

Sociotope mapping

– exploring public open space and its multiple use values in urban and landscape planning practice

Alexander Ståhle

Nordic Journal of Architectural Research
Volume 19, No 4, 2006, 13 pages
Nordic Association for Architectural Research
Alexander Ståhle, School of Architecture, Royal Institute
of Technology

TOPIC: ARCHITECTS IN THE 21ST CENTURY – AGENTS OF CHANGE?

Abstract:

Sociotope mapping – exploring public open space and its multiple use values in urban and landscape planning practice.

This paper aims to describe the theoretical body of a new urban planning tool called the “sociotope map” (Swedish: sociotopkarta), developed within the planning practice of the Stockholm City Urban Planning Administration. Since the postmodern communicative turn in urban and landscape planning, dominated by densification and sprawl, there has been a great demand for a more efficient connection between the system world of planners and the life world of citizens, starting from the users’ space and perspective, not the planners’. In Lefebvre’s terms the sociotope map is a representation of the users’ perceived space. The key Marxist concept here is use value, or more accurately in environmental economic terms: direct use value. The Stockholm sociotope map is consequently a map of the commonly perceived direct open use values of specific open space, of the citizens of Stockholm. The map emphasizes that people share use values but that every open space has a unique set of values. Its representation of diversity of place (topos) is maybe just the level of reduction that makes the map true enough to the citizens and at the same time useful for the planners. This can explain its recent recognition in Stockholm

and other fast growing municipalities in Sweden (e.g. Gothenburg 2004-2007 and Uppsala/Gottsunda 2006). However more experience and research still remain to completely understand this tool. The recent success can only be explained by the fact that there is a true demand. A society which is turning increasingly postmodern, globalized and individualized can hardly plan, develop or grow without knowledge of the common use values of urban public open space.

Key words:

public space, open space, urban planning, landscape design, use value

Introduction

This story begins with a practical spatial planning problem. In the late 1970s the urban development of Stockholm municipality had reached its outer limits. The Urban Planning Administration now started to formulate strategies for densification, or as it was stated in the city Plan from 1999: "Building the city inwards". In 1996 the politicians of the Stockholm City Council decided, because of extensive conflicts around densification projects, that they needed a map of open space showing its "ecological, social and cultural values". The project was officially called "Stockholms grönkarta" (Stockholm green map), since practically all open space was and still is considered "green". Although it was supposed to cover not only parks and nature areas but also plazas, play grounds, sport fields, quays et cetera. The project was administered by the Stockholm City Urban Planning Administration and divided in two; the biotope map and the sociotope map, where the former related to ecological issues and the latter to human issues.

In Swedish modernist planning (approx. 1930-80) human and social issues have been strongly emphasized since the beginning. But with the latest environmental turn around 1980-90 an apparent shift toward biological issues took place in open space planning. Especially ecological aspects of nature had a very strong position within recent green structure planning, namely as biodiversity, endangered species, biotopes and landscape ecology. The biotope map, developed within a collaborative project between Stockholm University and Stockholm Urban Planning Administration (Löfvenhaft & Ihse 1998), is a product of such scientific ecology and easily integrated into the rational planning cultures still working at this time. Its success basically depends on rigorous research, detailed mapping and a high degree of quantitative data at expert level and a strong political consensus on all levels, be it municipal, regional, national, continental or international, such as the Rio convention.

The sociotope map can on the other hand be regarded as part of the communicative turn in post modern urban planning, focusing on dialogue and citizen participation (Healey 1997). I will in this paper focus on the communication in terms of the exploration of use values of open space and how these are possible to integrate in planning by mapping. This paper is lead by Henri Lefebvre's pressed ques-

tions in his pamphlet *Right to the city* (1982): "Which are the socially successful places and which will they be? How do we recognize them? Based on what criteria?" (1982, p. 141, my translation from Swedish translation). In the end we also have to ask ourselves: – How do we create and manage these successful spaces? This paper is basically about how urban planners today try to integrate these 'postmodern' questions into actual planning practice, specifically when it comes to the densification of existing urban and suburban settlements.

The Stockholm sociotope map practice

The concept 'sociotope' was invented ad hoc during my urban planning practical training at the Stockholm Urban Planning Administration 2000-2002 together with landscape architect and former city park director of Stockholm, Anders Sandberg. We where at that time not aware of any other use of this concept but we thought it was an intriguing complement to the biologists' concept of the *biotope*. The immediate attention that the sociotope concept got among planners², researchers³ and media⁴ can be explained having the Wittgensteinian notion in mind, which emphasizes that words are produced and reproduced by their utility and use. Hence there is no absolute definition of the word. Sociotope was a natural reaction to the environmental turn in planning and the systemic ecological (biocentric) paradigm that had been dominating green open space discourse since the 1980s. The sociotope map was also a pragmatic response to the need of a map which showed open space use values in Stockholm City. The concept has been defined and redefined continuously since the start. To sum up the persuasion for meaning in our work I would, as the "reflective practitioner", summarize the attempts to define the concept sociotope as *'the commonly perceived direct use values of a place by a specific culture or group'*.

In the following a brief description is presented of how the sociotope map was made at the Stockholm City urban planning administration. It has to be emphasized that this procedure is one specific case, formed by practical and administrative conditions. A sociotope map, as discussed theoretically below, could be created in a totally different way and also look totally different in the end. A sociotope map is in any case a response to central (local) authorities' increasing need to understand their citizens and their ev-

everyday urban environment. Thus the first step in making a sociotope map is to define the “group”. It answers the question: Who does the open space use values represent? In our case the “specific culture” was the citizens of Stockholm, i.e. the people living within Stockholm City, not people from other municipalities, towns or countries.

The Stockholm sociotope map was made principally in five steps:

1. **Open space definition.** All publicly accessible open space > 0.5 ha were geographically defined and named.
2. **Expert evaluation.** Open space professionals (e.g. landscape architects) value the open spaces by observation with protocols that was developed out of scientific research and professional experience. In Stockholm all defined open spaces were observed for at least 10 minutes in two different seasons.
3. **User evaluation.** The citizens of Stockholm City were engaged in several “dialogue activities” such as interviews, focus groups and questionnaires. This was partly administered by the local city district administrations. The main question concerned the citizens’ “favourite outdoor places” and its use values. Questionnaires were sent to local organisations, personnel at day nurseries and pre-schools, published in the local news paper, and put up as webforms on the city district’s websites. Several interviews and focus groups with youths, adults and elderly people were conducted. Environmental psychologist Maria Nordström at Stockholm University, who made some interviews, also developed the latest questionnaires and interview guides. Since 1996 the Stockholm municipality has carried out more than 25 large inquiries on green and open space use.⁵
4. **Synthesis.** All information from the user evaluations were compiled together with the expert observations into 20 use value-concepts. These were for example: play, quiet, walking, picnic, crowds, swimming, wilderness. The concepts ranged from intense urbanity to calm nature, all encompassed within the open spaces of the City of Stockholm. The concepts were deliberately made a simple everyday language that would work as an interface (a tool for communication) between the life world of citizens and the system world of planners.

5. **Mapping.** Based on the expert and user evaluations every specific open space was registered with its specific composition of use values into the sociotope map. One open space can have one or several use values.⁶ Since most of the surveys focused on “favourite places” the user evaluation data was place specific. The synthesis of public and expert place information is done through various triangulations and comparisons between places and use values. The places were also marked in two territorial levels: local place and regional place. The GIS-based map was designed to be printed in A1 and also for web-publication on the Internet and the administration’s Intranet, making it as accessible and easy to use as possible for planners within the administrations as well as external consultants, mostly architect firms.⁷

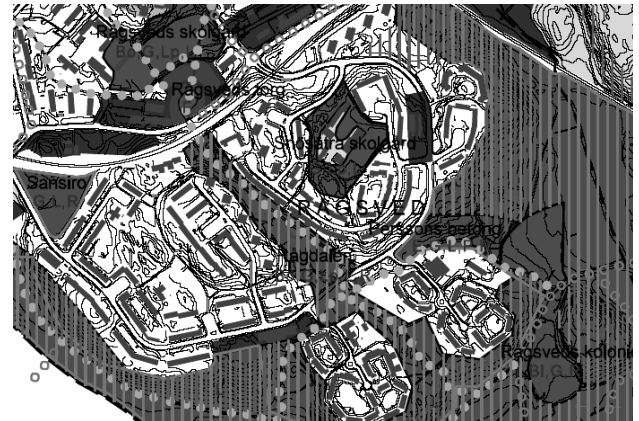


Fig 1. Excerpt from the Stockholm sociotope map for the city district Rågsved.

It is not yet clear what impact the sociotope map has had on planning practice or in planning and urban theory. It is to my experience evident that the map and its method have not lost attention since 2002, when the first sociotope map of Stockholm was finished. On the contrary it seems to be increasingly more familiar to planners in Stockholm. Almost everyone in the planning and environmental administrations and in external consultant firms seems to have heard about it. Many have at least come across it in a project, and quite a few have been using it practically, for example in EIA (Environmental Impact Assessment) and SEA (Strategic Environmental Assessment). Two other municipalities in Sweden have recently started sociotope

mapping; Gothenburg (2nd biggest city in Sweden) and Uppsala (4th biggest city in Sweden). In my own research on green structure accessibility the sociotope map constituted essential empirical data, which I could not do without (Ståhle 2005).

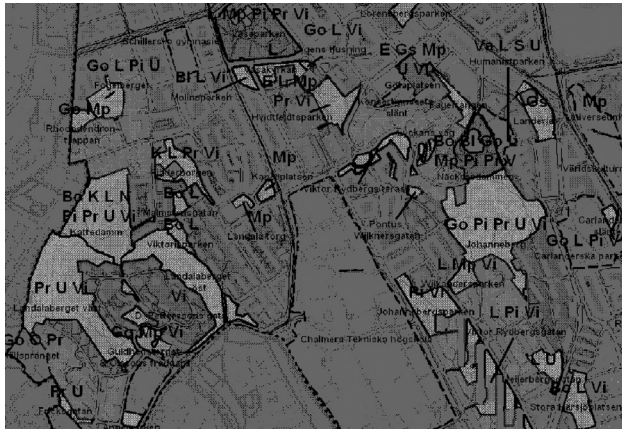


Fig 2. Excerpt from the Gothenburg sociotope map for the city district of Centrum.

Three cases in planning practice

In the following, three planning projects are described where the sociotope map has been used in urban planning practice. The projects include the densification of Årsta, brownfield development of Annedal and open space design in Gottsunda (Uppsala).

1) An extensive densification project was initiated in Årsta in 2003 (Stadsbyggnadskontoret 2003b). Årsta is a modernist suburb from the 1950s. Within this project the Stockholm sociotope map was used as a background for more detailed sociotope studies. The survey was conducted as focus group interviews by two planners from the municipality. The main aim was to understand how adults, youth and children use open space so that the most popular spaces could be saved from exploitation and so that open space in itself could be improved. The results were quite clear. Adults preferred peace and quiet walks in the largest park and in the closest forest area. Youths often seek places for meetings and gatherings to see their friends. Freedom, space and street life are common qualities in their favourite places, which imply both forest, sports fields and the city centre. Personnel in nursery schools and after-school centres in the area were asked to state the children's most visited places.

No less than 40 different parks and green areas in Årsta were mentioned in the interviews. It is apparent that these places are a necessary supplement to the yards that belongs to the nursery school, the after-school centre or the school.



Fig 3. Favourite open spaces for youths in Årsta. (Stadsbyggnadskontoret 2003b)

2) Annedal in Stockholm is an extensively used brown field where a new housing district is currently planned. Within this planning process, children, youths, adults and elderly people in the adjacent housing area of Mariehäll were interviewed in focus groups. The interviews, which were conducted by two urban planners from the municipality, resulted in a detailed sociotope map for the current area and guidelines for open space planning. The most important conclusion was that a lack of some fundamental open space use values such as park spaces for picnic and soccer in Mariehäll was experienced and therefore it was important to create these values in Annedal. The guidelines emphasized not only the content of the new open spaces but also the size and the connecting street system as means for making the new park accessible and public. (Stadsbyggnadskontoret 2006)

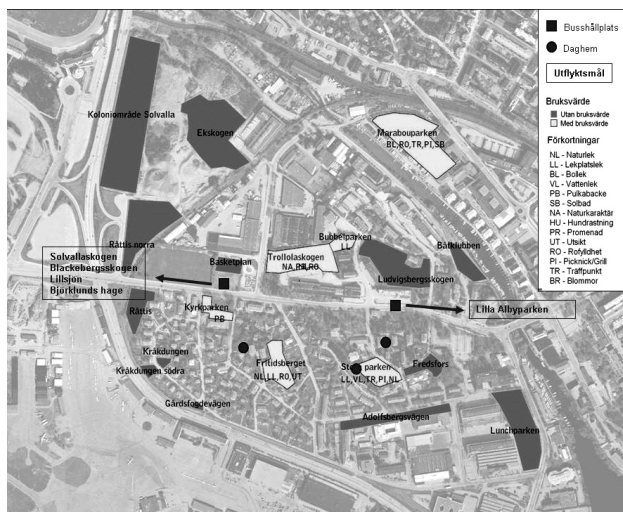


Fig 4. Favourite open spaces for children ages 2-6 in Mariehäll (Stadsbyggnadskontoret 2006).

3) In 2006 the Uppsala Urban Planning Administration started a planning process called “Gottsundaprocessen”, which emphasized dialogue with local citizens. Gottsunda is today the largest late modernist area from the 1960s in Uppsala (4th biggest city in Sweden) with a lot of social housing. A high degree of immigrants, low income, low education and high crime rates are what the area is infamous for. One of the main aims with the planning process was to find spaces for densification and also open space for landscape design improvement. The Leisure and Nature Administration at the municipality initiated a sociotope mapping project to collect knowledge in the open space use values. 22 focus group interviews were conducted; ten groups with pre-school personnel, youth councils at school, youth organisations (La Softa, KFUM), adult associations (Culture club Raffi, Rental housing associations), and elderly (Women’s organization Bozorgan, Christian church association). The results were diverse but also very clear about one thing. Gottsunda lacks a proper public open space in its centre. The most popular open spaces were in the periphery of the area (e.g. Gottsundagipen). The district centre consists today of a large parking lot outside a degrading shopping mall from the 1960s. The consultant firm Spacescape, which I am a part of, administrated the sociotope mapping process and summarized the findings into a proposal for a new central plaza on what is now the parking lot. The pro-

posal was illustrated by a visionary collage that represented all the things that the citizens in Gottsunda had stated as major open space use values: places to sit in the sun, events, scene, cafés, water, flowers, playgrounds, sports fields and street markets. All these use values could be designed in a new public open space that would be located on the parking lot, within the everyday movement pattern of the citizens of Gottsunda. The cars could instead be put aside and on the roof of the shopping mall.

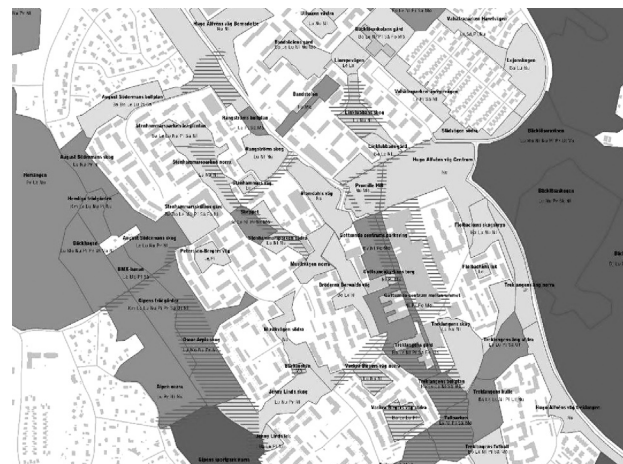


Fig 5. Sociotope map of Gottsunda showing the stated use values of open spaces.



Fig. 6. Visionary collage of a new central plaza in central Gottsunda based on the sociotope survey (Uppsala kommun & Spacescape 2006).⁸

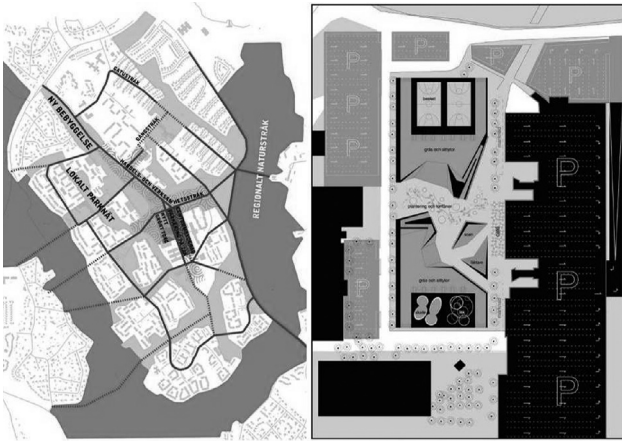


Fig 7. Plan proposal for densification of open spaces with low use value (left) and design proposal of a new plaza in central Gottsunda (right). The plaza location and design is a direct translation of the sociotope survey, stating the values and the wishes of the local citizens (Uppsala kommun & Spacescape 2006).

With the citizens' opinions and perceptions as a starting point, as done in the sociotope mapping process presented in these three projects, new places can be created that are shaped from the citizens' point of view – “bottom-up”, not “top-down” by the mind of one architect or decision maker. The sociotope map emphasizes the fundamental difference between *life world* of citizens and the *system world* of planners and architects. It proposes a way to handle this fundamental contradiction between “the user” and “the designer”, which really has been emphasized within the post-modern turn in urban planning.

The sociotope map as urban theory

One can consider the postmodern turn in urban planning, the critique of modernism, technology, rationality and large scale capitalism, as a critique of how the system world of institutions and companies was too separated from the life worlds of people and culture (Habermas 1986, Harvey 1989, pp. 257-261). This turn naturally led to emphasizes on post-structuralism, deconstructivism, culturalism etc. in the academic discourse (Foucault, Jameson, Habermas) and consequently discussions on governance and forms of dialogue in the planning discourse (Friedman, Healy, Mintzberg). But the question remains: What about the descriptions of urban space? What is the sociotope map, as it has been developed in Stockholm, in the perspective of contempo-

rary urban theory? My starting point for investigating the sociotope mapping procedure in broader theoretical perspective is in this paper ‘meta-philosopher’ Henri Lefebvre, who also has inspired important urban thinkers like Harvey (1989), Soja (1996), and Castells (1996). This section is very much a reflection on my work as a practising landscape architect and urban planner. I am now a researcher in urban design trying to grasp what the sociotope map is, or rather has become, in a larger urban theoretical realm, trying to be the “reflective practitioner” (Schön 1983).

To begin with, sociotope mapping seems to be about the Castells notion of “space of place” separate from the “space of flows”. The space of place “is a locale whose form and function and meaning are self-contained within the boundaries of physical contiguity” (1996 pp. 314-315). This space is the life world space, or as Lefebvre critically called it among other concepts; “true space”.

“True space” was thus substituted for the “truth of space”, and applied to such practical problems as those of bureaucracy and power, rent and profit, and so on, so creating the illusion of a less chaotic reality; social space tended to become indistinguishable from the space of planners, politicians and administrators, and the architectural space, with its social constructed character, from the (mental) space of architects. (Lefebvre 1991, p. 300)

Lefebvre's argument is pinpointing the separation between the system worlds of planners, architects, administrators etc. and the life worlds of people. In his influential book *The production of space* (1991) Lefebvre introduces a range of space concepts more or less related to this dichotomy. System world related descriptions are e.g. “abstract space”, “Euclidean geometric space”, “objective space”. Life world space is mainly referred to as e.g. “social space”, but also “lived space”, “perceived space” and “absolute space”. In some parts of the book Lefebvre is very abstract and vague in his definitions of these concepts, but in his concrete examples from urban planning practice he is definitely very clear. Haussmann, Bauhaus, Le Corbusier and Niemeyer have all, according to Lefebvre, made false and dangerous reductions of social space (1991, pp. 303, 308, 312). Their systemic descriptions, plans, zoning et cetera, fail to represent the complexity of urbanity and their policies then segregate

and fragment social space in the city (1991, pp. 311, 317). Thus Lefebvre pins down the core problem of urban planning, the apparent dangers of reducing life world/space to system world/space.

In its most extreme form, reductionism entails the reduction of time to space, the reduction of use value to exchange value, the reduction of objects to signs, and the reduction of “reality” to the semiosphere; it also means that the movement of the dialectic is reduced to a logic, and social space to a purely formal mental space (Lefebvre 1991, p. 296).

It is basically this argument that is very difficult to ignore if you are in any way engaged in urban planning, design or management, regardless your ideological, political or cultural approach to urbanity itself.

Open space as representation of perceived space

So, what is Lefebvre’s suggestion? How can urban theory and practice deal with this problem? He suggests to differentiate between “perceived”, “conceived”, and “lived” space, and also what he calls “spatial practices”, “representations of space” and “representational space” (1991, pp. 38-39). Soja uses the first triad to deconstruct the common dualism of “real” material space (firstspace) and “imagined” mental space (second space), and to discuss an alternative approach that integrates mental and material dimensions into a “real-and-imagined” place – thirdspace (1996).⁹

Harvey, on the other hand, tries to illustrate the second

triad in a simplified table based on three major urban practices; Accessibility & distancing, Appropriation & use of space, Domination & control of space. (1989, p. 262) Below I have made an interpretation of Harvey’s table to pinpoint the sociotope map.

Taking the conventional (Soja, Harvey) reading of Lefebvre’s triad it becomes clear that the sociotope map is just a representation. It cannot be anything more than this. But what is it really a representation of? Well, if the second triad explains *how* space is represented, the first triad captures *what* is represented. Let me take the much debated issue of “urban safety” as an example, since safety issues very often comes up as negative use value in sociotope mapping processes, such as focus group interviews. For example this was a big issue in Gottsunda.

I would argue that violence in urban space concerns lived space, “what is really happening”. The violent space is consequently an unsafe space for people, i.e. they can get hurt there, if they want it or not. Another thing is how people experience this space, how they perceive it. Some people feel unsafe; some do not, regardless the crime statistics and probability of violence of a particular space. This has been shown in e.g. gender research, where women often feel unsafe in public open space at night, but most violence on women takes place at home. This is easily described as differences between lived and perceived space. Concerning conceived space it is in this context best described as the ‘secured space’, i.e. the space that should or is considered to be safe. This is often a concern for the police who set goals

	Accessibility & distancing	Appropriation & use	Domination & control
Material spatial practices	Flows of people	Promenade	Fencing
Representations of space	Traffic analysis, Space syntax	Building typologies, Sociotope map	Property map, City plan
Spaces of representation	Internet	Civic square	Religious square

Table 1. ”A grid of Spatial Practices”, interpreted from Harvey (1989, p. 262).

for their activities in urban space, where law and property intersect. The conceived safe space can also be the urban planner's or politician's vision of a "safe city".

The complexity of safety in urban space and the nature of the sociotope map are dissected even further if the two Lefebvrian triads are interconnected as done in the table below. Again the sociotope map end up in the middle in the table,

values of open space use that is of importance to people's everyday life (Certeau 1984), i.e. the open space use values.

Then we are back to Lefebvre's main space concept; social space. In a very general interpretation of this notion it largely means 'space of use value'. (1991, pp. 347-52) This space, the "user's space", is created as it is lived and simultaneously subjectively perceived by its users. And thus

	Spatial practice	Representation of space	Space of representation
Lived space	Violence in space	Crime stats on map	Riots in space
Perceived space	Safe/unsafe space	Sociotope map	Safety in shopping mall
Conceived space	Housing with CPTED ¹⁰	Security zone plan	Safety signs in space

Table 2. A grid of safety in urban space based on Lefebvre's two triads of space.

capturing people's everyday experience, for example how people feel about different spaces. It is definitively not a representation of conceived open space. One can however claim that the sociotope map also tries to represent aspects of lived space, even though perceived space is emphasized in municipal reports (Stähle 2000, 2002, 2003). This discrepancy needs to be discussed a little further.

Open space as the user's space

Representations of lived and perceived space could be understood as the methodological difference between (anthropological) observation and (sociological) interview, the difference between what people really do and what they really say that they do (feel). Since the sociotope map is created from both observation of lived space and interviews on perceived space it can be considered some sort of mix. I still argue that the sociotope map in the end aims to be a representation of a collective (common) perception of open space, its use values rather than its actual uses. Capturing values, in different forms is also said to be the main object of the municipal "green map" commission. The Stockholm sociotope map aims foremost to represent the collective

"The user's space is lived [and perceived] – not represented (or conceived). When compared with the abstract space of the experts (architects, urbanists, planners), the space of everyday activities of users is a concrete one, which is to say subjective" (1991, p. 362). In this quote Lefebvre is very clear, and he is for this reason very reluctant and sceptic to any representation of social space. Since any urban planner has to work with representations and conceptions of space one has to be a priori critical to any attempt to reduce social space into maps, illustrations and geometry. This is not to say it is impossible. On the contrary it is essential and the very crucial (democratic) problem of urban spatial planning. The planners need useful representations of open space use values. The Swedish open space researcher Ulla Berglund highlights in her dissertation "Perspectives on urban nature" (1996) that there really exist fundamental differences between how "citizens and planners perceive open space in the city". This is also, to my experience, why the sociotope map has gained such attention among planners recently, because it emphasizes the user, uses and use values.

Open space as direct use value

The very core concept in the sociotope map is consequently *use value*¹¹, since it captures the utility of open space. The concept is of course central to Lefebvre's philosophy of space and to other (neo)marxist urban thinkers. In my analysis of urban open space practices and my exploration of the sociotope map, the theories of use value developed within political and environmental economy will show very useful (Brännlund & Kriström 1998, pp.74-78, Turner et al 1994, pp.112). If we look at Swedish open planning practice in the 1990s it has developed an almost standardized way of mapping, i.e. representing open space (and green structure). The conventional model has been, and highly still is, to divide maps into three parts; social values, historical values, and ecological values (Bucht & Persson 1994, Stockholms stad 2004). I have found environmental economy to be a useful way to understand these three categories of value, and to read the sociotope map into this planning tradition.

The main categories developed within environmental economy are *use value* and *non-use value*, where the latter means the value of something's plain existence. Use value is divided into *direct* and *indirect use value*, where the former refers to the direct utility of the environment, for example a playground. This value is often called "social value" or "recreational value" in traditional open space planning practice. The concept of the "social" can though be confusing since it in many other planning contexts often refers only to interaction and co-presence. However, using Lefebvre's sense of the word "social space" it broadens it to what has been discussed as open space use value. Reduce direct use value to "recreation" must nonetheless be considered as narrowing the perspective of outdoor life, not dealing with things like social interaction, play and competition.¹² Due to the common domination of the concept "recreation" as the single description of open space direct use value the significance of these spaces, I would argue, are often underestimated. The urban square has most often been the symbol for social interaction and democracy, even though urban parks have maybe been playing a more central political role in modern cities. There are several examples from Stockholm's political history where parks have been more revolutionary spaces than squares.¹³ Nevertheless the sociotope map seems to essentially concern the realms of general direct use value,

defined by the users.

Looking at indirect use value it means using space from a distance. One example is the open spaces as a part of the cityscape, as an appreciated view (from your window). To open space planning and design the differences between direct and indirect use value is crucial. A prime example is the green spaces of post war suburbia (1950-70), also bluntly called "towers-in-a-park", an urban design doctrine generally conceived by Le Corbusier, Gropius, Niemayer among others. Most green spaces in these areas only have indirect use value, as view from your car or apartment window. The green strips along highways cannot, due to security and noise, be visited and directly used by pedestrians. This also goes for a lot of the green space surrounding residential buildings, which also often suffer from vague territoriality, i.e. ambiguity in what is private and public, which also repel use. If we look at parks in traditional western European inner-city grids, green space is usually embedded within the street system creating a continuous spatial system for pedestrians. These city parks have almost without exception both direct and indirect use value, in that they are simultaneously used for outdoor life and as a spectacle from adjacent windows.

Now, let us look at non-use value, a concept heavily debated within political and environmental economy (Brännlund & Kriström 1998, p.77). Non-use value is commonly discussed as two sorts; option value and existence value, where the former is a little closer to use value itself. Option value aims to capture the possibility for future use, e.g. the possibility to go to Amazonas in the future even though I have never been there (direct use value) or seen it on television (indirect use value). But option value seems also to relate to something bigger, as the possibilities for future generations to use a space.¹⁴ This then relates to existence value, which means the value of something's bare existence. It is valuable just because it exists, irrespective of its current or future utility. Since the environmental turn in postmodern planning open space discourse has been dominated by "green" and environmental issues, at least in Sweden, existence value, which is not encompassed by the sociotope map, has for the last twenty years been a dominant paradigm.

The dominance of existence value

To understand why the sociotope map is in some ways very radical in the current Swedish planning context there is a need for a further explanation of the dominance of existence value. The two dominating classes of existence values in current green structure planning have for the last twenty years been the ecological value (biodiversity) and the historical value (cultural heritage). These are commonly defined by experts, like ecologists and archaeologists. Existence values are for example traces of ancient remains under ground or rare endangered species, things that an ordinary citizen most likely seldom experience or face in his/her everyday life. This is why these values sometimes are called “scientific values”.¹⁵

In planning practice there are not absolutely clear boundaries between the concepts in green structure planning and these environmental economics value concepts. Surveys on the direct use value of green areas show that historical and ecological dimensions contribute to shape direct use value (Grahn & Sorte 1995, pp. 84-160. Ståhle 2000, Stockholms läns landsting 2001). E.g. an old biologically diverse meadow is often very popular among picnicking citizens. There is also an interesting development of new forms of user valuations within cultural heritage (Olsson 2003). This trend has led also to the introduction of the concept “experience value” (upplevelsevärde).¹⁶ The captivating thing is that “experience value” primarily refers to the user’s experience, not to the expert’s, hence it is basically referring to direct use value, something which is supposed to be captured in a sociotope map.

Since open space in urban planning is often treated as green space, the issue of ecological value and biodiversity has had especially strong implications. And, since ecology and biology are natural sciences there is to my experience very common that values (use or non-use) are confusingly mixed with ‘facts’ about the biological system itself.¹⁷ It has then been noted that the notion of biological facts is not unfamiliar to either anthropocentric or biocentric philosophies.¹⁸ An anthropocentric approach however would refer to green area ecology as means for reaching human ends, but biocentric ideology would claim that ecology is both means and ends at the same time. The notion of existence value or ecological value, when the ecology as an end in itself is basically what defines biocen-

trism. The sociotope map is consequently leaning further towards an anthropocentric paradigm.

Existence value has been very strong in Swedish urban planning for conservation, especially green space, since the environmental movement has emphasized uniqueness and irreplaceability. Contemporary ideologies based on existence value can then in fact be associated with postmodern phenomenology and its concept of *place*, in other words “genius loci” (Norberg-Schultz 1980). Since every place is unique it cannot, theoretically at least, be replaced by another place (Byggforskningsrådet 1994). There is a slight tendency in neo-marxist thinking, such as Castells and Harvey, to emphasize the life of place as it is, as an existence value. This reluctance to change is likely to be explained as reluctance to exchangeability, i.e. the translation from use value to exchange value (in monetary terms). But do we have to fear this determinism? Change can also be socially driven, by the vision of a better and more useful urban landscape. Less green space by densification can actually mean more use values, since more people most often means more possibilities for social interactions and events and more open space investments (by public or private funding).

In the processes of urban densification, public open spaces are decreasing in size but most often increasing in use value diversity. This is maybe the most evident clue to why the sociotope map has been created and why it has got recent attention. If we remove a certain amount of open space in an area, how can left over open space be improved and made more diverse, how can new use values be superimposed? What combinations of use values are possible and appropriate in a certain location? These are the concrete questions that planners and landscape architects working with urban densification face today.

Planning for density and diversity

In many ways public open spaces, especially parks, in dense cities are similar to Foucault’s concept of heterotopias, i.e. realized utopias. Foucault (1967) discusses the garden as one of the oldest heterotopias, a single real place that juxtaposes several spaces or sites that are in themselves incompatible. This is exactly what e.g. urban parks do. They juxtapose many different lived and perceived spaces of the urban population. In other words these spaces are layers of use values, layers of co-present interests and utilities. And so they are

in a way realized utopias, where children play along side with adults, where different ideologies and genders meet, and where nature meet culture et cetera. It is not hard to be in agreement with Foucault when he argues that a civilization without heterotopias is a society where “dreams dry up, espionage takes the place of adventure, and the police take the place of pirates”.

Public urban open spaces obviously can have the function of heterotopias, not to say that they are free from conflicts and paradoxes, but to understand why they are continuously produced and reproduced by urban societies. I am thus arguing that the heterogeneous character of these spaces primarily can be comprehended as the multiplicity of use values, and the sociotope map is very much an attempt to capture and represent this spatial multiplicity. It is of course futile to claim that a map can totally comprehend this diversity. A map is as stated by e.g. Lefebvre, a radical reduction of reality. The sociotope map nevertheless tries to show this multiplicity by listing the different use values in every specific open space. And the map tries to communicate local knowledge of the “space of place” which in a conventional planning process maybe not would be taken into account otherwise. The Swedish legislated planning process is said to be communicative with compulsory public councils, but experience tells us that when the councils are held the most important design decisions have already been made by the architects, developers and politicians, and there is often little possibilities to change a proposed design. The result is then often a conflict, which results in either a project forced through or a stopped project. The debate is hence often focused on “build or not to build”, rather than “*how* to build”.

Since there has been so many extensive conflicts concerning open space densification, new models such as “compensation theories” or “principles for balance” have recently been introduced in the Swedish planning discourse (Rundcrantz & Skärbäck 2003). These models have however roughly two main assumptions; first that changes of environmental quality, such as loss of green space, is generally negative and second that “loss” has to be replaced (somewhere else). A fundamental problem with compensation ideology for green structure planning is that it is passive and stigmatizing, most sadly for already disturbed low-quality settlements. “Compensation” or “balance” can by defini-

tion never enhance value because it aims to preserve status quo. The reason to why compensation ideologies have been so successful recently is very likely that they follow both environmental ethics and liberal logic, bluntly summarized as “the one who takes shall give back”, be it to individuals or “nature”. But, as stated, urban open space is much more socially complex than captured by cost-benefit analysis. To reduce open space to a simple case of quantitative exchangeability is missing the prime goal of urban planning, that is; to grasp Lefebvre’s fundamental enquiry: “Which are the socially successful places and which will they be?” This is why the sociotope map was made in the first place, to cope with complex urban space development and improvement, not to preserve existing conditions.

However, it still remains time, experience and research to understand what impact and meaning the sociotope map have had. The recent success can only be explained by need. A society which is turning increasingly postmodern, globalized and individualized can hardly plan, develop or grow without knowledge of the common use values of space of place.

AUTHOR



Alexander Ståhle
School of Architecture,
Royal Institute of Technology,
S-100 44 Stockholm, Sweden,
alexander.stahle@arch.kth.se

REFERENCES

- ARIANSEN, P 1993, *Miljöfilosofi*, Nya Doxa, Falun
- BARNETT, C 1997, Review of *Thirdspace: Transactions*, *Institute of British Geographers NS* 22:529-530.
- BENJAMIN, W 1969 (1936), *The Work of Art in the Age of Mechanical Reproduction*, Schoken Books
- BOVERKET, 1994, *Stadens parker och natur*, Rapport 1994:12, Karlskrona
- BRÄNNLUND, R & KRISTRÖM, B 1998, *Miljöekonomi*, Studentlitteratur, Lund
- BUCHANAN, J 1965, *An economic Theory of Clubs*, *Economica*, 32:1:14

- BUCHT, E & PERSON, B 1994, Grönstruktur i städer och tätorter: Utdrag ur PBL:utredningen 1994, Stad & Land 127, SLU, Alnarp
- BYGGFORSKNINGSRÅDET, 1994, Plats för känsla: Samhällsplanering och mening, Rapport T9:1994, Stockholm
- CASTELLS, M 1996, The space of flows. in Susser, 2002, The Castells reader on cities and social theory, Blackwell, Oxford
- CERTEAU, M 1984, The Practice of Everyday Life, University of California Press, Berkeley
- COLE, D 2002, Pollution and Property: Comparing Ownership Institutions for Environmental Protection, Cambridge University Press, Cambridge
- DEVLIN, R A 2000, Property Rights, Tenure Systems and Managing Natural Capital, in Kaplowitz M (ed), 2000. Property Rights, Economics and the Environment, JAI Press Inc, Stanford
- FOUCAULT, M 1967, 'On other spaces', in Rethinking architecture (ed.), Neil Leach, Routledge, London
- GRAHN, P & SORTE, G 1985. Hur används parken?. Stad & Land nr 39. SLU. Alnarp
- HABERMAS, J 1984, The Theory of Communicative Action (Heinemann, London)
- HALLBERG, A & HÖGLUND, J 2002, Betalningsvilja : ett ekonomiskt perspektiv, en studie av tre metoder för värdering av kollektiva varor, C:uppsats NE3070. Nationalekonomiska institutionen, Stockholms universitet, Stockholm
- HARVEY, D 1989, The urban experience, John Hopkins, Baltimore
- PATSY, H 1997, Collaborative planning: Shaping places in Fragmented Societies, Palgrave Macmillan.
- HILLIER, B & HANSON, J 1984, The social logic of space, Cambridge University Press, Cambridge
- LEFEBVRE, H 1991 (1974), The Production of Space, Basil Blackwell, Oxford
- LEFEBVRE, H 1982, Staden som rättighet, Bokomotiv, Stockholm
- LÖFVENHAFT, K & IHSE, M 1998, Biologisk mångfald och fysisk planering: Landskapsekologisk planering i stadsmiljö med hjälp av flygbildsbaserad fjärranalys: metodstudie i Stockholm, Stadsbyggnadskontoret, Stockholm
- MARX, K 1867 (1999), Das capital, Gateway Editions, Reprint edition
- MÅNSSON, P (RED) 2003, Moderna samhällsteorier, Prisma, Stockholm
- NATURVÅRDSVERKET, 1997, Ekonomisk värdering av miljön: Metoder för att mäta efterfrågan på miljötillgångar, Rapport 4827, Stockholm.
- OSTROM, E 1990, Governing the commons: The evolution of Institutions for Collective Action, Cambridge University Press, Cambridge
- PETERSON, A 2002, Building the Urban Landscape: Political approaches to City Park Distribution, Dissertation at Graduate School of Arts and Sciences of Washington University in St Louis, St Louis
- RASMUSSEN, S E 1948 (1934), London: the unique city, J. Cape, London
- RUNDCRANTZ K & SKÄRBÄCK E, 2003, Environmental compensation in planning: A review of five different countries with major emphasis on the German system. European Environment 13, 204-226
- SCHÖN, D 1983, The reflective practitioner: How professionals think in action, Basic books,
- SOJA, E 1996, Thirdspace, Blackwell, Oxford
- STADSBYGGNADSKONTORET, 2000, Sociotop som redskap i grönområdesplanering: Ansats till kartering av upplevelsevärden med tillämpning av begreppet sociotope inom Stockholms del av Nationalstadsparken, Metodstudie, Rapport SBK 2000:4. Stadsbyggnadskontoret, Stockholm
- STADSBYGGNADSKONTORET, 2002, Sociotopkarta för Stockholms innerstad : metoden och resultatet, Rapport SBK 2002:4, Stockholm
- STADSBYGGNADSKONTORET, 2003a, Sociotophandboken: Stadsplanering med Stockholmskarta, rapport SBK 2003:2, Stockholms stad
- STADSBYGGNADSKONTORET, 2003b, Årstastråket: Program för ny bostadsbebyggelse, Stockholms stad.
- STADSBYGGNADSKONTORET, 2004, Stockholms sociotopkarta (map), Stockholms stad, Stockholm
- STADSBYGGNADSKONTORET, 2006, Parkplanering i Annedal och Mariehäll, Stockholms stad
- STOCKHOLMS LÄNS LANDSTING, 1992, Storstockholms gröna kilar. Regionplane- och trafikkontoret, Stockholm
- STOCKHOLMS LÄNS LANDSTING, 2001, Upplevelsevärden: sociala kvaliteter i den regionala gröna strukturen, Rapport 2001:4, Regionplane- och trafikkontoret, Stockholm

STOCKHOLMS STAD, 2004, Stockholms parkprogram, Gatu- och fastighetskontoret, Stockholm

STÄHLE, A 2005, Mer park i tätare stad. Licentiate thesis, School of architecture, KTH, Stockholm

TURNER, R K, PEARCE, D & BATEMAN, I 1994, Environmental Economics: An Elementary Introduction, Harvester Wheatsheaf, New York

UPPSALA KOMMUN & SPACESCAPE, 2006, Gottsundabornas gemensamma rum, Fritids- och naturvårdsnämnden, Uppsala

WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT, 1987, Our common future, Oxford University Press, Oxford

NOTES

- ¹ "A biotope is an area of uniform environmental (physical) conditions providing habitat(s) for a specific assemblage of plants and animals. Used in this sense, "biotope" is really synonymous with the term "ecosystem". However, some ecologists would limit the term to encompassing only physical environmental factors; essentially meaning: the habitat of a community of organisms. Thus, a species has a certain habitat, but the group of species that share an ecosystem with that species, share a biotope. Just as a habitat is the place where a species is found, so a biotope is the place where a specific biological community is found." (<http://en.wikipedia.org/wiki/Biotope>)
- ² The Stockholm Urban Planning Administration put out three reports and handbooks on the sociotope mapping model in the course of three years (Stadsbyggnadskontoret 2000, 2002, 2003).
- ³ The EEC-financed research project GREENSCOM (Communicating Urban Growth and Green) writes in their final report: "... As an instrument we can say that it [the sociotope map] is:
 1. Socially sustainable: Since its' very intention is to enhance the significance of public structures, better public structures and services and their accessibility and work for empowerment of citizens. As a planning instrument it opens multiple fields of action. It is especially intended to make room for the users field of action, life world which means daily life, since it actively goes in search of life world values and is intended for citizens to put to use in their daily life. It also implies new agencies. First of all the making of the greenmap requires collaboration between different experts. Secondly, it makes room for the citizens in the planning process, and this user agency is intended to be continuous, not one consultation. With what success these new agencies are realised should be visible within a short time.
 2. Communicatively sustainable: It allows for multiple fields of action, and diverse meanings. It also gives time, since it is not a once and for all mapping and evaluation, but an ongoing process. It is indeed meant for gaining a comprehensive view that has a significance at local level. Further more, it is intended to prevent deadlocks in communication."
- ⁴ In Swedens biggest daily newspaper Dagens Nyheter (2000) the sociotope map was described as a powerful tool to notice open space use values when developers suggested exploiting open space. The journalist used phrases like "great sociotopeic values" and "a diverse sociotope".
- ⁵ All these user surveys are summarized in "Sociotophandboken" (Stadsbyggnadskontoret 2003, in Swedish).
- ⁶ This is fundamentally different to the kind of park character mapping developed by open space researcher Patrick Grahn and so extensively used by municipalities all over Scandinavia (Grahn & Sorte 1985).
- ⁷ All sociotope maps of Stockholm City can be downloaded from www.stockholm.se.
- ⁸ Illustration by Henrik Markhede.
- ⁹ This can however be regarded as a reduction of Lefebvre's ideas. What this "thirdspace" really is can be questioned. If it captures and integrates everything, it is also nothing, as argued by Barnett (1997).
- ¹⁰ "Crime Prevention Through Environmental Design" is a growing field of policies, an organisation and a research programme (<http://www.cpted.net>). In Sweden the handbook Botryggt 05 is of the same category (<http://www.botryggt.se>).
- ¹¹ The concept use value is most commonly referred to Adam Smith, but also in urban theory to Marx (1867/1999)
- ¹² See e.g. Boverket, 1994.
- ¹³ For example; workers demonstrations at Gärdet 1890, "The Elm-fight" in Kungsträdgården in 1971, Reclaim the street-demonstrations in Björns trädgård. 2003.
- ¹⁴ See e.g. "Our common future" (World Commission on Environment and Development 1987).
- ¹⁵ See e.g. Stockholms läns landsting 1992.
- ¹⁶ Stähle 2000, Stockholms läns landsting 2001, The research project "Landskapets upplevelsevärden" (<http://www.lpal.slu.se/projekt/p157.htm>).
- ¹⁷ It can for example be the structure of biotopes, also called the "ecological infrastructure" (Löfvenhaft & Ihse 1998).
- ¹⁸ See e.g. Ariansen 1993.