

RISK, UNCERTAINTY, AND SPATIAL DISTINCTION: A STUDY OF URBAN PLANNING IN STOCKHOLM

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Abstract

This paper examines urban planning in Stockholm, focusing on the proposal for a new comprehensive plan. It explores the problems urban planning has set out to solve and whether – and if so, how – the concepts of risk and uncertainty form part of the planning discourse. A departure point is that both urban planning ideals and the problems these ideals claim to address are constructed. Explicitly or implicitly, planning creates demarcations that make places and activities appear safe or risky, attractive or problematic, etc. Analysis of the proposal for a new comprehensive plan for Stockholm identifies at least three such boundaries or spatial distinctions: between centre and periphery, green areas and other parts of the city, and risky or unsafe areas and other areas. Likewise, the analysis finds evidence of a tension between rational planning and normative ideas of the “good city” in urban planning.

Keywords: risk; uncertainty; urban planning

1. INTRODUCTION

The concept of progress is central to modern society. Progress implies that, using human reason and activity, we can mould and change society and nature, and furthermore, that the society of the future will be better than that of the present. This concept is built into urban planning, not least in its various visions and planning ideals. The concept of progress corresponds to that of risk, which has become central to our understanding of misfortunes as events that are calculable and predictable in probabilistic terms. Concepts such as luck, fate, and God separate events from controllable causes, while the concept of risk indicates the possibility of forecasting and controlling future events (Green, 1997). Although recurrent regulatory failures and disasters challenge this understanding, highlighting flaws in the belief that we can exert control over future events, organizations seem to have no option but to act as though it were valid. This “act as if” ethos manifests itself in a plethora of rules and devices for managing risk. Power (2007: 5) writes: “Central to this response imperative is the production of visionary documents and designs in the form of standards and guidelines for individuals and organizations”. Furthermore, risk management, as an endeavour to control future events, alludes to values of science, expertise, and rationality and frames uncertainty as current “gaps in knowledge” or

“not-yet-knowns” (Lidskog, Soneryd and Uggla, 2009). Risk management thus often treats uncertainty as a curable state.

In terms of risk management, social and urban planning initially focused on issues such as safety, security, and health as related to urbanization and industrialization (Breheny, 1996; Johansson, Svedung and Andersson, 2006). A recent analysis of local planning in Sweden, however, indicates that risk assessment in planning is primarily related to calamitous events. The analysis also demonstrates that planning documents are supposed to fulfil several functions, presenting visions and serving as implementation instruments, political guidelines for the built environment and land use, and tools for dialogue and information on future development (Johansson, Svedung and Andersson, 2006). Planning thus emerges from the tension between ideas of rationality, expertise, and science-based decision-making and dreams and visions of a better future.

This paper examines urban planning in Stockholm, focusing on the proposal for a new comprehensive plan. The paper explores the problems urban planning has set out to solve and whether – and if so, how – the concepts of risk and uncertainty form part of the planning discourse. A departure point is that both urban planning ideals and the problems these ideals claim to address are constructed: they are co-produced and gain meaning from each other (Jasanoff, 2006). In this sense, urban planning involves drawing boundaries and distinguishing between, for example, centre and periphery and humans and nature, separating places spatially or with regard to their purpose and to ideas of their proper use (Lidskog, Soneryd and Uggla, 2009). Accordingly, another issue discussed here is how such distinctions are made.

2. URBAN PLANNING IDEALS

Discussion of the meaning and implications of urban form is not new. Planning history manifests an ongoing debate that can roughly be described as polarized between “centrists” favouring the compact city and “decentrists” pleading for urban decentralization. The former “believe in the virtues of high density cities and decry urban sprawl” (Breheny, 1996), whereas the latter have mainly promoted decentralization as a way to deal with the problems of industrial cities. Neither position necessarily invokes environmental concerns.

In contemporary debate, the problems of urbanization and industrialization have been reframed in terms of sustainable development (Breheny, 1996), and in recent decades, the relationship between urban form and sustainability has become a planning issue. In some instances, various planning ideas and ideals, proposed as solutions to environmental problems, are framed as matters of evidence, i.e., what

urban form best addresses contemporary problems is described as an empirical question resolvable with hard evidence. One example is the discussion of density and urban sprawl in relation to climate change, which can supposed be solved with reference to hard facts pertaining, for example, to petroleum consumption and mobility patterns (Breheny, 1996)

Urbanization can be considered both a threat to nature and a way to promote resource efficiency and an environmentally sustainable way of life. The concept of sustainable cities alludes to a range of factors, such as accessibility, efficiency, innovation, employment opportunities, safety, and a good environment including biodiversity conservation. Today's cities face divergent demands, including pressure to lodge increasing numbers of people, animals, and other species (Evans, 2007). The concept of the sustainable and liveable city incorporates strong and partly contradictory ideals. One such ideal invokes "urban qualities" or "urbanity", referring to values such as density and diversity. Another concept is that of the "green city" or "garden city", which refers to the value of green spaces (e.g., parks and gardens) for recreational purposes and of green-field sites and "wildlife corridors" for environmental purposes. The urban is often considered antithetical to nature, which is defined as "the other" counterposed to human society and culture (Merchant, 2003; Oelschlaeger, 1991). This often unproblematic distinction between nature and culture, however, is anything but given; instead, the concepts are bound together, gaining meaning from each other. Urban planning thus also concerns the relationship between nature and culture or between the "natural" and built landscape.

Contemporary urban planning has tended to favour concentration in reaction to the low-density city and urban sprawl. Both European and Swedish planning discourses emphasize particular urban qualities. Such discourse frequently invokes the concepts of "renaissance" and city rebirth, based on a specific historical understanding of the city (Tunström, 2009). For example, the *Green Paper on the Urban Environment* of 1990 articulates a version of the traditional urban ideal of the "mixing" of urban uses (Commission of the European Communities, 1990;2004). This tendency to emphasize the ideal of a compact city characterized by mixing and diversity is manifested in the proposal for a new comprehensive plan for Stockholm, to be analyzed in the following section.

3. PLANNING FOR GROWTH IN STOCKHOLM

The future of Stockholm – as both city and region – is discussed in several related documents, for example: *Vision2030* (adopted by Stockholm municipal government in June 2007), a proposed new comprehensive plan (to be decided on in 2010), and a proposed new regional development plan (to be decided on in 2010). All these documents express high expectations for Stockholm's future

development, as conveyed in the following slogans: “A world-class Stockholm”, “Stockholm – the capital of Scandinavia”, and “Stockholm region – Europe’s most attractive city region”. The basis for these expectations is a forecast continuation of faster population and economic growth in the Stockholm region than in the rest of the country, and the idea that Stockholm is unique in that it unites “the pulse of a big city with proximity to natural experiences and a clean city environment” (Stockholms stad, 2008).

3.1. Proposal for a new comprehensive plan for Stockholm

In the foreword to the proposal for a new comprehensive plan for Stockholm, the City Commissioner summarizes her view of Stockholm’s future development. Based on the vision of “a world-class Stockholm”, the aim is to “create a compact city, which is attractive, environmentally friendly, and safe for human beings – it is a city for walking, based on the qualities of the compact city ... with vibrant city life in new areas ... [and] dissolved boundaries between the city centre and the suburbs” (Stadsbyggnadskontoret, 2009a).

The first section of the proposal elaborates on several challenges facing urban planning. The forecast is that Stockholm – as both city and region – will continue growing, which, according to the proposal, poses a challenge to future city planning. Other challenges mentioned in the introduction are combining continuous growth with long-term sustainable development, attracting competent workers, mitigating climate change, and providing equal opportunities for all residents. Beside these challenges, the introduction to the proposal refers to the general objectives for a growing region presented by Stockholm municipal council in *Vision2030 – A world-class Stockholm*, and by other actors, such as other municipalities in the region (Stadsbyggnadskontoret, 2009a: 9). This vision stresses three themes: Stockholm as a versatile city replete with experiences; Stockholm as a dynamic, innovative business community; and Stockholm as the citizens’ city. The introduction states that the intention of such visions and objectives is to describe growth that is ecologically, socially, and economically sustainable in the long term. The issue of Stockholm’s future development is thus based on forecast continuous growth and framed as a matter of sustainable development.

Following this introduction, the proposal elaborates on the course of planning and identifies nine focal areas: Stockholm – a city on the water; a strong economy and educational system; a cohesive and vital city; sports, recreation, and green sites; a modern transport system and sustainable travel; housing supply in a growing city; new energy and technical supply systems; a city replete with experience and cultural–historical values; and environment, health, and safety in a compact big city.

Based on the vision of a world-class Stockholm and the focal areas, the proposal presents the city's planning direction and strategies for sustainable growth. This section of the proposal explicitly advocates abandoning the direction articulated in the 1999 comprehensive plan, which was to preserve coherent green-field sites. The proposal states that there are "strong reasons to abandon this principle" when the city is growing and its residents' requirements are changing (Stadsbyggnadskontoret, 2009a: 32). Instead, the aim is to supplement post-war Stockholm with the "intense urban environment of the inner city", characterized by diversity and including housing, workplaces, and services. Furthermore, it is stated that Stockholm, compared with other big cities, is sparsely built up, meaning there is potential to increase the urban density (Stadsbyggnadskontoret, 2009a: 32). The overall aim of the proposed strategy – i.e., i) continue consolidating the city centre, ii) create attractive centra outside the city centre, iii) link different parts of the city, and iv) promote a living environment throughout the city – is to create a more compact and coherent Stockholm. The importance of green-field sites and nature areas, especially parks, is emphasized only in relation to the concept of a compact and coherent city. These areas are supposed to contribute to "the attractiveness, character, and beauty" of Stockholm (Stadsbyggnadskontoret, 2009a: 18) and to be important both for recreational purposes and as meeting places and public space. Although it is acknowledged that the proposed planning direction would entail a reduction of green areas, this loss would be compensated for by improving the urban environment as a whole, i.e., "public space of high quality and diversity that attracts Stockholm citizens of various ages and interests" (Stadsbyggnadskontoret, 2009a: 18), and by improving the quality of parks.

3.2. No problems, but several challenges

The introduction to this paper asked what problems Stockholm urban planning was setting out to solve. The proposal for a new comprehensive plan for Stockholm makes sparing use of the term "problem". Instead, the proposal starts with visions of the future city and several "challenges", focusing much more on goals than on obstacles. Accordingly, the emphasis is on meeting challenges and on exploiting, enhancing, or creating "opportunities". Potential problems are alluded to rather than spelled out (unlike the comprehensive plan of 1999).

Through repeatedly emphasizing the compact, coherent, attractive, vital, and mixed city – as expressed in the following quotation – an ideal of a specific city is crystallized:

The vision of a world-class Stockholm largely concerns a vital and growing city where a diversity of functions/activities is mixed. Often the prototype is the intense environment of the inner city that includes a mixture of housing, workplaces, and services that attract a great many citizens and visitors. (Stadsbyggnadskontoret, 2009a)

In contrast to this explicit ideal, problems are defined implicitly. The stated ideal indirectly touches on the absence or lack of certain desirable elements in certain urban areas. This absence or lack concerns both qualitative factors (e.g., community and attractiveness) and physical form. This discourse defines certain areas of the city (e.g., the suburbs) as problematic and unattractive, representing homogeneity, lifelessness, lack of safety, etc. (Tedros, 2008).

Analysis of Swedish planning discourse, 1988–2003, demonstrates how the modern city represents the antithesis of the “good city”, an ideal based on the concept of the traditional European city (Tunström, 2009). According to this perspective, it is modern planning that has broken and fragmented the city, creating suburbs and bedroom towns that lack “history, identity, coherence, and diversity” (Tunström, 2009). This planning discourse and the city ideal presented in the proposal for a new comprehensive plan for Stockholm correspond to certain presumed values, such as coherence, mixed use, diversity, and traditional neighbourhood structure, as proposed by the New Urbanism movement. This movement, which has its roots in the USA, aims to revive “the lost art of place-making” (New Urbanism, 2009) and upholds the possibility of creating a sense of community by integrating the various parts of a city (Tunström, 2009: 75).

The proposal for a new comprehensive plan for Stockholm is thus based on a desire to achieve certain urban qualities by means of physical planning. Although the term “problem” is rarely used in the proposal, problems and deficiencies are constructed via talk of what is desirable and by identifying challenges.

3.3. To manage uncertainty

Physical planning is based on the notion of an open-ended future, which implies that uncertainty must be accepted and managed. Studies of planning and forecasting practices indicate that planners and professional futurists use various strategies to manage uncertainty in planning. One strategy relies on norms, recommendations, and guidelines set by politicians, national public agencies, and other authorities. This strategy is based on simplifying and standardizing a complex and uncertain set of knowledge (Lidskog, Soneryd and Uggla, 2009: 87; van Asselt, Mesman and van't Klooster, 2007: 647). Another strategy entails embracing pragmatism and adopting a “no-regrets” attitude, i.e., the proposed measures and planning direction will be beneficial, or at least not detrimental, even if forecast events do not occur. Yet another strategy is to discursively manage uncertainty, either reducing it by invoking comparisons with even greater uncertainty and thus defusing current uncertainty (Olausson and Uggla, 2009; Uggla, 2004).

The proposal for a new comprehensive plan for Stockholm concludes that the city has a good base of knowledge and other requirements for planning. The assumption underlying the proposal is that Stockholm will continue to grow, and the passage articulating this is the only one that mentions “uncertainty”. This passage states that “of course there are many uncertainties concerning the future, not least in times of considerable fluctuations in the market” (Stadsbyggnadskontoret, 2009a). However, this acknowledgement of uncertainty does not impinge on the proposed planning direction, which is to promote continuous growth. Instead, the next section of the text presents forecast figures for population increase, births, and needed child and geriatric care without any further discussion. In this sense, the forecast figures are conferred significance as a basis for the proposed planning direction.

In the proposal, the chosen emphasis on densification represents both a way to manage current population and economic growth and a strategy for fostering desirable growth. This dual framing of the issue entails a limited scope and requirement for discussion of uncertainty. Defining continuous growth as both real and desirable could be seen as a way to discursively manage the uncertainty of forecasting. It also means that the proposed planning direction embodies a no-regret strategy: it is a way not only to meet the needs of population and economic growth (which may or may not occur as forecast), but also to foster *desirable* population and economic growth. The proposal is thus framed both as the rational management of certain conditions and as normative in emphasizing certain positive qualities inherent in the proposed planning direction.

Another approach to the management of uncertainty in planning is to analyze the role of knowledge in planning discourse. The proposal for a new comprehensive plan for Stockholm uses the concept of knowledge in a straightforward way. As exemplified by the following quotations, knowledge of various issues, such as risk, vulnerability, and the needs of various groups, is considered either sufficient or needing improvement:

Knowledge of the everyday needs of various groups in society should be increased via dialogue and investigation. (Stadsbyggnadskontoret, 2009a)

The city generally has very good knowledge of the conditions and requirements of planning, and the essential basis of planning is accounted for in this comprehensive plan. In certain areas, there is rapid development, not least concerning technology. It is important that the city be ready for new requirements and that the basis for planning be renewed as conditions change. In recent years, for example, increased knowledge of risk and vulnerability in the urban environment has identified the need for improvement of the basis for planning. (Stadsbyggnadskontoret, 2009a)

In addition, when discussing the consequences of climate change, the proposal says it is important to continue upgrading the knowledge base, but does not explicitly consider the complexity and uncertainty connected with climate science and scenarios (Edwards, 2001). One interpretation is that such discussions are supposed to be beyond the scope of urban planning. Instead of elaborating on them in terms of uncertainty, climate change impacts are referred to as risks that, in turn, are delegated to a working party focusing on climate change adaptation.

Analysis indicates that, in the Stockholm case, issues of uncertainty and knowledge are treated in a way that does not acknowledge uncertainty in any deeper sense. When uncertainty is explicitly mentioned, it is discursively managed by presenting figures that, despite their preliminary character, are used as basis for a subsequent proposal in combination with the framing of continuous growth as both real and desirable. Likewise, the analysis demonstrates that how the concept of knowledge is used in the proposal rules out the acknowledgement of profound uncertainty; in other words, uncertainty is framed as current “gaps in knowledge” and “not-yet-knowns” or referred to simply as “risk”. How, then, are the explicitly mentioned risks related to climate change and other issues managed in the proposal?

3.4. Planning as risk discourse?

The concept of risk has assumed a prominent position not only in social science, but also in the government and corporate sectors (Hutter and Power, 2005; Renn, 2008). Since the mid 1990s risk management practices have rapidly spread across a wide range of organizational contexts (Power, 2004). One might expect urban planning to be part of this risk discourse. In the proposal for a new comprehensive plan for Stockholm, however, risks are discussed in a limited way. Except for some instances in which the term could easily be replaced with another word, for example, in the statement that “there is a risk that sports will come into conflict with the value of coherent green-field sites”, risk is used in relation to specific issues in the proposal.

In the passages of the proposal that explicitly refer to risk, the concept is related to climate change and particular risk areas or to activities facing particular risks. When the issue of climate change and risk is discussed, the incursion of saltwater into Lake Mälaren and sea level rise are cited as the main issues. Likewise, areas facing particular risks, e.g., areas threatened with landslides and flooding, are mentioned (Stadsbyggnadskontoret, 2009a). The risk activities mentioned in the proposal concern the airport, businesses that must be located a certain distance from dwellings, and complex infrastructural projects (Stadsbyggnadskontoret, 2009a).

As well as in a limited number of passages in the proposal proper, risk is mainly dealt with in an appendix whose three sections discuss environmental impact assessment, national interests according to the environmental code, and environmental and risk issues. The third section, besides touching on military preparedness and war, covers four main environment-related categories: i) environmental issues such as noise, water quality, and air pollution; ii) climate change impacts such as flooding and rising temperature; iii) landslides and other natural disasters; and iv) risks related to particular activities and/or areas, such as harbours, industry, transport of hazardous goods, and air traffic, or to the function of infrastructure such as telecommunications and IT (Stadsbyggnadskontoret, 2009b). The proposal and its appendix frame the concept of risk mainly as a matter related to environmental issues, climate change, and technical systems.

However, what is considered a risk is also constructed in passages that never explicitly mention the term "risk", for example, when talking of safety and lack of safety in relation to particular phenomena. In the proposal, safety is linked to the existence of a vital, attractive city and to integration, whereas lack of safety is linked to deserted places, and areas needing improvement. Accordingly, the proposal links the remediation of unsafe conditions in various parts of the city to safe passages and walks, increased safety in parks and green-field sites, creating populated public spaces and vibrant city life, and enhancing safety and preventing crime in specific areas (Stadsbyggnadskontoret, 2009a). Parallel to the construction of risk in this discourse of safety and lack of safety, an ideal is also constructed, i.e., the ideal of a compact and coherent city.

The proposal invokes the concept of risk mainly in relation to specific geographical areas and to activities linked to infrastructure and technical systems, removing it from the discussion of planning direction. Instead, risks are mainly accounted for in an appendix identifying the need to identify, inventory, and further assess risk objects in light of the issues listed in the appendix. The construction of risk in the discussion of safety and lack of safety, on the other hand, is closely linked to the construction of a certain planning ideal and to identifying some areas possessing urban qualities as attractive and safe and others as desolate and unsafe.

3.5. Spatial distinctions

Explicitly or implicitly, planning creates demarcations that make places and activities appear safe or risky, attractive or unattractive, straightforward or problematic, or important or unimportant (Lidskog, Soneryd and Uggla, 2009). The analysis of the proposal for a new comprehensive plan for Stockholm identifies at least three such spatial demarcations or distinctions: between centre and periphery, between green areas and other parts of the city, and between risky or unsafe areas and other areas.

First, although the proposal for a new comprehensive plan for Stockholm explicitly aims to “dissolve boundaries between the city centre and the suburbs” (Stadsbyggnadskontoret, 2009a), it nevertheless distinguishes between centre and periphery. When the inner city, described as an “intense urban environment”, is proposed as the prototypical goal of urban planning, areas not fitting this outline are either constructed as peripheral and needing improvement (e.g., concerning safety and crime prevention) or disregarded. To be defined as an adequate part of the city, the area or district must already possess certain urban qualities or have the potential to become city-like.

Second, the proposal stresses that parks, green-field sites, and nature areas contribute to the city’s attractiveness. It also states that the importance of attractive green-field sites increases as the city grows, since these places are important for recreation and provide a “second living room for citizens” (Stadsbyggnadskontoret, 2009a). “Green” and “natural” features thus have their place and represent positive values in the city. Even so, the proposal constructs an incompatibility between the coherent city and coherent green areas, favouring the coherent city. The idea is to compensate for the loss of green-field sites by creating high-quality public space, such as parks, that enhances the quality of the city environment as a whole. Furthermore, it is firmly stated that “the value of existing green-field sites must be determined in relation to the possibility of further developing the city environment” (Stadsbyggnadskontoret, 2009a). The proposal for a new comprehensive plan manifests ambivalence toward green areas in the city. On one hand, green-field sites and parks are characterized as important to the city, having recreational value and functioning as public meeting places. On the other hand, green-field sites and parks are constructed in opposition to desirable qualities of urban life, and cast as places that must give way to expansion and increased urban density. In this sense, green areas and nature are constructed as something qualitatively different from the rest of the city.

Third, as discussed in the previous section, the proposal reserves the concept of risk for particular activities and areas, such as harbours, airports, industry, and areas vulnerable to flooding and landslides. This keeps the concept of risk separate from the more general planning discussion, delegating it to other arenas and actors. Furthermore, the construction of certain places as safe or unsafe is closely linked to the ideal of the compact city. The proposal links safety to vibrant city life, diversity, integration, and coherence, while lack of safety is linked to desolation, barriers, and suburbs.

4. CONCLUDING DISCUSSION

One way the proposal for a new comprehensive plan for Stockholm approaches risk and uncertainty is to link risk to certain activities and areas and to remove the issue from the planning discussion,

delegating it to other arenas and actors. This approach to risk implies a reliance on rational management concepts. In this discourse, the matter is delegated to experts in a range of well-defined risk areas. Another way the proposal treats risk and uncertainty is to link lack of safety to certain areas constructed as problematic, in contrast to other areas possessing valued urban qualities. These parallel approaches to risk and uncertainty issues indicate, first, that spatial distinctions offer a way to manage awkward issues such as risk and uncertainty in urban planning. Second, they evince a tension in urban planning between rational planning, on one hand, and visions and strategies based on ideas of the “good city”, on the other. In this sense, the planning discourse relates to a master narrative of modernity, including ideas of rationality, objectivity, scientific evidence, and possible control; at the same time, it is deeply normative in its unproblematic emphasis on certain values of the compact city.

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