation, e.g. funding and legislative constraints.

The relationship between rationalities in planning

There are obvious relations between these different rationalities, as there are contradictory elements constituting and defining them in theory, as well as in practices. Each type of rationality has its own kinds of bounds, and the use of one rationality may bound another, conflicting, rationality. However, as stated above, and schematically depicted in figure 1, different rationality types are not necessarily mutually exclusive. Different rationality types may well be useful simultaneously in a process depending on the context and situations. It could be argued that actual planning situations *require* the use of different rationalities in the same process. This is a common theme in planning literature; many studies are aiming for depicting integrative approaches. For instance Alexander (2001) letting CR and SR meet, or Sager (1999) discussing and combining IR and CR in land- use planning, and Allmendinger (2009) is elaborating on forms for communicative planning and notions of post-modernism to meet, to name just a few.

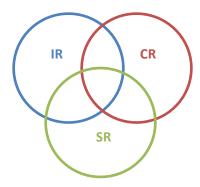


Figure 1. A conceptual framework of rationality types in SCM (IR = Instrumental rationality; CR = Communicative rationality; SR = Strategic rationality). Applied in empirical analysis, relative circle sizes symbolize relative dominance of each rationality type in actual cases, and degree of overlap symbolizes degree of interrelatedness of rationality types. (Inspired by the application of "The effective deliberation framework" in Connelly & Richardson, 2008.)

To make some sketches on a process of simultaneous use one could articulate it as follows. When IR defines the means that are likely to result in desired outcomes *if implemented*, SR secures that implementation. This is carried out through coordination of actions and resources from different actors, which is the case in more or less all planning situations, including transport planning. CR is a necessary and early component of these processes for achieving a basic and fundamental mutual understanding of a situation and for articulating a common goal. It could be argued that through communication and deliberation, joint learning will follow which enables for change processes to unfold. Thus, IR is fundamentally necessary in a context of limited resources; SR is necessary for something to happen and goals to be achieved; CR is necessary for actors to develop a shared understanding and for giving ground to change through joint learning.

The case of Strategic Choice of Measures (SCM)

In the handbook (STA, 2014a) we find the purpose of SCM:

"The analyses of deficiencies and problems and the unbiased search for alternative solutions in order to find suitable measures has not before had a clear place in the planning system for the development of the transport system... the methodology for studies for strategic choice of measures is expected to ensure safe and cost-efficient solutions which take into consideration all transport and travel modes as well as all types of measures. It concerns both efficiency in the society and a contribution to sustainable development." (STA, 2014a:9)

SCM is an "arena that is created for early dialogues" (STA, 2014a:3) and thus an opportunity for a meeting. But it is also an organized procedure. Its "ideal" structure and process according to the handbook consists of four phases, illustrated in figure 2.



Figure 2. Four phases in the appraisal procedure (STA, 2014a).

Initiating a study is a matter of organizing a process and initially assessing problems and the existence of reasonable solutions. It is in this phase that resources are determined, competencies and co-actors are engaged and a purpose of the study is defined.

In the next phase, understand the situation, the problem is further defined and delimited. Several activities aim at collecting and arranging up-to-date information about the nature of the problem, e.g. information

on system performance for the demarcated area and the relevant transport functions, and the knowledge and perspective of other actors and stakeholders on the issue at hand and related development plans. At this stage, the problem is defined, the objectives are determined and indicators are specified.

In the third phase, the four step principle is applied. Testing possible solutions means gathering people with different skills and responsibilities for a creative process. Different alternatives will be generated, and then the measures will be assessed in terms of impact on the problem, estimated costs, and in relation to the objectives. The most appropriate and most effective measures are arranged for in-depth comparative analysis.

In the final phase, to form a direction and recommending action, actors proceed with the actions considered to be most effective. A draft recommendation is prepared and describes the overall impact assessment. The results of the study are consulted among the key actors. Finally the recommendation, which is not formally committing, is submitted for decision on continued handling to appointed decision makers, at the STA or other organizations depending on the measures.

Rationalities in SCM

The SCM handbook

Considering the background to the introduction of SCM as a new step in national transport planning there was a dominating discourse focusing on delivering more efficiency in transport policy (Odhage, 2017). More cooperation and better opportunities for coordination were ordinated along with measures for increased abilities for management and quality control.

Thus as one key to success, SCM is presented as an arena for early dialogues which should enable cooperation in early stages between key actors, such as the STA, municipalities, regional actors, transport firms and the business sector, for addressing transport related problems in spatial development contexts. The cooperative ambitions expressed in the handbook are primarily focused on participation and dialogue between key actors as a dominant feature of a CR. However, the aspect of transformation and giving ground to change through a process in developing new common knowledge is mainly indistinct. It is obscured by instrumental considerations of facts and knowledge, and the handbook avoids issues of conflict and contradictory knowledge claims, portraying knowledge and information as easily transferable and acceptable to all parties through dialogue.

On the issue of participation in an SCM, a considerable amount of SR is expressed in the handbook on finding and picking the most suitable actors for the task at hand. On several aspects the matter of finding actors to involve a clear focus on ability and responsibility is articulated which makes a clear divide between formal public bodies, transport firms and business on the one side, and on the other, mainly representatives of affected parties from the locality. The approach to participation is not focused on finding the affected parties but in finding those that can act and whose resources and plans need to be coordinated efficiently.

Another aspect for implementing SCM as a new planning activity concerns the need for enhanced control and quality of the planning process. The procedure in itself is an expression of measured and instrumental consideration of conditions, solutions and assessment. It is stepwise in tackling problems, analytical in consideration of processes, interactions and in relation to solutions and problems. The articulated system thinking approach considers either hierarchies or causality. Throughout the handbook the need for efficient procedures and efficiency in measures are explicitly expressed. It is as an ideal-type, explicitly expressing motifs of CR, although mostly a phenomenon of IR.

The three cases

The development of Aredalen

In Åre, a small but popular winter resort in northern Sweden bordering Norway, an SCM process was conducted in 2013 with the aim of dealing with the difficult traffic situation in the village during high-season with large numbers of visitors and car traffic (STA, 2014c). The number of visitors has increased many times over the years without any fundamental changes concerning safety or capacity or other measures being implemented to the road infrastructure. This situation, with a village street and a transregional trunk road in the same infrastructure, has led to complications in form of queues and increased safety risks for all involved, which all in all is a challenge to the possibilities for further growth of the resort, pressing for a shift to a more sustainable mobility pattern in the area.

Considerable parts of the process, in the case of Åre, were steeped in CR, such as a will to cooperation, or in the ambition of broad participation, and in looking for common ground and consensus on solutions for change and sustainable development. However, there are also other rationalities heavily influencing and steering the process and the participants away from effective communicative outcomes, such as local legitimacy and trust. Instead letting a parallel transport agenda, articulated in visions of a transnational corridor from Finland to Norway via the Åre valley, implicitly delimiting the scope of the process and thus the mutuality of the problem. Instrumentality is explicit in the "transport corridor" and the enhancement of E14 as a high capacity trunk road, and SR is displayed in the actual SCM process. In the process, the possibilities of discussing the trunk road were effectively blocked by personnel from the STA letting the problem be mainly solved by local actor's efforts, leaving little room for mutual and interdependent solutions and compromises. The rationale that dominated this case was the strategic type, letting the parallel agenda influence and circumscribe this potentially mutual open-ended appraisal, thus intending to secure the implementation of the other more prioritized agenda of a future, not yet existing, trans-European transport corridor.

In Åre, issues were compartmentalized, but not through discussion and agreement, as a communicative practice between key actors. Instead there was a division of issues through the STA acting for the implementation of other goals and using instrumental functions – for instance the standards of Ten-T networks – for hindering alternative perspectives on the road to be elaborated in the Åre process. Hence there is a counter-acting strategic behavior in the process, visualized in figure 3 as a gap between SR and CR. There is however relations between IR and SR, and most likely possible connections with other aspects of instrumental considerations and the communicative approach within the scope of the actual process and its issues on the "village street" problematics. This interpretation does recognize CR in the process, but highlights how strategic action in this case makes CR less fruitful.

The traffic situation in Kivik

In the south east corner of Sweden, the municipality of Simrishamn has been advocating a bypass on the national road 9 past the village of Kivik since the 1960's. In the summer, particularly at the time of the famous annual fair, large volumes of car traffic congest the local transport system and limit the accessibility of the area. The municipal comprehensive land use plan from 2001 has reserved a 40 meter wide corridor for the purpose of a bypass but cost benefit analyses of alternative routes have shown negative results and concrete plans for a bypass have never materialized. Pending a possible bypass the municipality identified the need for traffic safety measures on road 9 and when a process to update the comprehensive plan was launched in 2012, the STA proposed a more open-ended examination of this issue to find a long term solution. As a result, the STA and the municipality jointly decided to initiate an SCM – a recently introduced planning activity at the time.

The case of Kivik is an illustration of a planning process which turned from a default position of promoting a bypass to a reassessment of goals and desirable solutions. The STA had signaled to the municipality that a bypass was unlikely to be funded by national money, but also acknowledged the concerns of the

municipality regarding the traffic situation on road 9 through Kivik, and expressed a will to find a solution to the problems there. This signal carried credibility and caused the municipality to "lower the guard" and demonstrated a willingness to be a constructive partner in the search for solutions of mutual benefit for the STA and the municipality, actions that could be seen as a step towards an ideal speech situation. Thus, more than many cases, Kivik represents an example of CR in practice. Furthermore, the Kivik case is also an example of strong linkages between the three rationality types. The instrumentally rational scrutiny of facts and local knowledge about the traffic situation in Kivik, as well as the systematic assessment of costs and benefits of possible measures, constituted a large and important part of the communicatively rational dialogue between the STA and the municipality. In addition, the communicatively rational dialogue laid the foundation for a formalized agreement that secured the commitment of both parties to a package of measures, eventually implemented, hence an important condition for a strategically rational result. In sum, the case demonstrates a high level of mutually enforcing use of the three types of rationality.

The railway crossing at Högtorpsgatan in Hallsberg

The town Hallsberg in central Sweden is one of the strategically most important railway junctions in the country. It is the site of large scale freight yards and two of the major national railways intersect there. The railroads divide the town in half and within the actual town there are only a few crossings. At one particular crossing, Högtorpsgatan, the vast number of passing trains cause the bars to block other traffic up to twelve hours per day, creating a significant barrier between the northern and southern parts of Hallsberg and contributing to high strain on the only overpass in the town centre about a kilometer from Högtorpsgatan. It also creates safety hazards at the tracks, and contributes to the vulnerability of the railway system as a whole. The municipality has argued for an overpass as replacement for the single level crossing for some time, and the STA has been keen on having the crossing fenced to remove disturbances on the train traffic. An SCM was initiated to "increase the knowledge about possible measures at the existing single level crossing at Högtorpsgatan in Hallsberg that best contribute to the fulfillment of national, regional and local goals in the transport system" (STA, 2015a:10, translated by the authors). The SCM eventually resulted in a recommended set of several measures, including closing the crossing and a new overpass. Fencing of the crossing is now underway, but discussions of a possible overpass has been displaced to a larger STA led investigation of the entire railway through Hallsberg.

The case of Högtorpsgatan demonstrates several elements of CR, for instance, a persistent emphasis on consensus along the discussions in the SCM, and a process with wide participation where goals and directions for the future were defined jointly. There are also several components of SR in the actions of both the municipality, who saw a new overpass as the final goal for the entire process, and the STA who could legitimize the closing of the crossing with the SCM, without necessarily committing to a new overpass. However, the agreement from the SCM included measures that were never implemented nor on the current agenda of either party. Hence, the correspondence between the overall agreement and the actual outcome of the SCM are weak, and the actual degree of consensus in the results of the SCM was lower than it may appear in the SCM report.

Permeating the entire case from initiation to outcome, has been the functionality of the national railway system where Hallsberg is acknowledged as a crucial node of national importance. Fencing the crossing is a relatively low cost and thereby efficient measure to achieve this overarching objective, a conclusion that also enhances the possibility for the STA to take necessary action to fulfill its own goals. The overlap of IR and SR was thereby greater than that of CR and SR, as illustrated in figure 3. The aftermath of the SCM, where the Högtorpsgatan crossing is integrated into a larger investigation of the functionality of the railway through Hallsberg, mirrors the fundamentally instrumentally rational concerns even further.

Rationalities in SCM: An interpretation

Based on the analysis above, the following figures give a qualitative indication of the use and occurrence of different rationality types in the handbook and the three case studies:

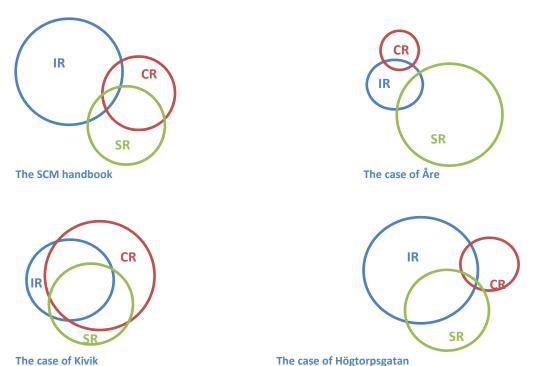


Figure 3. Qualitative indications of use and occurrence of rationality types as expressed in the examples examined in this study. Relative circle sizes symbolize relative dominance of the different rationality types in each example. Overlaps symbolize interrelatedness between rationality types.

As discussed above, the SCM practice, as symbolized by its ideal type version in the SCM handbook, is a practice of rationalities in plural. Often framed as a communicative practice giving room for CR, there are strong elements of SR in the emphasis on interagency coordination to secure the capacity to act, and even more prominently, the instrumental framework of the process of conducting SCM's in practice. Simultaneously promoted, all three types of rationality appear, but one tends to dominate the overall character of the handbook; instrumental rationality (see also Odhage, 2017).

The analysis of the three cases illustrates the occurrence of all three rationality types in each SCM. They all have components of IR, CR and SR. However, as shown in the previous section, the relative weight and dominance of the three types vary from case to case. While Kivik was characterized by dialogue largely based on openness to shared facts and interpretations, willingness to re-evaluate previous conceptions, and aspirations for mutually agreeable solutions, the case of Högtorpsgatan reveals a strong concern of the STA to preserve the function of the railway system, on which disruptions may quickly spread and affect large parts of the entire national railway system. Like Högtorpsgatan, the case in Åre also revolves around a strong national interest in the pursuit of a large scale, even transnational, transport corridor, but in contrast to the case of Högtorpsgatan, where the national infrastructure has existing and highly material needs, the Åre case is rooted in a long term strategy for scenarios that have yet to be realized. Thus from the perspective of different types of rationality, each case displays the simultaneous characteristics of different rationalities, but where the Kivik case can be categorized as dominated by CR, Högtorpsgatan by IR, and Åre by SR.

SCM as the simultaneous use of different rationalities

From the analysis above, it is clear that all SCM situations are characterized by the simultaneous occurrence and use of different rationalities. In contrast to the "traditional" procedure for transport planning where early phase investigations of transport related problems were conducted from a narrower infrastructure perspective (although supposed to be analyzed more widely since the 1990's), SCM involves communicative elements where the participation of other actors is emphasized more heavily, while maintaining a concern with cost effective solutions and an organized, instrumental, procedure for carrying out the planning process.

The participatory character of national transport planning is of course far from new. Indeed, before SCM was introduced, public consultation was mandatory in early phases in a way it no longer is. In addition, continuous dialogues between municipalities and the STA have been central to the national transport planning process for many years, although more so in the road sector than in the railway sector (Tornberg, 2011). But SCM institutionalizes the communicative element in a project format, in order to use different perspectives to define problems and link them to action, a sequence that depends on the joint framing of problems and goals, but also the systematic assessment of alternative solutions as well as the creation of commitment to implementation. The SCM approach thus requires the use of different rationalities, and its introduction and establishment as an integral part of the Swedish national transport planning process can be seen as an institutionalization of a practice that gives room for the simultaneous use of different rationalities, although more or less successfully in actual planning situations.

From the analysis, it is also clear that the potential for simultaneous use of different rationalities is far from given, and that any case may end up being dominated by one rationality over others. All the examples demonstrated above illustrate the fact that the relative weight and dominance of different rationalities vary greatly from case to case. Although the SCM approach is framed in a joint terminology expressed in the handbook, however dominated by IR, the actual practice of conducting SCM is highly context dependent and the room for different rationalities will vary. Sager (1999:101) has pointed out that "The concurrent or simultaneous utilization of different rationality types requires not only a lateral form of comprehension, but also an intellectual openness to distinctly dissimilar interpretations". Thus the circumstances in which an SCM is carried out can be expected to greatly influence the conditions for different rationality types to be used. Following the analysis above, several such contextual circumstances appear to be of significant importance. For instance, the possibilities for open-ended discussions depend on the extent and influence of previous decisions. The more institutionalized (and materialized) previous decisions are, the stronger the path dependency and momentum of ongoing and preexisting processes. Also, acknowledging the fact that SCM's involve strategic actors, the degree of political controversy can be expected to greatly influence the willingness to engage in consensus seeking dialogue. Furthermore, SCM assumes some form of interdependence between the actors involved, and a certain degree of symmetry in this interdependence. When a cooperative effort is in the interest of one party but not another, the conditions for a fruitful cooperation is greatly limited, and if a joint agreement only favors one party, it is unlikely to be effective. How problems, geographical scope, main issues, etc are defined may affect the ways in which such contextual factors come into play, and the process of framing in SCM's therefore becomes crucial. These conditions and aspects will not be elaborated further here, but should form the basis for further research.

Concluding remarks

A rationality based analysis of SCM as a transport planning approach has proven useful in at least two regards. Firstly, the theoretical discussion on simultaneous use of different rationalities has highlighted the need for the use of different rationalities in practical planning situations. This has enabled an analysis of strengths and shortcomings in actual planning processes, assuming that these need to be characterized by the simultaneous use of instrumental, communicative and strategic rationality if they are to result in efficient and viable, as well as legitimate and morally justifiable outcomes. Secondly, to the extent that

certain planning situations do not offer the opportunity to use all three rationality types, a rationality based analysis of the conditions that apply in specific situations may enable the identification of room for certain rationalities to be used, thus enhance the possibility to apply approaches where reasonable applications of different rationalities may be expected.

The focus of the analysis in this paper has been the planning process in an SCM context. A related aspect that has not been addressed explicitly in the paper is the function of different rationalities in relation to the potential of SCM to enable change toward a more sustainable society. Enabling and creating societal change could be a matter of slow incremental processes or it could take form through radical shifts in perception and conceptions. The awareness of how and for what reasons different rationalities are used in practice, in relation to different perceptions of change, could contribute to an increased understanding of SCM as a change process. This issue should be explored further in coming research.

To conclude; in discussing the relationship between different forms of planning and different forms of rationality, this paper has argued that SCM is an example of a transport planning approach that is characterized by the simultaneous use of different rationalities. SCM's thereby has the potential to result in decisions that can be instrumentally, strategically and communicatively rationally motivated. If rational planning means "planning that has and can give reasons justifying a course of action" (Alexander, 2000:243), SCM can thereby be seen as a potentially very rational way of conducting transport planning. From the perspective of one particular form of rationality, it may not be "optimal", but "satisfactory" and "meaningful", when taking other rationalities into account.

References

Alexander, E.R. (2000): Rationality Revisited: Planning Paradigms in a Post-Postmodernist Perspective. *Journal of Planning Education and Research*, 19, 242-256.

Alexander, E.R. (2001): The Planner-Prince: Interdependence, Rationalities and Post-communicative Practice. *Planning Theory & Practice*, 2(3), 311-324.

Allmendinger, P. (2009). Planning theory. (2. ed.) Palgrave Macmillan, Basingstoke.

Banister, D. (2008): The sustainable mobility paradigm. Transport Policy, 15, 73-80.

Cars G (1992): Förhandlingar mellan privata och offentliga aktörer i samhällsbyggandet. KTH, Stockholm.

Connelly, S. & Richardson, T. (2008): Effective policy-making in the uplands: a case study in the Peak District National Park. In Bonn, A., Allott, T., Hubacek, K. & Stewart, J. (eds): *Drivers of Environmental Change in Uplands*, 376-392. Routledge, London.

Edwards, M. and Mackett, R.L. (1996): Developing new urban public transport systems: An irrational decision-making process. *Transport Policy*, 3, 225-239.

Flyvbjerg, B. (1998): Rationality and power: Democracy in practice. University of Chicago Press, Chicago.

Healey, P. (1997): Collaborative Planning: Shaping Places in Fragmented Societies. Macmillan, London.

Hultén, J. (2012): Ny väg till nya vägar och järnvägar. Finanseringspragmatism och planeringsrationalism vid beslut om infrastrukturinvesteringar. Lund University, Lund.

Innes, J.E. & Booher, D.E. (2010): *Planning with Complexity: An Introduction to Collaborative Rationality for Public Policy*. Routledge, New York.

Isaksson, K., Richardson, T. & Olsson, K. (2009): From consultation to deliberation? Tracing deliberative norms in EIA frameworks in Swedish roads planning. *Environmental Impact Assessment Review*, 29(5), 295-304.

Khakee, A (1998): Evaluation and Planning: Inseparable Concepts. *The Town Planning Review*, 69(4), 359-374.

Odhage, J. (2017): Otraditionella lösningar med traditionella medel: Åtgärdsvalsstudien som planeringsfenomen. KTH, Stockholm.

Sager, T. (1999): The rationality issue in land-use planning. *Journal of Management History*, 5(2), 87-107.

Sager, T. & Ravlum, I-A. (2005): From Projects to Strategies: A Transaction Cost Approach to Politicians' Problems with Strategic Transport Planning'. *Planning Theory & Practice*, 6(2), 213-232.

Samset, K., Andersen, B. & Austeng, K (2014): To which extent do projects explore the opportunity space? A study of conceptual appraisals and the choice of conceptual solutions. *International Journal of Managing Projects in Business*, 7, 473-492.

STA, Swedish Transport Administration (2014a): *Strategic Choice of Measures, A new step for planning of transportation solutions, Handbook*. Publication number: 2013:176, Borlänge.

STA, Swedish Transport Administration (2014b): Åtgärdsvalsstudie Trafiksituationen i Kivik. Mall för redovisning av förenklad åtgärdsvalsstudie.

STA, Swedish Transport Administration (2014c): Åtgärdsvalstudie Åredalen, Report 2014:089

STA, Swedish Transport Administration (2015a): *Åtgärdsvalsstudie Plankorsning Högtorpsgatan, Hallsberg. Hallsbergs kommun, Örebro län.* Report 2015:097.

STA, Swedish Transport Administration (2015b): *Åtgärdsvalsstudier - nytt steg i planering av transportlösningar – handledning*. Report 2015:171.

Tornberg, P. (2011): Making Sense of Integrated Planning: Challenges to Urban and Transport Planning Processes in Sweden. KTH, Stockholm.

Tornberg, P. & Cars, G. (2014): Samhällsutvecklare i praktiken: Tre fallstudier om samhällsutvecklarrollen inom VO Samhälle. 2014-09-12. WSP and KTH, Stockholm.

Willson, R. (2001): Assessing communicative rationality as a transportation planning paradigm. *Transportation*, 28, 1-31.