SOCKA

A Malmö-based exploration of assessing urban spaces from a social perspective



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Architecture and Planning Beyond Sustainability (MPDSD Master's program)

Master's Thesis course ACEX35 Direction of Social ecological urbanism

Chalmers School of Architecture Department of Architecture & Civil Engineering

Keywords: social sustainability, social impact assessments, social architecture, urban development, sustainable urban planning

Illustrations by author if not otherwise annotated

Abstract

This thesis explores an intersection between social sustainability and urban design, focused on social impact assessments (SIAs) in Malmö. The project identifies development potentials of Malmö stad's current social impact assessment model (SKB) through interviews with civil servants. This exploration reveals the need for future iterations to provide guidance for both measurable and qualitative social aspects, be usable throughout the planning process, flexible enough to provide learning loops and maintain a firm focus on spatial qualities rather than policies. An extensive literature review, document study and analysis is performed to establish a theoretical framework. Six main categories of socio-spatial design principles to consider are found through this exploration: Sense of safety, Accessibility and connections, Health and well-being, Social life and meetings, Experiential qualities and Equal possibility of use. The concepts are nuanced into a process-based tool constructed to meet the identified development potentials, herein named the SOCKA (Sociala konsekvenser- analysmetod). The SOCKA is tested by performing an evaluation of a section of Amiralsgatan in Malmö. Following this test, reflections on its usefulness and relevant ways in which the exploration can continue is presented.

The test revealed that qualitative knowledge production requires sufficient time spent on sight in in order to meet its inherent potentials in the assessment process. A deeper application of quantitative data through municipal use is also thought to improve the knowledge production of the approach. The test revealed that the use of the SOCKA holds great potential throughout the planning timeline. Furthermore, considering design as a means of mitigating negative social impacts might be a powerful tool for architects to explore in the future of the field.

In conclusion, this project answered the research questions by developing a new approach for performing social impact assessments (SOCKA) and testing it in Malmö, through a balance of quantitative and qualitative methods, flexible processes and socio-spatial aspects. The project finds that such an approach can aid in assessing social impacts and guide mitigating interventions for projects through a number of generated design principles and processes. Continued exploration of similar methods in future research is vital for social sustainability to be acknowledged for the important potentials it holds for architects and urban developers.

social ecological urbanism socio-ecological urbanism, social-ecological urbanism

About the author

Bim Byström is an urban developer and landscape architect working for the city of Malmö. As part of their current role, the author works with socially sustainable planning and design proposals, as well as constructing methods and performing analyses to ensure sustainable development in projects ranging from neighborhood transformations to urban expansions. Trained as a landscape architect, Bim came to Chalmers to study a second master at the program "Architecture and Planning Beyond Sustainability". Having learned of how ecological and green sustainability can be achieved through landscape architecture, the interest for social sustainability through urban development lead to a search for continued education, found through the MPDSD program at Chalmers.



With this thesis, the author seeks to merge several perspectives from two educations as well as experience from practicing as an urban developer. The osmosis between academic paper and day to day practice has been a source of much knowledge production. Hopefully, the findings of the thesis can play a part in the growing field of socially sustainable urban spaces and the methods for working towards them.

Acknowledgements

This thesis would not have been possible without the collaboration and guidance of several people. I want to sincerely thank my supervisor Lars Marcus, both for allowing me to listen and learn from your great knowledge of socially sustainable urban planning and architecture, but also for the rewarding conversations and reflections on different trends, themes and aspects explored together within this thesis. To Gianna Stavroulaki, I also want to direct a warm thank you for you guidance and help in furthering the knowledge production this thesis seeks to deliver. Thank you also to colleagues at the municipality, who tirelessly strive for social values to be seen and practiced to a larger extent by planners and architects and who are a constant source of inspiration. I also want to thank SLU and my former supervisor Caroline Dahl, without whom much of the knowledge needed to produce this thesis would never have been discovered. Many more have contributed in different ways, and I hope to show you all my appreciation.

"By giving shape and form to our material world, architecture structures the system of space in which we live and move. In that it does so, it has a direct relation – rather than a merely symbolic one – to social life, since it provides the material preconditions for the patterns of movement, encounter and avoidance which are the material realization – as well as sometimes the generator – of social relations. In this sense, architecture pervades our everyday experience far more than a preoccupation with its visual properties would suggest."

-Bill Hillier & Julienne Hanson, 1984

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PART ONE

Introduction

Background

Social impact assessments

Within the field of urban development, there has been several methodological developments since the 1970s to ensure sustainable processes and results. According to the International Association for Impact Assessments, *"Social Impact Assessment includes the processes of analyzing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions"* (IAIA, 2024). Through this process, the association points to social impact assessments as a vital tool for creating more equitable and sustainable environments. In their official description of the method, IAIA (2024) describe this method as heavily reliant on its practitioners. According to the association, the complexity, subjectivity and ethical implications of working with social impact assessments requires much knowledge and focus, as well as a professional value system that encourages decision-making which promotes positive impacts for the stakeholders and citizens that are affected by the project at hand.

According to Vanclay (2003), social impact assessments can relate to anything from aesthetic impacts to effects on health or democratic issues. Vanclay goes on to describe this wide span of interfacing topics as an explanation for a clear lack of systematization amongst different practitioners and approaches. The same issue is discussed by Antonson & Levin (2018), who describe that the lack of categorization of both individual methods and overarching approaches for social impact assessments in Sweden has led to a fractioned application of the perspectives in Swedish urban planning. The lack of coordination has, according to the authors, led to several local practitioners using their own methods to evaluate social effects in urban planning processes. This in turn leads to a range of issues relating to comparability, peer reviews and quality of the work being done all over the country.

In Sweden, the city of Gothenburg was an early pioneer in developing a tool for Social impact assessments (Varga, 2015). However, in line with descriptions by Antonson & Levin (2018), many municipalities opt for developing their own approaches. One such municipality is Malmö, where a tool for social impact assessments named "Sociala konsekvensbedömningar" (Hereafter referred to as the SKB) was published in 2020. However, as described on p. 14-18, interviews with civil servants reveal that the tool isn't being used by the municipal departments due to several issues with its configuration.

Malmö as an arena for development potentials

In addition to some clear needs for development regarding the methodologies for assessing social impacts of the urban development, Malmö holds many other interesting qualities from the perspective of working towards more socially sustainable cities. Being the third largest city in Sweden, Malmö is situated across from the Danish capital of Copenhagen and growing fast as part of the Öresund-region (Malmö Stad 2023a). According to the municipal comprehensive plan, the expanding city faces several challenges in keeping up with socially sustainable urban development as the city continues to grow. There are notable gaps in health and well-being between different areas within the city and between people of different socio-economic levels. The comprehensive plan describes how this relates to the urban configuration, which provides certain areas of the city with better accessibility to natural areas, recreation and sustainable mobility options. In general, a strong need to work pro-actively with social sustainability in Malmö is described in the comprehensive plan (Malmö stad, 2023a). According to the document, one child out of four grows up in what is classified as an impoverished household. Similarly, every fourth child is living in residential crowding. Amongst this group, persons born outside of Scandinavia are highly over-represented. The city also faces great challenges related to homelessness, particularly with regards to families with small children. In general, the municipality has detected vast differences in social cohesion, trust and participation between different neighborhoods and areas within the city. Interestingly, the comprehensive plan especially underlines how various design praxis throughout the city contributes to inequitable access to common spaces (Malmö stad, 2023a).

Thesis questions, objectives and purpose of exploration

In other words, the city faces many social challenges, irking its civil servants and urban planners to carefully consider how social impacts or values relate to changes in the urban landscape. Furthermore, as can be seen on p. 14-18 of this thesis, interviews with civil servants at Malmö municipality can point to several issues with the current methods for assessing social impacts of urban developments. According to the interviewees, the current model is not usable across different municipal bodies involved in city development, and hence not throughout the entire timeline required to develop and maintain urban spaces. Too many different social themes and policy-driven aspects are also incorporated in a way that is more confusing than helpful to identify the physical parameters of social sustainability in the places being developed. The tool does not invite evaluating or learning loops, and puts a rigid focus on "predicting" social aspects rather than finding insights in pre-existing environments. Furthermore, the tool doesn't provide enough guidance for how to assess different parameters, and the social qualities of physical space that are recommended seem arbitrary and without clear connections to relevant research and praxis. Lastly, the interviewees also point to the complex issue of measuring the immeasurable and interpreting the uninterpretable. In other words, they describe that social issues in technical departments sometimes are overlooked due to the notion that they cannot be measured and therefore not followed up on, improved or assessed. The interviewees describe the need for guiding tools and methods that can allow a combination of quantifiable and interpretative knowledge to come together and aid in the assessment of social impacts from urban development projects. With this context, the following research questions can be articulated:

-How can the development potentials of Malmö's current social impact assessment model be met through a balance of measurable and interpretive perspectives?

-How can the found knowledge contribute to a more succesful praxis in the field of sustainable urban development?

To explore these questions, the objective of this project is to propose a development of the current model for assessing social impacts of built urban spaces in Malmö, motivated by current issues and informed by relevant research and praxis. This aim is pursued by exploring literary sources together with practical knowledge of municipal planning processes. The constructed approach is then tested on a selected site in Malmö, and reflections from this test is used to suggest potential avenues of future studies.

The purpose of this exploration is to broaden the practical application of social theories in urban design and shine a light on the complexities facing the field with regards to assessing aspects which are both quantitative and qualitative by nature. Through this exploration, the thesis hopes to contribute with novel ways in which architects and urban designers can work towards ensuring social values of built urban spaces.

Methods

To meet the objectives and answer the research questions, this thesis produced a document review and subsequent analysis of Malmö municipality's existing tool for social impact assessments (Henceforth referred to as the SKB - Social konsekvensbeskrivningsmodell). The document review was performed by carrying out unstructured interviews with two anonymous sources from Malmö municipality, in order to gain understanding of how the tool is configured and learn about the experience of using it. The interviewees have requested to remain anonymous, and are referred to as 'A' and 'B' respectively within this thesis. 'A' is a civil servant working with detail planning and sustainability analyses as well as consequence analyses of future development at the Technical Department. 'B' works at the Planning Department with developing methods to implement more socially sustainable practices within the planning process*. The interviews were performed digitally and followed no distinct structure, but rather focused on the interviews were conducted separately.

The interviews resulted in several identified problems and areas of development with the current model, as mentioned by A and B. In order to adress these issues, a document analysis was performed by reading through the SKB and identifying recurring socio-spatial topics (rather than vague or policy-driven ones), which was described as a relevant development potential by the interviewees. Six such topics were discovered. These topics where then nuanced through a literature review which presented findings from theoretical sources.

* Translations from Swedish: Technical Department - Fastighets- och gatukontoret Planning Department - Stadsbyggnadskontoret Following the nuancing and theoretical exploration of different topics from the SKB, the additional concerns raised by A and B were adressed by further consulting the literature on how to measure and interpret different aspects and flexible uses of impact assessment tools. Together with practical knowledge from working as an urban planner, a process-based tool was subsequently proposed, meant to adress the needs expressed by A and B. A reflection on possible merits such as evaluations of current places in addition to speculations of future developments, facilitation of learning loops through flexible use and clear guidance with focus on spatial factors is discussed, followed by a graphic summary.

In part three of the paper, the product of part two was tested by carrying out an evaluation of an existing urban space in Malmö and subsequently proposing a new design, through a variation of the suggested process-based approach. The chosen site is a part of Amiralsgatan which connects the area Rosengård to the city's central areas. In order to chose a relevant site, personal experiences of perceived barriers and social disparities in Malmö were used to map general areas of interest. Within this selection, Amiralsgatan was chosen to be particularly interesting as it connects highly adjacent geographical areas, but through perceived barriers these areas are experienced as being very far apart. Furthermore, the streetscape is labeled with many interesting properties in the comprehensive plan of Malmö (Malmö stad, 2023a), including "Main street" "Prioritized walking zone" "Prioritized public transport street" and "Planned prioritized bicycle street".

In order to perform the assessments, interpretative methods were combined through site visits with more quantitative methods such as counting benches and considering the percentage of canopy cover, according to the produced tool. Furthermore, a performed space syntax analysis was consulted as well as other geographical information used to measure distances. The theoretical framework provided guiding lists of aspects to consider, merging a quantitative and qualitative approach through its flexibility. In the test performed within this project, time spent on site exploring its hidden complexities was deemed an important method to truly assess the more qualitative aspects. No participatory methods were used within this thesis, in order to fit the project within the scope of the course, however future uses would benefit highly from exploring such methods, as described in further detail in the discussion.

Producing the design for Amiralsgatan was performed partly by intuitive sketching during site visits and partly by identifying aspects from the tool with much site-specific potential. Within the design phase, the tool and its resulting analyses were used flexibly as guidelines rather than criteria, in accordance with the wishes expressed by A and B. In part four, a discussion of both developing and testing the tool is conducted. Possible future explorations are reflected upon, and the importance of continued studies within the field is described as well as other insights gained from the project.

Theory and main references

Within this paper, urban design was explored from the perspective of analysis and social sustainability. As described, the paper's third part consists of a test of the constructed approach, from which certain design proposals are produced. However, as the role of these proposals are largely instrumental to evaluating the usability of the approach, no external visual references have been relied upon, as this might make it difficult to discern how helpful the analytical tool is in guiding mitigating proposals. Regarding theoretical

references, the thesis draws on a vast basis of literature, to nuance and inform design principles that might promote social values in urban design and function as a theoretical framework. The literature review was conducted by searching for the topics identified through a document analysis of the current municipal tool (SKB) and similar key words in research databases. The selection of sources was based on two main principles. Firstly, the sources should present relevant research and praxis regarding the socio-spatial topics found in the SKB, and secondly the sources should nuance the topics in a way that presented a more spatial and design-oriented understanding of the concept, in order to make the end result more attainable in line with the needs described by A and B. Some of the central authors which were consulted within the theoretical framework include Vanclay, Zamanifard et al., Bornemark, Marcus, Listerborn and more.

Delimitations

This thesis explored complex topics such as social impact assessments, urban design from a social perspective and the development of sustainability methodologies within architecture and planning processes. As the topics of the paper have very broad applications, some delimitations were made to create a framework for the thesis. First, the geographical scope of the project was limited to focus on just one Swedish municipality, namely Malmö. The reasons for this are described in the introduction, most importantly a steadily growing population and many social challenges for the city's urban developers to consider. In part, the decision to focus on Malmö as a case study was also made due to the author's current position as an urban developer with a focus on social sustainability and methodological development at Malmö municipality. An osmosis of knowledge between academic paper and active praxis has therefore been possible, which has benefited the knowledge production within project greatly.

Secondly, the scope set by the academic context of a Master thesis construes a limitation for the project. With more time, resources and primarily more collaborators, the result of the project might have been far more ambitious. The presented project was constructed as part of a Master's thesis course, presenting the culmination of a two year program in architecture and planning beyond sustainability, garnering results thereafter.

Thirdly, the constructed approach was tested on only one site, limiting the knowledge possible to find from such a test. The chosen site is a streetscape, wherefore other types of urban spaces such as parks, plazas and squares have fallen outside of the scope of testing. Therefore, knowledge of how the approach functions on these types of streets is not as easily identified within the project as how it relates to streetscapes.

Lastly, this paper builds on a current model rather than starting a method development process from scratch. This construes another limitation, as the creation of a completely new model would have resulted in a different outcome. As it stands, the produced approach relates strongly to the development needs expressed by two key interviewees A and B at the municipality. Furthermore, the theoretical concepts explored in the literature review were discovered as part of analyzing the current model. The selection of merely two interviewees also limited the project. Given more time and resources, a more thorough mapping of current needs might have produced different results.

Reading instructions

This thesis consists of four main parts, as illustrated below. In part one, the context and objectives are introduced. Part two consists of a problem formulation of the current model for evaluating social impact assessments in Malmö (the SKB). This is followed by a combination of academic knowledge and practical experience that outlines a proposed development of the current model. In order to test the proposed changes, the new approach is tested in part three of the thesis, generating analyses and mitigating design proposals for a chosen site in Malmö. Part four consists of a critical reflection and discussion on both the process of creating and experience of using the constructed approach (SOCKA).

PART THREE

Jesting a variation of the 50CKA on a relevant site in Malmo

PART FOUR Discussing the development & experience of using the SOCKA

PARTONE Introduction of context Objectives & methods PART TWO



PART TWO

Constructing the SOCKA

Presentation and problem formulation of Malmö's current SKB

As part of method developments for a more socially sustainable urban development, Malmö municipality has constructed a tool for assessing the social impacts called SKB (Social konsekvensbedömningsmodell) (Malmö stad, 2023b). According to Malmö stad, the tool aims to contribute to increased discussion and mitigation measures with regards to social aspects of new public spaces as well as the development of existing spaces, for example during densification processes. The performed assessments are meant to educate planners on how physical planning and design affects human and societal well-being, and provide a foundation for urban planning and development decisions (Malmö stad, 2023b).

The SKB tool consists of a 20-page document described as a process leader manual including a "matrix tool" meant to be filled in through discussions between different stakeholders and professionals. The document starts off with an introductory chapter explaining the background, some key concepts and uses of the tool. Following this introductory chapter, six social aspects are presented, selected to represent the social sustainability analysis. Each aspect is described from the perspective of six goals of the municipality based on internal planning policies and international goals such as Agenda 2030. At the end of the document, the matrix tool presents the same intersection of social aspects and planning goals on each axis, complemented by guiding questions (see figures on p. 15) (Malmö stad, 2020).

According to Malmö stad (2023b), the tool is meant to be part of a process, and encourage collaborationstyle assessments in diverse groups with knowledge and interest regarding the proposed changes to a current or new urban space. The tool is meant to integrate social issues with other sustainability aspects, for a more holistic view of sustainable urban planning. Malmö stad (2020) states that the purpose of the tool is to increase social awareness in municipal planning and design of urban spaces. Furthermore, the tool is meant to ensure that the needs of multiple groups are met, and that the outcomes and responsibilities of planning and design decisions are clarified.

Interestingly, Malmö stad (2020) mentions that tool is the result of a so called "pilot year" in 2015, and that revisions are to be made continuously as new knowledge about social factors are learnt and can be incorporated. The currently available document was last reviewed in 2020. Furthermore, the document mentions that one of the conclusions of the discovery work during the pilot year was that for every decision that concerns physical investments in the city development, a social impact assessment should be conducted. The practical reality of this ambition does not seem to be met, according to the interviews presented on the following pages.

VARDAGSLIV

Huvudfrågorna

Underlättar de föreliggande åtgärderna vardagslivet? (funktioner, service, trygghet, närhet, utbud, täthet). Vet vi tillräckligt om befintligt vardagsliv? Finns det vardagliga funktioner som bör bevaras? Vad/Vilka kan förbättra förslaget?

Ledord

Service, utbud, likvärdigt, jämlikt, jämställt, sammanhang, hälsa, tillit, trygghet, närhet, gå, cykla

Vad vill vi uppnå

Stadens utforming ska underlätta det vardagsliv som kretsar kring basala behov, som mat, omsorg, utbildning, arbete, transporter, kultur, umgänge, trygghet, rekreation, lek, motion, meningsfull friid och sociala sammanhang. Den fysiska organiseringen av staden ska ge förutsättningar för ett praktiskt vardagsliv där det är lätt att nå det man önskar och där möten mellan människor bidrar till ökad trygghet och sociala kontakter. Staden ska spegla och tillgodose de behov, rutiner och aktiviteter niskor har i vardagen, och aktivt arbeta för ökad jämlikhet, rättvis fördelning och beakta de sociala faktorer som påverkar användandet av staden.

Varför

För att en stad ska räknas som fungerande och attraktiv måste vardagen för den enskilde fungera. Stadens utformning ska så långt som möjligt ge förutsättningar för att uppnå likvärdiga förutsättninga för vardagslivet i stadens olika delar. Det vi vill fylla våra liv med ska vi kunna nå på ett smidigt sätt

som inte kräver för stora resurser i fråga om pengar eller til. Stadens fysiska struktur skapar ramarna kring vad som är möjligt att genomföra i det dagliga livet, vad som är tidsmässigt möjligt och som påverkar hur fölk beder sig och var de för sig i staden. Det är viktigt att prioritera den nödvändiga servicen (livsmedel, förskola etc). Finne den inte lätt tillgänglig i vardagen så minskar möjligheten att hinna med att ta del av annat utbud (bibliotek, parker m.m.). Varuagen sa missa mojnigreten at minia mera da ta det av da man durda (rhonotek, parket min.). Otrygghet kan vara en restriktion i personens vardag och påverka den enskildes möjligheter att på olika sätt ta del av samhället vilket kan göra vardagen komplicerad. Med ett fungerande lokalsamhälle där service och mötesplatser finns på tryggt och trafiksäkert gångavstånd gynnas tillit, hälsa och folkliv. Samlande stråk med entréer och fönster mot sträket bidrar till social uppsikt och ökad

folkliv. Samlande stråk med entreer och fönster mot stråket bidrar till social uppsikt och ökad tryggoht krafiksäker. Samspel och interaktion kan stärkas genom en utformning som samlar folkliv och rörelser till aktiva stråk istället för att sprida rörelser till en mängd stråk. Ett aktivt stråk betyder att det finns en mängd aktiviteter, entréer och fönster som vänder sig med olika typer av funktioner längs kanterna. Det sociala kapitalet i ett bostadsområde kan underlättas genom platser där boende runt trappan, runt gården, i kvarteret och i området nattrligt kan mötas. Inom bostadsområden kan småskaliohet och tvilloga ansvarspränser

mötas. Inom bostadsområden kan småskalighet och tydliga ansvarsgränse bidra till att de boende kan hitta "sina" platser som de kan värna och vara stola över. Trygga bostadsområden där de bonde kan vana och vara och till omgivningen har en ordnad struktur där det är lätt att orientera sig och förstå var ansvarsgränserna ligger. (illustration enligt principer från Gehl Architects)



Example of the document's disposition. Malmö stad, 2020, p 12-13.

				1			1
SOCIALA ASPEKTER		Delaktighet och	Jämlikhet och	Barnrätts-	Goda livsmiljöer	Tillgänglighet	Risker /
		inflytande	jämställdhet	perspektiv			genomför-
							andehinder
ANSVARET FÖR	Bidrar XX (process och slutresultat) till						Vad ser vi för
HELHETEN	förbättrade sociala situationer och ökad tillit						hinder? Vem
	för ett större område? (för arbetslösa,						har ansvar?
	trångbodda, fattiga för delaktighet och						Hur ser
	sammanhang)						nuläget ut?
	Finns det åtgärder inom XXprocessen som						Hur säkrar vi
	skulle kunna förbättra ovanstående? Vem har						ja-svaren?
	ansvar (behöver kontaktas) för att det ska ske?						
SAMSPEL &	Bidrar XX till att underlätta nätverk, interaktion						Vad ser vi för
SAIVIIVIAINHAING	och moten? Bidrar XX till integration, trygghet,						hinder? Vem
	tillit och jamlika förutsattningar? Köppling till						har ansvar?
	ach hinder? Mötesplatser inne ach ute?						nul sei
	Vot vi vilka värdon som måsta hovaras?						Hur säkrar vi
	vet vi viika varuen sonn maste bevaras:						ia-svaren?
	Vad/Vilka kan förbättra förslaget?						,
VARDAGSLIV &	Underlättar XX vardagslivet? (funktioner,						Vad ser vi för
SERVICE	service, trygghet, närhet, utbud, täthet) Vet vi						hinder? Vem
	tillräckligt om befintligt vardagsliv? Tillit? Finns						har ansvar?
	det vardagliga funktioner som bör bevaras?						Hur ser
	Kan vi samutnyttja bättre?						nuläget ut?
	Vad/Vilka kan förbättra förslaget?						Hur säkrar vi
							ja-svaren?
GRÖNA MILIÖFR &	Einns dat gräna miliäar som här/måsta						Vad sor vi för
HÄLSOPERSPEKTIVET	hevaras? Vet vi hur de används? Finns gröna						hinder? Vem
	miliöer inom det avstånd som Malmös						har ansvar?
	riktlinier anger?						Hur ser
	Tillför XX tillräckligt med hälsosamma						nuläget ut?
	kvaliteter? Klarar vi buller och avgaser?						Hur säkrar vi
	Vad/Vilka kan förbättra förslaget?						ja-svaren?
IDENTITET	Finns det (och känner vi till) befintliga						Vad ser vi för
	identitetsskapande värden som bör bevaras?						hinder? Vem
	Ger XX möjlighet att stärka identitet och bidra						har ansvar?
	till att fler besöker området? Avspeglas						Hur ser
	områdets identitet i den fysiska omgivningen?						nuläget ut?
	Kan naringsliv attraheras av området?						Hur säkrar vi
	Vad/Vilka kan forbattra forslaget?						Ja-svaren?
DIALOG & NORMER	Vad har vi för kunskansluckor? Vems normer				+		Vad ser vi för
Sinces & Northier	styr hedömningen? Finns det specielle						hinder? Vem
	personer/grupper som behöver extra						har ansvar?
	omtanke?						Hur ser
							nuläget ut?
							Hur säkrar vi
							ja-svaren?

The matrix tool presented as part of the SKB. On the y-axis, different social aspects are presented. On the x-axis, social sustainability goals of the municipality based on internal planning policies and international goals such as Agenda 2030 are shown. Each resulting box is meant to evoke discussion of the intersection on the two axes. (Malmö stad, 2020, p 20)

Mätbart och upplevt

Delaktighet och inflytande: Vår tillgång till platser som underlättar ett fungerande vardagsliv på verkas av det sociala sammanhang vi befinner oss i; av normer, kulturer och föreställningar. Ett normkritiskt förhållningssätt, lyhördhet efter erfarenheter uttryckta i dialogsammanhang samt noministis i ofnamingssan, ynouer eiee eriaemete du yeka i cuaogsaminianag sami öppenhet mot medborgares skiftande situationer är centralt för att nå ett fungerande vardagsliv, där var och en ges möjlighet att integrera med grannar och påverka sin omgivning. *Mätbara faktorer:* Har dialog hållits? Fördelning ålder, kön etc på dialogmöten.

Upplevda faktorer: Möilighet till interaktivitet? Har vi varit lyhörda för olika infallsvinklar? Upplevd spridning deltagare och kommentarer. Upplevd spridning platser, funktioner, utformning.

Jämlikhet och Jämställdhet: Hur väl vardagslivet fungerar är en fråga om förutsättningar. Behov måste prioriteras lika. Individer ska kunna mötas både i privata och i offentliga sammanhang utifrä rimliga behov och önskemål. Stadens utformning måste erbjuda alla att ta en plats i anspråk och inlemma den i det som karaktäriserar invånarnas platser. Service på nära håll gynnar miljön och den om inte föredrar bilen. Faktorer som ger ökat folkliv och ökad social uppsikt bidrar till ökad trygghet för både kvinnor och män. Mätbara faktorer: förekomst av mötesplatser för alla, av arbetsplatser, parkerin

möjligheter för cyklar och bilar, närhet och placeringar av busshållplatser, förhållande

Initial Rogerad visuan van van net oon precompare visuanteringen visuanteringe Finns det otrygga platser och stråk som begränsar möjligheterna att röra sig i området Finns det alternativa vägar när det är mörkt.

ektiv: I vardagslivets skala bör man utgå från det gående och cyklande barnets perspektiv med korta avstånd och enkla rutter. Livsmedelsbutik, skola, förskola, parker, platser för lel perspektiv med kolta avstand och einka futter. Livsindedisound, skola, torskola, patker, plader for teo och fysisk aktivitet ska kunna nås inom fem minuters gång – dvs inom 30-500 m. Platser ska ha tillräckliga ytor och utformas för både flickor och pojkar. Mätbara faktorer: antal vardagsfunktioner inom gångavstånd avstånd till livsmedel,

skola, förskola, park, lek, fysisk aktivitet med beaktande av faktiska barriärer, sittmöjligheter. I ta per barn på skolgårdar/bostadsgårdar. Upplevda faktorer: genhet, orienterbarhet, överskådlighet, kvalitet, trygghet, säkerhet

och upplevda barriären

Goda livsmiljöer: Förutsättningar för att i vardagen kunna transportera sig aktivt, ta promenader och joggingrundor ska vara möjligt för alla. Ett bra område har en mångfald av bostadstyper och upplåtelseformer, har service och arbetsplatser, har vatten och grönska med parker, träd och gräsmattor, har klimat och vindskydd samt plats för rekreation och kultur

n knina von vindsspod samt plat so i tekvalovi kolika. Mätbara faktorer: Tillgång till trivsamma och varierade platser, trygghetsmätningar (MOMS) och faktiska brott utifrån polisstatistik, samlande stråk Upplevda faktorer: kvalitet och trygghet, underlättas förutsättningar för en

eten livsstil

Tillgänglighet: Arbetsplatser, nöjen, kultur och fritid ska inte göras beroende av biltransport. God tillgång till gång-, cykel- och kollektivtrafikmöjligheter är centralt både för miljön och för en jämlik transport. Planeringen ska ta hänsyn till olika rörelsemönster och användning av olika transportmedel. *Mätbara faktorer: förekomst av trottoarer och cykelbana, närhet och tillgång till buss.* gång- och cykelstråk, parker, lekplatser, utegym, yta per boende på gården Upplevda faktorer: tillgånglighet över säsong och dygn.

In order to gain a deeper understanding of how the SKB is translated into practical use, two interviews with civil servants from concerned departments within Malmö stad (here named 'A' and 'B') are presented within the following pages. A is civil servant working with detail planning and sustainability analyses as well as consequence analyses of future development at the Technical Department. A mentions that one important factor to consider when it comes to implementing the SKB tool is the organization of Malmö municipality. Several different departments collaborate with regards to public space planning and design, including the Planning Department, Environmental Department and Technical Department. According to A, a strong collaboration across these offices is very important for the tool to be effective- something which is not mentioned on the website or in the official document. A describes that the departments work with different parts of the planning process, wherefore this would require a tool that can easily adapt to early or late stages of the urban development

A also states that the social consequence analyses have been put to the side for a long time at the Technical Department. The reason given was that there was no personnel with sufficient skills to use and lead work with the SKB tool. According to A, social aspects of urban development projects are deemed very important, both by the civil servants and politicians working in Malmö. **Consequently**, 'A' mentions that the **omission of performed social impact assessments at the Technical Department is not for lack of need or importance**, but simply for lack of usable tools.

When asked to elaborate on the problems with the current SKB, A describes how the discrepancy between the Planning Department (responsible for developing the SKB tool) and the Technical Department means that the tool is largely ineffective for the work conducted at the latter mentioned office. They describe how the Planning Department deals with early stages of new development and more overarching planning decisions, whereas the Technical Department works with both late stage development of new areas as well as changes to the current urban environment (such as rebuilding parks or squares, recreating streetscapes for new public transport, renovating playgrounds and other recreational places etc). As described by A, the collaboration could be seen as a timeline, where the Planning Department deals with the planning and overarching designs for urban development, and the Technical Department takes over and performs the detailed design, maintenance and, down the line, redesign or renovation of the urban spaces.

As A describes it, the SKB is currently too convoluted to put into constructive use for the Technical Department civil servants. As the Technical Department deals with operative, concrete changes to the urban landscape and detailed design, the vague themes mentioned in the SKB are difficult to adopt. Another problem according to A is that the tool aims to encompass far too much, resulting in it being unusable most of the time, as the participants lose themselves in the complex and intangible questions. They also point to another issue in the current work with sustainability and consequence analyses, where ecological and economical aspects go through a thorough process in order inform urban development decisions, whereas the social aspects are more "guessed at".

In addition to the SKB tool being too hard to implement at the later stage of the so called planning timeline (eg. after the project has been handed over by the Planning Department to the Technical Department), A describes the view of social sustainability factors as part of the problem. They state that factors such as safety, childrens' perspectives etc can not be measured in the same way as more technical sustainability factors and therefore are not directly translatable to the established methods of analyzing ecological or economical consequences.

The topic of measurability when it comes to socially sustainable urban development is built upon by interview person B. They work at the Planning Department, among other things with developing the methods to implement more socially sustainable practices within the planning processes. According to B, it is true that social aspects face a different challenge than other sustainability aspects in consequence analyses due to the common idea that these aspects are immeasurable. However, B describes how their current work with developing the understanding for social issues aims to (among other things) dispel this notion. B mentions that although certain social and spatial aspects are more interpretive and require an experienced specialist to assess, there are still many ways to consider socially sustainable physical space through quantification. They describe the suspicion that:

The problem is not with social aspects of physical space being immeasurable, but rather that social impact assessments (SIAs) were born from the established models for environmental impact assessments. Therefore, SIAs have struggled with the difficult position of the topics at hand being measured using methods meant for other fields. B believes that a combination of quantifiable and interpretational data is key to understanding the social aspects, impacts and consequences of physical space.

When asked about the current SKB tool in Malmö stad, B describes several issues that they are keen to adress in future iterations of the model. Firstly, the matrix contained within the tool is more confusing than it is helpful to identify the actual social aspects and consequences in real-life projects and places being developed. B describes the two axes of the matrix, one describing different social aspects and one describing social sustainability goals of the municipality based on internal planning policies and international goals such as Agenda 2030. B mentions that they understand the thought of weaving together these two aspects, but that the way it is done within the tool, becomes more of a policy assurance document than a tool that can be practically applied on the physical places meant to be analyzed.

Furthermore, B describes a frustration with the current model being its lack of usability for evaluating or learning loops. Instead of actually being a process-oriented tool (as it is described within the 20-page process leader manual), B mentions how the current configuration of themes and questions only invites a rigid focus on "predicting" social aspects instead of finding insights in pre-existing environments.

B describes currently working on more time-aware methods that can include "current state social analysis", "future changes social analysis" and "continued consequences social analysis". Upon reflection, B also mentions that the possibility of evaluating projects and places after several years of social life having been spent there, and drawing conclusions from these types of evaluations could be an important potential analysis, using similar topics or questions as the rest of the analyses. Lastly, B mentions that the social aspects within the model meant to capture all components of socially sustainable urban development are confusing and poorly motivated, albeit with some very important factors of social sustainability mentioned throughout, but with a confusing end result. B mentions that this becomes increasingly clear when the aspects are intersected with the planning goals of the municipality in the matrix, which again seem to result in a tool for assurance of planning policies rather than an effective method for socially sustainable urban development.

B describes the need for a thorough scrutiny of the six chosen social aspects, and re-configuration in accordance with a more visionary approach and wider cast net focusing on international research and praxis rather than internal policies. They speculate that this would result in a more usable categorization and focus on actual social aspects of built environment, and as a result a more applicable result of the social analyses.

In conclusion, the current composition and use of Malmö stad's SKB model presents several issues and potentials to adress:

- There is not enough guidance for how to combine the qualitative assessments required when considering social aspect with the quantitative discourse of the field of impact assessments.
- The tool is not usable across different municipal bodies involved in city development, nor in the entire timeline required to develop and maintain urban spaces.
- The tool encompasses too many different social themes and policy-driven aspects in a way that is more confusing than helpful to identify the actual parameters of social sustainability in the physical places being developed.
- The tool does not invite evaluating or learning loops but rather puts a rigid focus on "predicting" social aspects instead of finding insights in pre-existing environments.
- The social aspects stated within the tool are confusing and poorly motivated, albeit with some very important factors of social sustainability mentioned here and there, but with a confusing end result.

These conclusions, found through interviews with civil servants who work primarily with social- and sustainability analyses in different urban development departments within the municipality will be the basis for the next chapter. In these following pages, the current model will be nuanced using relevant literature, research and praxis in order to suggest changes that might adress the problem formulations found through the interviews.

Re-imagining the current SKB model - nuancing concepts and finding "hows" through literature

When considering the conclusions found in the previous chapter, certain goals can be set up for a more usable and reliable approach to assess social sustainability of the built environment. Building on the current SKB, such a re-iteration should be developed in a way that makes it **usable throughout** the planning process, with clear guidance for quantifying and interpreting social aspects. The configuration should be easily understood and focus on places and spatial qualities rather than policies, and it should be usable for evaluation and learning loops. Lastly, the social aspects and questions should be robustly anchored in relevant research and praxis.

This chapter aims to explore how these goals can be met, using the current SKB as a base in order to not start from zero- but rather build on the work already put into developing the current model. Firstly, the chapter will explore the social aspects, topics and questions through the lens of a literature review. The selected literature will be used to nuance and develop the themes of the tool according to relevant research and praxis. Following this development, the current SKB model will be re-imagined in a way that makes it usable throughout the urban development process, providing guides for quantifying and interpreting social aspects focused on physical space factors, and usable for evaluation purposes and learning loops.

As described in the previous chapter, The SKB tool consists of an introductory chapter discussing themes and uses, followed by different chapters describing social aspects from the perspective of municipal sustainability goals. The chapter titles are "Responsibility for the entirety", "Collaborations and contexts", "Everyday life and service", "Green environments and the health perspective", "Identity" and "Dialogue and norms". The document gives no clear motivation for the chosen aspects. However, when reading through the contents of each chapter carefully, a pattern starts to appear. Six different themes and goals are repeatedly stated to play a part. These goals seem far less arbitrary than the chapter titles themselves, and they are described in context and with clear purposes within the different chapters. Furthermore, when applying a more universal research perspective on these themes, it appears that many scholars and practitioners agree that these recurring themes are of vital importance for socially sustainable urban spaces. On the following pages, the six discovered themes are presented and nuanced through a literature review.

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SENSE OF SAFETY

The first theme to be presented as a recurring topic across the entire SKB is "a sense of safety". The document describes how safety, or the feeling of being safe, is something that runs through almost all aspect of socially sustainable urban development (Malmö stad 2020). For example, in the chapter "Responsibility for the entirety", the importance of considering a wide range of perspectives when designing for a sense of safety is underlined. Furthermore, the importance of designing safe spaces for moving in traffic, with a particular focus on children's safety is pressed upon in the chapter. In the same vein, the document instructs the conductor of the assessment to ask themselves if the project design would encourage a sense of safety in children from different parts of the city and not just from the area the site of development is located in. The chapter also brings up the importance of being able to orient oneself as a way to promote a sense of safety in visitors. In the next chapter, "Collaborations and contexts", the importance of visibility and social control for perceived sense of safety is pressed upon. Furthermore, the document describes liveliness and attractors that make people want to spend time in a space as important factors for fostering a sense of safety. The chapter describes that safe spaces are a goal in general, and more specifically safe connections and streetscapes. Both a sense of safety and actual traffic safety are brought up as goals in the second chapter of SKB. Following this, the chapter "Everyday life and service" builds upon previous chapters' description of a sense of safety being central to socially sustainable places, and describes it as one of the most basic requirements of socially appreciated urban space. This chapter describes how feeling unsafe can affect a persons life negatively and contribute to isolation which in turn is described as a health-threatening condition. By providing inviting and safe spaces for meeting others, relaxing or travel through and across, a general sense of safety can be encouraged (Malmö stad 2020). Again, the importance of being able to orient oneself is described in the SKB as important for experiencing safety, as well as visual connections between different areas. In the chapter "Green environments and the health perspective", safety is described as one of the initial keywords. Here, the SKB brings up the importance of considering a sense of safety from a genus point of view - particularly in a park-like spaces, where hiding places and minimized visibility might be an issue. Building on this, the chapter mentions the importance of adequate lighting as a way to promote good visibility. The chapter "Identity" re-iterates the importance of being able to orient oneself- for example through landmarks and unique elements- to promote a sense of safety, as well as the importance of good visual connections and sight-lines.*

*The last chapter of the SKB, "Dialogue and norms" differs a lot from the other five, as the chapter doesn't describe a goal for the physical space to strive towards in order to be socially beneficial, but rather the importance of inclusive methods when designing. In order to meet the objective of developing a method that is more clearly centered around physical space aspects of socially sustainable urban space than policies, this topic will be discussed separately in the chapter "Configuration of approach" (see p. 46).

The importance of creating a sense of safety for socially sustainable urban space has been discussed by many authors over the years. Professor Jan Gehl (2010) emphasizes the crucial role of a perceived sense of safety in fostering social cohesion within public spaces. According to the author, popular spaces bustling with people tend to be highly valued and inherently feel secure. A vibrant atmosphere is a key element in creating a safe environment, wherefore the author underscores the importance of creating interesting, comfortable places centered around inviting people to spend time leisurely. Additionally, Gehl highlights the significance of *peripheral seating* and *adequate lighting* as essential factors contributing to a sense of security in public areas. Gehl also suggests that space that is too loosely programmed or that doesn't signal any clear uses can decrease a space's sense of security as it creates confusion. To combat this, the author emphasizes the importance of *territorial markers*, describing how *clearly defined zones* with different levels of publicness can enhance the sense of safety in urban areas. The topic of zones within the urban space coded for different levels of publicness is also discussed by Mayblin, Valentine, Kossak & Schneider (2015). The authors emphasize the importance of physical spaces promoting a sense of safety - describing this as essential for facilitating social life and meetings between people. The authors investigate various approaches to achieve this sense of safety through a spatial experiment. The results indicate that private zones within public spaces encourages safety and a willingness to interact with others. The sense of safety is described as a basic human need to share thoughts and feelings comfortably in intimate settings. Additionally, the authors found these private enclaves to encourage a greater willingness among individuals to challenge their own pre-conceived notions about new people. According to Peters (2017), finding ways to dispell prejudice and encourage meaningful encounters with strangers can greatly increase the chances for new meetings in shared spaces. Such meetings may in turn contribute to networks being built across perceived social divides. In another paper, Peters (2010) agrees with Gehl (2010) that a sense of security can be encouraged by creating familiar and predictable surroundings.

Perceived security is also described as contributing to feelings of attachment to public spaces, which can have positive impacts on everything from a sense of pride, identity, care and community.

Baran, Tabrizian, Zhai, Smith, & Floyd (2018) delve into another dimension of perceived safety in urban spaces. Specifically, the authors investigate the nature of perceived safety in urban parks. Their findings are in line with Gehl's (2010), emphasizing the significance of a *lively atmosphere* and a *well-designed and easily understandable path system*, particularly in the context of green urban spaces. Lis, Pardela & Iwankowski (2019) further elaborate on this by describing how *clear views* is of particular importance when it comes to vegetation design in urban parks. Furthermore, Lis et al. connect the sense of safety to *accessibility of vegetation design*, describing that *poorly managed* or wild areas can be experienced as frightening or indicate a low possibility of escape in case of sudden danger. This condition may impede perceived safety by itself, but also other safety-promoting aspects such as the possibility for free movement and liveliness. Hashim, Thani, Jamaludin & Yatim (2016) also confirm that *spatial openness* is a key safety attribute in park vegetation. The authors explore how the design of vegetation in urban spaces can particularly enhance the sense of safety *for women*. Their research reveals that features such as *open landscape and sightlines, clear arrangements and maintenance of vegetation including minimal or no sight impeding shrubbery* are crucial aspects to reach this goal.

Listerborn (2000) builds on the discussion of how a sense of safety can be achieved with a particular focus on gender. The importance of offering alternative routes as a means of enhancing the perceived safety within an urban space is mentioned by the author. According to Listerborn's research, having few alternative routes in urban spaces may lead to gender segregation. Women often feel less secure in enclosed environments, making it more challenging to navigate the city, according to Listerborn (2002).

The findings presented by Baran et al. (2018), Gehl (2010), Hashim et al. (2016), Lis et al (2019), Listerborn (2000; 2002), Mayblin et al. (2015) and Peters (2010) nuance and enrich the knowledge of how to create a sense of safety in urban spaces as described in the SKB. The research provides a range of more specific methods for increasing perceived security in urban places such as parks, open spaces and streetscapes. In summary, the research describes the following factors that may positively impact a sense security through urban space design:

-Interesting, comfortable places that attract people and movement -Peripheral seating with good overview of the space -Adequate lighting and sight-lines -Spaces that invite visitors to spend time leisurely and form positive memories -Designs that clearly signal uses and are not too loosely programmed -Clear and predictable territorial markers along streetscapes and connections for travelers -Clearly defined zones with different levels of publicness, including private zones within public spaces -Easily understandable path systems, particularly in green spaces -Well-kept vegetation designs that do not obstruct movement, in clear arrangement with open views and minimal visual barriers -Alternative routes to and from spaces



The second recurring theme within the SKB can be described as "accessible and connected space". Across all chapters, accessible space is brought up as a core aspect to consider. In the initial chapter "Responsibility for the entirety", the concept of accessibility is nuanced to include both smaller-scale aspects such as access to public transport nodes and bike racks as well as more system-related phenomena to do with connectivity. For example, the document asks the performer of the assessment to look for paths that cross from the studied place to other areas, interconnected webs of paths that link it to the larger system of the city as well as availability of longer, continuous streets and paths that can work to align different people's travel ways along the same route (Malmö stad 2020). This type of "main path" may also attract activities and extroverted facades which will in turn promote a sense of safety and liveliness. Frequency of available public transport is another factor to look for, as well as both physical and perceived proximity to social meeting places and recreational areas. Walking and biking paths are said to be especially important to consider when identifying socially beneficial connections of an area, as these modes of transport are the most inclusive and healthpromoting. Another factor is barriers- both physical and mental- that might stop different groups from entering a place. The document describes a good rule of thumb for childrens' access to playgrounds or other areas that promote physical activity to be 300-500 meters. Regarding park-like or green areas, the document suggests to look within a 1000 meter radius and compare the amount of greenery to other parts of the city, to get a sense of how available this aspect is currently to people moving through the site. Another measurement given by the document concerns places for physical activity. These should ideally be within walking distance from any given point- which according to the document is 500 meters. Furthermore, when designing, materials should be able to safely withstand all types of weather and seasons without impairing accessibility for travelers. Density and proximity are brought up as important factors, but vastly multipliable by factors such as lack of barriers, traffic safety and incitements such as meeting places, attractively designed spaces or other nodes. Without these factors, the system may seem well connected, but still be unused practically in the ways it might theoretically seem like.

The complex and interesting interplay between place accessibility and system connectivity is discussed by several theoretical sources as well. As mentioned, Listerborn's (2002) dissertation describes how having *few alternative routes* through urban spaces may work together with other design aspects that result in gender segregation, as women often feel more unsafe in isolated environments. Varna & Tiesdell (2010) also list the importance of connectivity as an integral part of creating accessible urban spaces. The authors emphasize that physical configuration affects both the degree to which different groups can find, arrive at and transverse into a place, and also what level of effort is required to do so. Their study finds that there are three main factors that work together to form connected and accessible spaces. The first factor is named 'Centrality and connectivity' and revolves around how the place is located within a larger system. According to the authors; *"Places that are strategically well-located (i.e. those with centrality and connectivity) within a city's movement pattern have greater potential movement and thus greater potential for different social groups coming together in space and time"* (Varna & Tiesdell, 2010, p. 584).

Together with Listerborn's (2002) point about well-connected places being more allowing for persons of different background and experiences to confidently spend time, the social importance of place connectivity is doubly underscored. Varna & Tiesdell (2010) go one step further in stating that although the internal design of a place itself plays a part in its attraction to be used, this can be seen only as a multiplier of the liveliness

that movement patterns create through interconnectivity with surrounding areas. The authors therefore mention that *changes to the connecting movement network that can increase its connections to other areas, lively spaces or reduce isolation* is an important alternative to changing the internal design, when looking to create more socially focused urban spaces.

The second factor mentioned by Varna & Tiesdell (2010) is 'Visual access'. According to the authors, *visual connections* should be considered a factor of urban space accessibility. In order to create visual access, the authors describe the importance of *not isolating a space from its neighboring connections such as streets* or pathways, providing clues and indicators that might make the space *orientable* for visitors and providing major *entrances along sightlines or with ample surrounding space*. The last factor mentioned by the authors is 'Thresholds and gateways'. According to the authors, this factor can relate to both physical and symbolic obstacles in the urban space. A few examples of symbolic hindrance given by the authors include *changes in the flooring material* or transitions from *open to roofed spaces*, which can create the sense of a threshold or barrier. Physical obstructions is described as design elements that hinder pedestrians of different ability levels, for example by *creating unnecessary levels in the ground*. Varna & Tiesdell describe these particular places as "decision points" for most visitors. The authors describe how more evident thresholds increase the risk of a visitor deciding not to enter. Even in situations where the person technically makes a choice, this type of design leads to a physical exclusion of people of different ability levels from places. In summary, the authors describe the best types of places for social life to be easily *found, seen and entered*.

As early as 1961, Jane Jacobs posed a theory emphasizing the significance of physically interconnected spaces for strengthened social connections. Jacobs (1961) highlights the essential role of public spaces that link people's daily lives, such as streetscapes, as ultimately contributing to enhanced social cohesion. Rokem and Vaughan (2019) also discuss space connectivity from this perspective. Their research makes use of space syntax analyses to reveal that areas which are not experienced as connected to a larger system suffer from higher degrees of social segregation. The authors describe that in addition to more connections to the surrounding areas, places for co-presence between different groups is vital in order to increase the experience of connected urban space, and plays an integral part in combating social segregation. The field of space syntax methods is described by Marcus, Giusti & Barthel (2016) as moving the understanding of urban connectivity from a modernistic and compartmentalized understanding of urban space, with an abstract understanding of human cognition towards a more systemic perspective that considers the affordances of urban spaces interdependent with human cognition itself. Ståhle, Marcus, & Karlström (2005) build on this by describing how the field is adding an experiential quality to a previously system-centered field. Marcus et al. (2016) state that one of the fundamental methods within space syntax methods is the 'axial map'- a network representation of urban space constructed from the perspective of a perceiving and moving human being. The axial map consists of straight lines covering all accessible open spaces, representing areas visually and physically accessible to humans. It serves as a cognitively defined network, allowing measurement of various properties, from an experiential point of view. Distance is topologically measured as the number of axial lines, reflecting 'cognitive distances' in the map. This approach is supported by empirical studies demonstrating consistent predictability of pedestrian movement, in other ways- the axial map is a more reliable way to measure the perceived accessibility, desire or possibility to move within a system than, for example, measuring distance from point A to B in meters (Marcus et al., 2016). The cognitive links described through axial maps underscore the importance of *observability of a path* in order for it to be selected.

Similar to Varna & Tiesdell's (2010) description of thresholds being 'decision points', a poor visual overview could make the cognitive distance longer and the travel option less appealing.

Legeby, Berghauser Pont & Marcus (2015) build on this knowledge by providing insight into how some of the measurements within space syntax theory can be made. The authors suggest using *site visits in combination with digital maps* to understand the space when performing an axial map. Furthermore, the importance of scale is emphasized, with more detailed analyses recommended in smaller scale spaces such as squares or small neighborhoods, and more general analyses in larger areas. Paths, squares, parks and changes in level such as stairs are recommended factors to map in a standardized fashion.

Edirisinghe (2019) summarizes many of the points brought up by other authors discussing the design factors of accessible urban spaces- from system connectivity to walkable surfaces. When it comes to planning and designing urban areas, the author firstly brings up the layout of streets, and the importance of *continuous and accessible routes for pedestrians* throughout the city. The street network should seamlessly *connect large and small streets, as well as public transportation access points*, according to Edirisinghe. Furthermore, the ground surface of pedestrian routes needs to be *even, wide, and gently sloped* to allow for proper drainage. The *design of pedestrian crossings* is crucial, requiring *smooth paths free of obstacles such as posts, holes, vendors or uneven places where water can gather*. Furthermore, *street furniture should be strategically placed along the outer edge of the sidewalk*, contributing to both functional and visual accessibility. *Visual and informative signage* should be clear and well-lit, to increase orientability. The material for pedestrian areas and walkways should always be safe and practical to move across, regardless of weather, according to the author. Lastly, designs that allow for ongoing *maintenance and care* of streets are necessary to sustain an accessible and safe experience for pedestrians.

In conclusion, Listerborn (2002), Varna & Tiesdell (2010), Jacobs (1961), Roken Vaughan (2019), Marcus et al. (2016), Ståhle et al. (2005), Legeby et al. (2015) and Edirisinghe (2019) deepen the understanding of accessibility and connected space as described in the SKB. The authors describe the following aspects to look for more closely when considering the level of accessibility and connectivity of urban space:

-Multiple entrances & connections, interconnected with surroundings

-Visual connections to neighboring areas, with clear entrances along sightlines
-Orientable design with clear signage and indicators for all modes of transportation
-Lack of barriers that might exclude certain groups. For example posts, holes and street furniture along walking paths

-Places with flexible use that might encourage co-presence between different groups -Prioritizing the needs and space for inclusive and health promoting transportation modes, such as bikes and pedestrians

-Continuous routes provided for pedestrians wherever possible

-High centrality and connectivity (measured by space syntax methods)

-Ground material that is weather resilient, easy to maintain, even, and gently sloped

-Continuous streets that connect to large and small side streets and public transport options

-Visual attractors and nodes that encourage movement

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The process leader manual for the SKB describe how the suggestion of initiating social impact assessments came from a project meant to explore ways to promote more equitable health in Malmö (Malmö stad, 2020). Thus, the health perspective has been a cornerstone of socially sustainable city planning in Malmö even before the SKB's creation. The document draws parallels between social life, physical space and both mental and physical health aspects. The SKB describes how not planning for socially sustainable urban spaces can lead to different areas feeling isolated from each other, and the amount of public space that is possible to share and use together to become limited, which minimizes the potential of building social capital with people across the city. This type of isolation can lead to societal norms becoming hard to understand, resulting in more isolation and distance from other groups, as well as a range of mental health problems. Furthermore, the lack of community can mean that little help or guidance is to be found in case of a physical health problem or emergency. According to the SKB, research on the determinants of health factors shows that the physical environment (and the social norms it creates) affects our lifestyles, how we relate to others in our environment and how we feel. The physical space can also geographically display social factors through differences in care and maintenance, quality and variety of function (Malmö stad, 2020).

Through these explanations, it is clear that the document places health factors at the heart of many other aspects of socially sustainable urban development. Another factor that is tied into this argument is the importance of considering childrens' perspectives. The SKB describes how urban planning needs to promote healthy and equitable conditions for growing up, and that urban designers need to always be aware that children are more susceptible to both physical and social aspects of the space they live in, having less control of their movement throughout the city than adults. Therefore, children's perspective and health should always be a factor to keep in mind when designing. Aspects of urban design brought up by the SKB (Malmö stad, 2020) that might contribute to increased health in general include prioritizing pedestrians and bikers, as this might lead to more people choosing these healthier modes of transportations than polluting and sedentary options like cars. Furthermore, promoting a physically active lifestyle is brought up several times as an important aim to strive for when designing. Both clearly programmed spaces for physical activity like playgrounds for children and sports arenas or outdoor gyms for adults are mentioned, as well as more flexible options like larger clearings and recreational areas. The document emphasizes that moderate physical exercise such as taking a walk should not be underestimated for an individual's health. Therefore, the importance of providing reasonable walking distance to nodes and targets is vital, with 300-500 meters in the suggested range.

In general, green areas and nature have a positive effect on our stress levels and air quality, according to the SKB. Promoting both visual and functional vegetation wherever possible within the urban context is therefore desired from a health perspective. Cars and other sources of pollution that are damaging to our health should be given a low priority in urban spaces. Some measurements that might be available through the municipality are suggested by the SKB, including noise and particle pollution levels. Diversity of health-promoting spaces is another way to understand the quality provided for users (for example active transport, playgrounds, nature areas, multisport arenas, jogging trails etc). Too monotone functions might create inequitable possibility of use for different groups, which is important to avoid, according to the SKB (Malmö stad, 2020).

Fathi, Sajadzadeh, Mohammadi Sheshkal, Aram, Pinter, Felde & Mosavi (2020) investigated the role of urban morphology and design on enhancing physical activity and general health. Amongst their findings, the authors - similarly to the SKB - point to the importance of *functionally diverse and flexible places* for physical activity as being key to promote health-improving uses by the general population. The authors take a novel approach to quantifying urban design aspects that facilitate health-promoting movement, and are able to point to correlations between different types of design elements and physical activity. Fathi et al. begin by summarizing some theoretical findings on how urban design can positively impact movement and general health. Safety from vehicle traffic and minimized volume for motorized vehicles is brought up, as well as continuous, well-connected, wide, and clearly lit orientable pedestrian paths with lots of design *diversity* as a way to encourage physical movement. Furthermore, the authors discuss the importance of providing favorable climate conditions, avoiding very warm or cold spaces and protecting against wind and rain. Barriers, uneven flooring, level differences and too much distance between nodes and meeting places are factors that might negatively impact the choice to walk rather than using other modes of transportation. It has also been shown that a greater diversity of users encourages more people to feel safe entering a place on foot- wherefore it is important to design for a sense of inclusion for all groups regardless of gender, age, physical ability or background. Visual cues have also been shown to play a vital role, and elements such as attractive colors and artefacts in the urban space as well as trees and other vegetation are particularly good for promoting pedestrian movement. Through a series of measures including space syntax analyses, questionnaires and expert evaluations, the authors were able to deduce that designing urban areas according to these criteria could lead to physical activities being enhanced with up to 18% by urban design alone:

> "Therefore, it can be concluded that by designing the urban structure and morphology in accordance with the design sub-criteria, it is possible to enhance physical activities up to 18% and by enhancing physical activities, it is possible to remarkably [...] enhance the citizens' general health."

Similarly to Fathi et al., Boverket (2022a) has gathered a few different categories to consider when developing urban areas with a focus on health benefits. The first aspect related to Fathi et al.'s (2020) main focus, namely active mobility as a health improving measure. Boverket describes how more people choosing to *bike and walk* as a mode of transportation contributes to *mental and physical health for the travelers, decreases noise pollution and particle pollution* from motorized vehicles and increases the *general traffic safety*, reducing fatality and accidents- all crucial factors for the general health. Boverket recommends *designing different paths for different speeds* to promote a diversity of active mobility travelers, and promoting frequent and adamant *maintenance* to promote biking and walking. Next, Boverket describes the importance of *recreational movement and play* for general health. The importance of providing highly *diverse uses* is being underscored, preferably through participatory

-Fathi et al. 2020, p. 19

processes in order to create inclusive functions. Since play is an intuitive activity, it is also recommended to consider designing "unfinished" areas for play or recreational activity- through these testbeds, the use of the place can inform continued developments over time and allow for more interesting and engaging places. Clean air is the next aspect mentioned by Boverket as vital for general health in urban areas. Recommendations include prioritizing green areas whenever possible, and promoting active mobility over motorized vehicles. Green areas are further discussed as an important aspect of general health. Design recommendations include to never remove a tree or vegetation area if possible to preserve, allowing for as much space as possible to be taken up by greenery, providing accessible green spaces that allow visitors to enjoy the mental health benefits of entering such places, and incorporating blue-green solutions; for example by vegetation-based drainage design rather than hard flooring and wells as a rainwater solution. Lastly, Boverket underscores the importance of providing good meeting places through welcoming urban designs as a way to improve social and mental health. Similarly to previous aspects, this is recommended to be developed using participatory methods, in order for designers to understand a wide range of perspectives and thus be able to design for diverse perspectives. Badland & Schofield's (2005) study also investigates how urban design can impact physical and mental health. Similarly to Fathi et al. (2020) and Boverket (2022), Badland & Schofield emphasize the importance of street connectivity, walkable distance between nodes, prioritizing biking and walking paths, green design elements and minimizing space and access for motorized vehicles in comparison to more active and inclusive modes of transportation as key elements in promoting mental and physical health in urban areas.

In summation, the SKB vividly describes the importance of considering both physical and mental health aspects when developing urban spaces. Findings from Fathi et al. (2020), Boverket (2022) and Badland & Schofield (2005) provide a deeper knowledge as to how these health promoting benefits can be obtained, in accordance with the following aspects:

-Promoting walking through continuous, well-connected, wide, orientable and clearly

lit pedestrian paths without barriers or uneven flooring but with lots of design diversity -Providing different paths for different speeds of physically active transportation modes -Minimizing space and access for motor traffic to reduce noise pollution, particle pollution, risk of physical injury and sedentary choices (and instead promoting inclusive and health beneficial mobility choices like walking and biking).

-Designing with consideration of different climate extremes by considering shelter, roofing, shady vegetation etc.

-Density between recreational areas that encourages use of such health-promoting facilities (SKB suggests 300-500 meters from any point to the nearest area for physical activity). -Playable and recreational areas should preferably be designed in a way that allows for further development through use, as play is an intuitive activity.

-Diversity of function within the design greatly increases the chance for physical movement, social interactions and mental health benefits

-Visual, visitable and functional greenery should be prioritized whenever possible, and should always be preserved throughout urban transformations if possible



Social and meeting possibilities is described by the SKB (Malmö stad, 2020) as one of the cornerstones of socially sustainable urban development. The document describes how both 'bonding' and 'bridging' social capital can be promoted through physical space configuration. Bonding social capital is described as strengthening the social ties within a pre-existing group, whereas bridging social capital is likened to creating new social relationships through cross-group interactions- something which is described as vital for combating intolerance and prejudice, segregation, feelings of unsafety, mental health issues, exclusion from society and other important factors for socially sustainable urban life. The document emphasizes the importance of providing meeting places that don't require a any payment, in order to avoid unequal access depending on financial situation. The document vaguely describes that meeting spaces should promote an 'us-feeling', but doesn't specify how this can be achieved. These places should help both children and adults meet people from different geographical areas, and provide a diversity of uses, experiences and supposed visitors. When designing places to interact with other people, the SKB suggests working with informal settings that might promote spontaneous interactions, offering qualitative and cared-for environments that encourage people to want to stay for a while. In order to make sure people from different groups and areas can access the places at the same time, these places should be designed with inclusive accessibility measures in mind, and preferably be able to accommodate different usages through flexible design. One way to consider this is by considering different age- and user groups. Another is to consider different types of meetings. From private to relaxing, social or even celebratory- all types of meetings should be accommodated for according to the SKB. The document also describes how food and cultivation areas is a well-known way to enhance the quality and diversity of meetings through culture. Green environments is another way mentioned to promote several different social contexts taking place simultaneously in the same space. Lastly, the document mentions that by providing something extraordinary in the urban environment, a sense of place identity can be promoted, which might encourage people from different areas to visit and meet new people.

There are several sources discussing the complex spatial prerequisites which can have an effect on how we interact with strangers and friends in urban spaces. The importance of meeting new people in neutral arenas such as shared urban space has been discussed for many years, for example by Allport (1954). Allport states that if facilitated correctly, these meetings have the potential to break down prejudice and combat social segregation in the long term. The most important factors in order to facilitate meaningful meetings that may have this long-term effect is, according to Allport, creating a sense of equality between groups (for example by making sure the space is inclusive for people with different physical and mental needs), displaying the acceptance from authorities of the meeting activities (through signage or other assurances), providing some goal that can be strived for together (for example through creative activities or sports) and encouraging some sort of collaboration between people (like common gardens or similar). Valentine (2008) nuance Allport's findings by stating that *common activities*, and particularly everyday activities is vital for creating social and meeting opportunities. Examples of situations where Allport's prerequisites could be met include *sports arenas or spaces for other organized hobbies, shared cultivation spots and stages or other culturally programmed spaces*, according to Valentine. Xiong et

al. (2020) deepen the understanding of common activities for positive meeting opportunities and social benefits further. In their study, they found that immigrant women were greatly helped to form positive social bonds with local citizens and different groups by the presence of diverse and inclusive sports facilities. Varna & Tiesdell (2010) suggest that by looking at a space in a larger context and designing a sort of "*activity gradient*", even hesitant visitors may be eased into common activity in shared spaces. There are also those who bring up the importance of more passive or *loosely programmed* space for social interaction. Peters (2010) describe how simply co-existing leisurely in a space can build a form of acceptance towards other groups which will make more active encounters happen much more easily in the long run. *Visual access that encourages people-watching and flexible, loosely programmed space* are the main components mentioned by Peters that might promote this process.

On the topic of flexibility, Kahn (2005) describes how simply hinting at the structures of a place, but allowing simultaneous diversity of use is vital for people with different interests to come together and interact in public space. Similarly to Boverket's (2022)

come together and interact in public space. Similarly to Boverket's (2022) description of good areas for playing, tKahn (2005) mentions how a sense of discovery and allowing personal curiosity and investigation to guide the use of a space can create deeper, more meaningful meetings with other people. Another way in which seemingly passive design elements can trigger more active interactions between site visitors is described by Whyte (1980) in his book "The social life of small urban spaces". Whyte presents the theory of 'triangulation', by which he means the process of some external object or stimulus in the physical space that encourages interactions between two ^{strangers} as though they are not strangers at all.

Peters (2010) builds upon Whyte's definition of triangulation by describing how unexpected physical elements in a public space can make us go from introspectively passive into a transitional state of curiosity, which in turn can lead to us actively seeking contact with other people around us, to better understand the unexpected element. In this altered state, the social barriers are less pronounced, and conversations between strangers are more likely to take place. Elements thought to trigger this intriguing process include diverse types of seating, public art, food vendors or cafés (Varna & Tiesdell, 2010), beautiful scenery (Whyte 1980) and unexpected design elements (Peters 2010). As previously discussed within this paper, Varna & Tiesdell (2010) argue that *space connectivity* can play a vital role in allowing for social life and meetings between people. Particular visual attractors and other urban design elements which might promote movement to and through a place is mentioned by the authors. These elements might allow for co-presence and interest from different groups at the same time, which together with the triangulation theory (Whyte, 1980) creates good possibility for interactions between groups. Another aspect which may facilitate social meetings in urban space is touched upon by Mayblin et al. (2015). As previously stated, the authors found that private zones within more public spaces can allow for a sense of intimacy and security, which is helpful in breaking down social barriers. According to their experiment, these spatial configurations contribute to facilitating social life and meetings in urban space.

In summary, both the SKB and a wider range of scientific research points to the central role that meaningful interactions and places for meeting in public space plays in the field of socially sustainable urban life. Allport (1954), Valentine (2008), Xiong et al. (2020), Varna & Tiesdell (2010), Peters (2010), Kahn (2005), Whyte (1980), Mayblin et al. (2015), all contribute to the knowledge of how these meaningful meeting places can be designed for, and point to the following:

-Providing places for common activity like community gardens, areas for sport or play, stages or spaces for cultural events, inclusive design and a gradient of activity throughout an urban space

-Designing flexible spaces for different uses through hints of functions, exploratory possibilities and places for people-watching

-Triangulation encourages new interactions through diverse types of seating, public art, food vendors or cafés, beautiful scenery and generally unexpected elements

-Providing visual attractors and other elements that might encourage movement to and through a site

-Designing private zones within urban public spaces to foster a sense of intimacy



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In one of the SKB's early chapters, the importance of experiential qualities in urban settings for different social benefits is described (Malmö stad, 2020). By providing attractive places for a variety of users, the segregated patterns of movement between different groups within the city can start to be diffused. According to the document, "providing a wide and varied range of attractive places can encourage people to visit parts of the city which might otherwise feel uninteresting or unattainable to them" (Malmö stad, 2020). Similarly to the findings of Gehl (2010), Fathi et al. (2020), Whyte (1980), Varna & Tiesdell (2010), Peters (2010) amongst others, the importance of visual attractors are pressed upon in the SKB as one of the most important ways to trigger physical movement, a sense of accessibility, safety and spontaneous meetings. A few characteristics that might indicate attractiveness of places is listed, including whether the activity or design provides different interpretations and uses, how green the place feels and what quality the maintenance of the place indicates are mentioned. Furthermore, the extent to which the place feels attainable and visible from 360 degrees, or whether the "force of pull" is limited to one or two directions is also an aspect to consider, according to the SKB. The document also describes that an attractor can be many different things, and different aspects attract different people. It is therefore important to think in terms of experiential qualities rather than simply attractive or aesthetically appealing places.

A function, view, activity, social interaction or other potential experience are all attractors in public space which can be designed for. The SKB emphasizes the importance of planning for dense nodes, thereby creating a string of pearls of different experiences, which can promote curiosity and the desire to try new things. Furthermore, seating and cultural events are stated as vital things to design for- or at the very least create prerequisites for in urban spaces. General variety and places to spend leisure time such as playgrounds and places that encourage staying, with comfortable settings, functions, views and climate are also described as vital to improve the experiences of urban space. Green connections and areas are another central part to providing socially beneficial experiential qualities. According to the SKB, both park-like places and other types of greenery is encouraged. The importance of providing varied greenery, natural values and blue-green combinations is also pressed upon. Green places can provide both relaxation and restorative qualities, but also highly social or active functions. Regardless of function, the SKB pressess upon the importance of adequate lighting and seating in green milieus. Furthermore, green areas should be designed in a way that makes them easy to maintain, without sharp corners or difficult plantings or flooring, and should preferably be connected to each other whenever possible through green corridors in the urban landscape. The SKB suggests looking at municipal analyses that show canopy cover, to assess how green an urban space is perceived. Furthermore, the distance to different types of green character areas within 1000 meters could also be assessed, to give an indicator of access and variety of park-like or natural environments.

In addition to vegetation design, the terms "recreation" and "meaningful leisure activities" are mentioned as vital to enhance the social life and cohesion of urban areas. Furthermore, providing special, unique or aweinspiring designs can become a landmark in people's mental map of urban spaces. This can contribute to enhanced orientability and foster a sense of place and identity between a site and its visitors. The SKB also suggests designing clear and easily identifiable elements or attempting to design different areas along the same theme or accent color as a way to make visitors more aware of their surroundings and what they are experiencing. Lastly, providing spaces that might be developed through collaborative measures (for example green areas that can be maintained through organizational engagement or collaboration with schools) can enhance a sense of responsibility, identity and pride over one's local surroundings.

The importance of designing urban space for human experience - in addition to function and logistics has been described within the field of architecture and urban design for many years. Some of the most famous early examples include Jane Jacobs' book (1961), describing the importance of pedestrianfriendly streetscapes for social life and Kevin Lynch's book (1964), which is famous for turning the lens on subjective experience of space rather than objective function. Since Jacob's and Lynch's works were published, uncountable publications have been made on the importance of experience-centered urban design, and the issue of designing for humans instead of commerce, technology or cars continues to be a vital goal for socially sustainable cities (Andreani, Kalchschmidt, Pinto & Sayegh 2019). Theories on what makes a positive urban experience are of course by some measure subjective, as that is the nature of experiences. Still, there are some substantial publications looking to quantify or at least categorize recurring patterns of what makes a positive experiential quality or urban space. Zamanifard, Alizadeh, Bosman & Coiacetto (2019) conduct a rigorous literature review and empirical study in order to find the central concepts to look for when it comes to experiential qualities of urban space. The authors describe that

although the urban web is complex with a myriad of different types of places, there are three main types of urban space most relevant to focus on with regards to social gualities, namely streetscapes, parks and squares or similar open spaces. With this distinction,

the authors find that the desired physical aspects for social and experiential qualities in these spaces can be divided into four categories with underlying concepts. Firstly, the authors describe the importance of *comfort* for the human experience. Within this category, concepts like *cleanliness, seating, walkability,* orientability, greenery, climatic conditions, ease of access and safety are discussed. Some examples that can be looked for within this category according to the authors include ramps and other accessibility modules, amount of vegetation, seating, volume and convenience of pedestrian space, comfortability in terms of noise and temperature etc. The next category introduced by the authors is *inclusiveness*, an aspect of physical configuration which is meant to improve social and experiential qualities according to the authors. The same reasoning is presented by Carr et al., who write that providing inclusive places will ensure not only that more people are invited to spend time together, but the experiences tend to be improved for everyone by thinking in diverse perspectives (Carr et al. 1992). Zamanifard et al. (2019) recommend asking users (for example through focus groups) about their experiences, in order to get a diverse perspective of a space when evaluating its inclusiveness. Considering the specific needs of children, women, elderly citizens and people with disability, as well as people from different cultures is recommended. Furthermore, the level of understandable design cues and information as well as other social barriers like fees or visual blocks from certain heights can be measured.

The next category of understanding the experiential qualities of urban space introduced by the authors is diversity and vitality, whereby attractors for different people, unique uses and potential for meaningful social interaction is considered. The authors suggest mapping possible reasons for different people to react, enter and lastly interact with the place. More concretely, three categories of use can be compared, namely 'strictly necessary', 'necessary and social activities' and 'necessary, social and optional activities', where the latter is most preferable and the first is least preferable for a diverse and lively space. This distinction was first made by Jane Jacobs (1961), who argued that positive experiences for city dwellers depend on a mix and diversity of these functions.

Zamanifard et al. (2019) also recommend looking for spaces that encourage events, social seating, strolling for the experience rather than the function of transportation, people-watching, exercising and relaxing. The last category introduced by the authors is "image and likability". This category more directly concerns the visual aspects and resulting feelings or meaningfulness this may have on people. As Lynch describes (1961), this relates to both comfortability and inclusion as places that promote positive feelings and images tend to make us more comfortable, and incite a desire to visit them again and again. Zamanifard et al. (2019) recommend to consider emotional mapping, and identifying feelings such as welcoming, comforting, unique, exciting and pleasant in order to assess the diversity and vitality of a place. Furthermore, the authors suggest considering factors such as ease of pedestrian access and walkability, natural environment, overall appearance (a subjective measure best investigated through participatory methods), variety and complexity of scale, use, color etc, maintenance and organization to assess the general image and likability of a place.

There are many diverse publications discussing experiential qualities of architecture and urban design, and as previously stated, most emphasize the subjectivity of such measures, as that is the nature of experiences. Thusly, the importance of considering a wide range of perspectives reveals the necessity for participatory methods (as described by Zamanifard et al., 2019) and an inclusive approach providing equal possibility of use for a variety of user groups, which will be discussed in the following chapter. Summarizing the results, Jacobs (1961), Lynch (1964), Zamanifard et al (2019) and Carr et al. (1992) provide the following insights and nuance to concepts relating to experiential qualities in the SKB:

-Comfortable places with safety measures, convenience and spatial priority for pedestrians, seating and accessibility modules such as ramps etc.

- -Varied and ample forms of natural and green environments for relaxing, being active, social or enjoying different naturalistic elements (the SKB recommends a distance of no longer than 1000 meters from any given place to a green area for recreation) -Measures taken to reduce weather, climate and noise disturbances -Designs that allows easy and frequent maintenance to avoid unclean or messy environments -Understandable and easily identifiable design elements and organization for different groups -Providing a mix of functional, social and recreational functions -Providing places that attract walking for the experience rather than the function of transportation -Providing good views for people-watching and discovering new elements, with minimal barriers that might exclude groups of certain heights such as children
- -Unique, identity-building and engaging design elements that attracts a diversity of perspectives -Variety and complexity of scale and use



The final recurring theme of socially sustainable urban design discernable within the SKB (Malmö stad, 2020) is the matter of equal and inclusive places, or rather the equal possibility of use for different groups. As stated on p. 46, this topic relates strongly to the methods by which it can be measured. As a diversity of perspectives is what is aimed to achieve it stands to reason that participatory methods provide good insights into different people's perspectives, something which is also underlined in the document. Within the SKB, general equality is brought up in terms of accessible spaces for those with impairments or varied function, as well as the design of places that include all genders equally. The SKB also emphasizes the importance of designing for children's needs especially. This is seen through the separate category "children's perspective", in line with recent social impact assessment developments in Sweden, which often include a separate "Children's consequence analysis". Furthermore, the document emphasizes the importance of designing for all socio-economic levels, and avoiding fees and other hindrances for those with less disposable income. Age is another factor that is brought up in terms of including all groups in the use and experience of urban spaces. By prioritizing those with the biggest needs when designing, one can be sure to include as many people as possible. In addition to groups that may have more or different needs than average (including children, elderly and persons with mental or physical disabilities), providing inclusive and equal places also means considering different cultural backgrounds and interests, according to the SKB. By providing a wider range of functions, activities or attractors, people from a more diverse range of perspectives may feel encouraged to visit a place. According to the SKB, it is important to consider that the "groups" described within the document are anything but static or mutually exclusive. For example, when designing for children one should also consider different genders, ages and physical abilities within that user group, and so on with other aspects of equal group inclusion. To this end, the document suggests always designing in a way that feels safe and accessible to women - since women tend to feel less included in public space and can belong to any and all other groups of particular vulnerability, this can be a good measure to keep in mind. Regarding mobility, the SKB suggests minimizing car dependency to travel anywhere, as this limits the availability for those without cars. Instead, the most inclusive modes of transportation such as walking or travelling by bike should be given spatial priority. The document also states that not every place needs to be for everyone - but rather that by using variation and providing at least some spaces for someone's perspective, the greater area will be of equal use regardless of who visits.

The importance of equal possibility of use is widely discussed within the field of architecture and urban design. For example, Carr et al. (1992) point out that providing spaces for equal use can create several social synergies. In addition to being beneficial from a democratic and equality perspective, providing spaces that invite a wider range of users means more people *co-existing, which provides livelier atmospheres and thus strengthens a sense of safety* (Gehl 2010), as well as increasing the chance for positive *meaningful interactions* which can contribute to strengthening *social cohesion* (Allport, 1954). As Zamanifard et al. (2019) point out, there are five main perspectives that are particularly important to consider, as prioritizing for these needs ensures equal possibility of use for the larger population. The perspectives suggested to pay extra close attention to are those of: *Children, Elderly citizens, People with disability, Women and non-male persons, People from diverse cultural backgrounds*. These are the

same criteria presented by the Swedish Equality Agency when describing grounds for discrimination (Jämställdhetsmyndigheten 2022). Against this background, it seems that Zamanifard et al.'s criteria for inclusive perspectives will be functional to follow as a measure to avoid discriminatory design.

On designs that might positively impact the possibility of use and experience of urban space for children, Krishnamurthy (2019) discusses a few key findings. Similarly to Zamanifard et al. 2019, the author differentiates between the spatial typologies of streetscapes, parks and squares/open spaces. Regarding streetscapes, Krishnamurthy recommends adding more safe play opportunities to these spaces in general. Whilst being mindful of traffic safety is key, adding playful street furniture, sidewalk games of playfully designed street crossings can not only enhance the experience for children, but also keep adults alert to the fact that children are moving around in the area. The author also suggests identifying common child routes (for example, common school ways etc), and designing along these paths as a sort of f playful journey or storytelling, with the same implications. Regarding parks and squares, the author recommends climbable objects that might provide both social and pedagogical qualities to children. In parks, this may be a natural element like a tree trunk or similar, and in a square the author suggests combining artwork with these playful functions. Flexible use is another recommendation by the author- by designing spaces that can accommodate varied groups and needs, children of different backgrounds and ages can co-exist and get to know each other through play and curiosity. Spacescape (2022) conducted a study to ascertain childrens' need in Malmö's trafficked urban areas. The findings indicate that visibility from different heights and orientability is key for children to feel safe, as well as clear, physical separations between pedestrian space, bicycle space and motorized vehicles. In general, limiting the space and speed of cars is also highly recommended.

Some things that the children from the study all agreed on from the ages 0-19 were that pedestrian streets feel most safe, sharing space with bicycles feels highly unsafe, as well as streets without crossings or high speed limits. Wide sidewalks and crossings were also most favorable among the participants in the study.

The matter of designing for children is also discussed at length in a recent study by Jansson & Herbert (2023), who mention "child impact assessment" (as a complement to social impact assessments), meant to promote child-friendly environments. Jansson & Herbert mention the following aspects as keys when designing for the needs of children: Varied built and natural places that are accessible and usable by children, well-connected infrastructure for pedestrians and bicycles that make it possible for children to travel independently and a reduction of garbage, particle and noise pollution. Furthermore, heavily regulated traffic and easement of children's possibility to assess risk themselves through good visibility is discussed as well as a sense of freedom and possibility to use places independently and a possibility for children to participate in the development of their own environment. Pedagogical places that encourages new skills, places that create unique memories and a sense of belonging and equal access to different types of places, and activities for all children regardless of social or geographical situations are also described as important factors to consider.

Yung, Conejos & Chan (2016) write about design principles for creating elderly-friendly urban environments. According to the authors, *comfortable, clean and well-lit places without noise or pollution and with plenty or seating for resting and talking* have been described as important factors for this group. Furthermore, a *layered sequence from private to public zones, through the design of unique and more 'local' spaces* in between has also been a documented preference for older citizens. A sense of safety through good *visual access and other measures mentioned within this chapter* (see p. 20-22 of this thesis) are also described as important, as well as access to *recreation through walking and physical exercise, and culture or learning* through for example exhibitions. Lastly, *good pedestrian infrastructure and public transport access, and a generally accessible* urban environment (see p. 24-26 of this thesis) is an important factor when designing for the elderly, according to the authors.

On the topic of creating urban designs for people with disabilities and varied function, Edirisinghe (2019) describes the concept "Universal design". According to the author;

"Universal design [...] refers to facility designs that accommodate the widest range of potential users, including people with mobility and visual disabilities and other special needs"

-Edirisinghe, 2019, p. 4

Within the publication, Edirisinghe goes on to describe how universal design can be thought of through an urban planning and architectural perspective. As previously described, the author summarizes the main design principles for including diverse needs and abilities in the use of urban spaces as follows: *Continuous, wide and well-connected pedestrian systems that connect large and small streets with public transport options.* Furthermore, the ground should be *gently sloped but even to avoid puddles or icy patches, free from obstacles, even with clear and non-slippery material regardless of weather. Seating should be provided, but at the edge of walking paths, and signage and other information cues should be used in a variety of ways* to strengthen different people's ability to orient themselves.

Regarding urban design that promotes equality between genders, it is something that has been discussed for several decades. Franck & Paxson (1989) describe several aspects that still seem relevant today. For example, the presence of *monuments and art representing women's perspective and achievements and avoiding the objectification of the female gender in public design choices* is recommended. Furthermore, *accessible public bathrooms* can greatly improve the comfort for those with a female physique. Although society changes constantly, designing for parents that take care of small children can be considered an

important factor for equal use, regardless of the parents' gender. To this end, the authors describe that space should be designed along a *private- to public gradient. In this way, the sharp boundary between domestic and public life can be blurred*, allowing for easier access for child-care parents to access public space. In that same vein, the authors recommend *flexible design of amenities that can function as both recreational or playable objects and necessary elements* at the same time, perhaps combining resting places with playable qualities or information cues with an artful experience- thus providing experiences for children and child-caring adults simultaneously. As Hashim et al. (2016) and Listerborn (2000; 2002) point out, *a sense of safety* is particularly important for women in urban spaces and can be achieved through *openness, clear visibility and views of other people and a multitude of paths to choose from*. In her dissertation, Listerborn (2002) also emphasizes research that indicates a difference in transportation between genders- where *pedestrian and bicycle-friendly means of transport is generally favored by women more than motorized vehicles*, wherefore improving the conditions for these modes of transport can be a positive step in ensuring a more equal possibility of using urban spaces.

Regarding the inclusion of people from different cultures and backgrounds in urban space, Joseph & Khare (2020) offer some insight. Similarly to Zamanifard et al. (2019), the authors emphasize the importance of *unique design elements that might promote shared local identities within neighborhoods of mixed background*. Concepts that translates across a multitude of perspectives and references through for example abstract aesthetics or common denominators like natural elements could be useful to consider. In order to promote spatial inclusion for different groups, cross-sections of different socio-spatial movement patterns could be analyzed before deciding on the exact localities of gathering spots, plazas and identity-building nodes. Furthermore, the authors suggest looking at streetscapes as having the potential of 'social seams', with the potential to connect different neighborhoods rather than severing them. Pleasant streets that invite staying, with safe crossing points, low traffic speed and prioritized space for pedestrians are key aspects to achieving this goal, according to the authors. Furthermore, the authors recommend decreasing "dead space" such as parking lots or general unprogrammed, unnatural or hardened areas without social function, as this might lead to confusion and insecurity, which may limit the chances for people of diverse background to reach out and share the public space together.

The inclusion of different perspectives is also a vital point being made by Zamanifard et al. (2019) amongst others when it comes to ensuring equal use of urban space. Although the needs of the groups discussed within this chapter is a good baseline to be aware of, the authors state that without proper participatory measures, inclusive and qualitative urban spaces can never truly be achieved, as there are localized and detailed layers to each individual place, which must be considered as a complement to the universal design guidelines. In other words, the authors want to emphasize the importance of user perspective and contribute to a paradigm shift within the praxis where the skill of translating these perspectives into urban space design becomes as important as expert observations. This point will be discussed in more detail in chapter four.

Zamanifard et al. (2019), Krishnamurthy (2019), Spacescape (2022), Yung et al. (2016), Edirisinghe (2019), Franck & Paxson (1989), Hashim et al. (2016), Listerborn (2000; 2002) and Joseph & Khare (2020) point to the following conclusions regarding equal possibility of use in urban spaces:

-Prioritizing the needs of children, elderly, persons with disabilities, non-male genders and of diverse cultural backgrounds

-Generally inclusive aspects include: Clear visibility, flexible functions and prioritizing the most inclusive modes of transportation (pedestrian and bicycle space)

-For children: Safe playable street furniture or sidewalk games, designing entire paths along a playful theme, climbable objects in parks or squares, flexible use for co-playing with different ages, visibility from all heights and clear territorial markers between pedestrians, bikes and cars, well-connected infrastructure for pedestrians and bicycles with wide sidewalks and crossings, unique elements and pedagogical places that encourage new skills.

-For elderly: Comfortable, clean and well-lit places without noise or pollution, accessible seating for resting and talking, small, unique meeting spots, possibility for physical activity and cultural activity or learning through for example exhibitions.

-For people with disabilities: Continuous, wide and well-connected pedestrian systems with public transport options, gently sloped but even ground free from obstacles, and paved with non-slippery material regardless of weather, seating at the edge of walking paths, and varied information cues.

-For women: Monuments and art that contribute to the representation of womens' achievement in society, accessible public bathrooms, flexible design that might be used by children and adults simultaneously, clear views and multitude of paths and prioritizing pedestrian and bicycle space

-For people of different cultural backgrounds: Unique elements of widely translatable concepts, strategic placement of meeting places along cross-sections of different movement patterns, clearly communicated functions, streets with low traffic, safe crossings and prioritized space for pedestrians

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Configuration of approach

- process, guidance and flexibility

In addition to the spatially focused and research-based social aspects nuanced through the literature review, interviews with the civil servants at Malmö stad also revealed other areas for development of the current model. In this chapter, the remaining potentials for development will be adressed. One such potential was providing guidance for both measurable and qualitative social aspects. This will be discussed under the rubric "Measurable, interpretive and participatory knowledge". The interviews also revealed the need for a future model to be more usable throughout the planning process and flexible enough to provide learning loops, whilst maintaining a firm focus on spatial qualities rather than policies (as these processes go through separate assessments and procedures). These points will be discussed in the final section of the chapter under the rubric "Flexible processes, learning loops and the spatial consideration". Summarizing the points from this paper's second part will result in a visualized approach meant to adress the needs for development. The approach will be tested in part three of the paper and consequently discussed in its fourth and final part.

Measurable, interpretive and participatory knowledge

As mentioned, the last chapter of the SKB revolves around socially sustainable urban development methods (rather than socially sustainable spaces) - more specifically, public participation. Although A and B asked for a clearer distinction and focus on spatial qualities within a future tool, this doesn't mean that the methods by which projects are developed should be overlooked from a social perspective. On the contrary, involving citizens in the planning process is mentioned by several sources to be of vital importance for a socially sustainable end result. Carr et al. (1992) describe public participation in the development of urban space as vital to achieve a diverse palette of perspectives and needs represented in the final built results. This in turn is an important measure to achieve truly public space that can be enjoyed by as many people as possible. Shankar & Larson (2015) build on this by connecting the dots between participatory methods and equal possibility of use when it comes to public spaces. By focusing on certain groups which may have larger obstacles to overcome than the general public, important aspects of the design which affords these groups the possibility to use the space can be identified. Furthermore, by involving local groups in urban development, social bonds can be created between participants, strengthening local communities around the project. Zamanifard et al. (2019) adds to this by describing the importance of continuous involvement of the public, rather than the "checklist" or "one-time" approach that might mislead urban developers into thinking the designs have been properly manifested in the public opinion. Zamanifard et al. describe how public participation and involvement could be used almost as a form of "social maintenance" to determine the continued quality of public space for its users.

On the topic of methodologies, Swaffield & Deming (2011) give a comprehensive description of how different methods might interact throughout the planning, designing and evaluating process of urban development. In line with the discourse found through interviews with A and B, the authors differentiate between interpretive and quantifying methods. In Swaffield & Deming's distinction, participatory methods as mentioned by Zamanifard et al. (2019), Shankar & Larson (2015) and others, are a part of the "interpretive" category, and could be described as a subjective approach, making use of different perspectives to better understand the more intangible aspects of experiencing a certain design. However, interpretive methods could also be used without public participation. The interpretative methods are described by the authors as a way to measure aspects that might be too experiential to quantify. Interpretive analysis methods could include site visits, observation studies, sketches, intuitive documentation and a representation of the sensations perceived on site. On the other hand, aspects which are better suited for quantitative analysis can be complemented with more objective measures. To add to Swaffield & Demings categorization, examples of aspects that could be more easily quantified than interpreted include distance between nodes, volumes of greenery or space for pedestrians, number of benches or lamp posts, variety of vegetation or color etc.

The distinction presented by Swaffield and Deming relates strongly to the identified development potentials of Malmö's current SKB. Throughout part two of this thesis, several different spatial aspects that might play an important role in ensuring more socially sustainable public space were discovered. The way these aspects are evaluated may vary depending on their nature - some aspects may easily be measured through quantifiable methods whilst others suit better to determine through a site visit or participatory engagement. In order to provide a flexible yet guiding tool as requested by the interviewees, these evaluation strategies will be woven together in a process-based approach. As philosopher Jonna Bornemark discusses, in order to gain a deep understanding of the world we live in, particularly concerning social aspects and subjective experiences, judgement is a professional skill we must start nourishing and a type of knowledge which we must start giving space in a world too focused on quantifications (Swedenborg, 2020). This perspective shines a light on the importance of social impact assessment models and how their configuration should reflect critical thinking and professional judgement from the urban developers using the tools.

Flexible processes, learning loops and the spatial consideration

When considering the needs expressed by A and B for a more flexible, spatially focused and process-oriented approach as a development of the SKB, the importance of combining measurability and interpretation seems highly relevant, as well as finding a way to practically incorporate the findings from the literature review regarding spatial aspects for socially sustainable public space. Furthermore, in order to meet the expressed needs for an approach that might be useful throughout the planning process, some connection between more strategic goals and more operative design details seems important. Considering the "timeline" described by interviewee A, where the Planning Department works with early development stages, and the Technical Department continues the projects in later and more detailed stages, flexibility throughout the process should include looking at knowledge from the comprehensive plan and the site in a larger context, all the way down to a detailed design scale. Legeby et al. (2015) describe how different types of site knowledge can be found through a combination of site visits and digital mapping, as a favorable way to understand these scalar complexities. Furthermore, the authors mention streetscapes, parks and squares as central to mapping the urban landscape. Similar distinctions of spatial typology are also found in Zamanifard et al.'s (2019) and Krishnamurthy's (2019) discourses. As several of the design principles found through the literature review relate more strongly to one or two of these spatial categories, this distinction might facilitate how to prioritize between different aspects of the social impact assessment, depending on what type of space is being evaluated. Lastly, the interviewees requested an approach that can more easily provide predictive, mitigating and evaluating analyses, and which might contribute to learning loops and gaining knowledge from already built places to inform new developments. This flexibility is also considered important to the flexibility and composition of the approach. By synthesizing these factors, a proposed configuration of the approach starts to take shape, given the name SOCKA* within this construction, to simplify the discourse. The proposed steps are visualized on p. 48-49, and lastly described in greater detail before being tested in part three of this thesis.

* Sociala konsekvenser - analysmodell (in English: Social consequences - analysis approach)

SOCKA

Sociala konsekvenser - analysmodell

	<image/>	<image/> <image/> <image/> <image/> <image/>	Nitigation measures		
Purpose	Gather a deeper understanding of the site and its different contexts	Identify social values, potentials and risks of spatial configuration (existing or proposed)	Propose measures for mitigating risks, meeting potentials and preserving values	Adap comp	
methods	 Consulting municipal goals & comprehensive plans Describing the site in its geographical context Collecting historical and cultural accounts of the site Conducting network analyses Gathering site descriptions from different user groups 	 Site visits and documentation (notes, photography etc) Assessment of the SOCKA design principles, mapped through GIS Cumulative assessments Site visits and assessments of the SOCKA design principles with different user groups 	 Design proposals Maintenance plan proposals Traffic regulation proposals Large scale planning proposals Participatory proposals 	 Co fac Co pro Co See See oth 	

Suggested



4. Adaptions

apting proposals by identifying npromises and synergies

consider other sustainability actors

consider logistics and other ractical factors

consider municipal plans

eek input from different urban evelopment competences

eek input from user groups and ther stakeholders

1. Site portrait



2. Socio-spatial analysis



3. Mitigation measures

Step one consists of constructing a kind of "site portrait" in order to get to know the site. Some suggested ways to familiarize oneself with the site include looking at municipal or comprehensive plans, network analyses and the site in its geographical context and historical or cultural accounts. Site descriptions from different relevant user groups might also be incorporated, adding the possibility of a more participatory activity to aid in construction of the site portrait.

Step two is more geographically localized and consists of performing socio-spatial analyses with the help of the six categories of design principles discovered through the literature review. Site visits and documentation is an important part in gaining interpretive knowledge of the site. This could also be done together with stakeholders or user groups, in order to better understand different perspectives and add a participatory approach to the analysis work. By using some type of GIS-function, the findings on site can then be mapped geographically, allowing for easier spatial analysis. Mapping both the presence, absence and potentials of different design principles allows for a dynamic analysis. In order to focus the analysis on relevant aspects, spatial priority for each design principle is provided to guide the assessor in sorting relevant aspects depending on whether the site most fits the description of streetscape, park or square (as distinguished by Zamanifard et al. (2019) amongst others). These techniques are combined in guiding "socio-spatial analysis sheets", to provide the assessor with a variety of options for the assessments.

Step three of the SOCKA is meant to invoke mitigating measures based on the previous steps. Following a cumulative summary of the analyses performed in step two, this step is meant to adress the found potentials and issues through some kind of mitigating plan, either a design proposal, maintenance plan, traffic regulation plan, or some other type of mitigation, depending on the site and its situation. This step could also benefit from participatory methods, as different stakeholders might interpret the results of the analyses differently and produce interesting mitigation measures to involve in the process.



In summation, one might consider the approach to provide guidance for professional assessments of social impacts through a combination of interpretive and quantifying methods. The flexible framework makes the tool usable across different muncipal bodies throughout the planning process, including assessments of existing spaces which might promote learning loops and insights for future projects. The suggested methods can be adapted to fit different scopes and priorities, and the design principles discovered through the literature review function as guiding spatial criteria.

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Lastly, step four consists of adaptations and compromises depending on different factors such as logistics, other sustainability aspects, stakeholders or found synergies. Naturally, this last and final step can also benefit from the involvement and participation of the public, as input from user groups is a vital way to find synergies or compromises that ensure a positive outcome.

In part three, this workflow integration is presented as a proposal of how the SOCKA might be used, integrating comprehensive planning goals, site visits, digital maps and design principles for social sustainability. By testing the SOCKA, one way of many in which the approach can be used is tested. In this case, an existing streetscape is evaluated and mitigating measures are proposed thereafter.

PART THREE

Testing the SOCKA

The chosen site for testing the SOCKA is a stretch of the main street "Amiralsgatan" in Malmö. The section of the street lies between what is considered by many as the "end of the city centre" (Nobelvägen and Nobeltorget) and the area Rosengård. Despite its geographical centrality, Rosengård is often thought of as a segregated and excluded part of Malmö - for example, Dikec (2019) writes: "The Rosengård neighborhood of Malmö is perhaps the most emblematic of Swedish 'badlands' in terms of concentration of poverty and deterioration". On the other end of the site, Nobelvägen and Nobeltorget mark what is colloquially called "C-ring" or "Centrumringen" (Central city ring line), inside of which the city center is informally considered to be located. The relationship between the city center cusp and Rosengård is very interesting, as the mental distance here can often be perceived as almost insurmountable, while in reality it is less than a kilometer. Hence, performing a focused and thorough analysis of the stretch connecting the two areas, and proposing mitigating measures that might shorten the mental distance is deemed a meaningful task for the purpose of testing the SOCKA. To frame the chosen geography in a somewhat philosophical perspective, the concept "terrain vague", discussed by Solà Morales (2013) can be noted. According to the author, the term relates to the kind of places which may seem to us vacant or mundane at first glance, but that provide the scene for "uncontaminated magic" of people's everyday life and habits. When it comes to these terrain vagues, the author describes the role of the architect as inherently problematic and historically aggressive. According to Solà Morales, the people living within a city are not mainly pre-occupied with its aesthetic or optical values, but rather the tangible system of functions and experiences it provides. To avoid violent transformations through extraneous interference (which according to the author seems to be most architects' only instrument when facing terrain vague), the author stresses the importance of compassionate urban development and thoughtful architecture, which cherishes the everyday mundanaties of terrain vagues, rather than destroying them with forcible reconfigurations. These sentiments relate to the SOCKA, in considering design not as something inherently grand which can enter and "solve" any site - but rather as mitigating measures meant to carefully and empathically improve the social values of a space.

As a transitional landscape between the city centre and ostrasized neighbouthood, the chosen site is vague by its nature. Although the street is perceived as this ambiguous space between such disparate places in, it is meant to provide several central functions to the citizens of Malmö, according to the comprehensive plan. These aspects will be discovered further in step 1 in order to conduct the site portrait, together with putting the site in its geographical context. Following this step, the socio-spatial analyses will take a closer look at how the different physical elements interplay along the streetscape and how they relate to the design criteria found through the literature review in part two. As a third step, the analyses will be interpreted to produce some mitigating design proposals that might closer align the design of the streetscape with principles found to enhance social values of public spaces, with a focus on the site's particular qualities. Lastly, a reflection on possible adaptions will circle back to the site portrait and the comprehensive goals for the area, in relation to mitigating suggestions.



The site in Malmö's comprehensive plan

As can be seen on the opposite side, the site holds the unique potential of being a prioritized function within almost every comprehensive plan category. Identified as a "main street", with prioritized bus connection and a planned priority for the comprehensive bicycle network it is clearly a streetscape meant to invite all modes of transport. In addition, the site is included in what the comprehensive plan describes as "prioritized areas for walking"- this makes the already packed ambitions for the streetscape even more interesting. In conclusion, it can be said that the comprehensive plan describes the goals of this part of Amiralsgatan to be as follows: It should be a main street, with ample bus connections, proper infrastructure for bicycle transport and with a priority for pedestrians.



Malmö comprehensive plan - Main streets & Public transport structure (Malmö stad, 2023a)



Malmö comprehensive plan - Prioritized pedestrian zones & Main bike paths (Malmö stad, 2023a)

The site in its geographical context

From part two of this thesis, many recommendations were found that indicate how urban design of streetscapes, parks and plazas can offer higher social values through design. Amongst the findings in literature, a few aspects were more contextual than design oriented. By considering these aspects and the site within its context before analyzing the more detailed design on site, a deeper understanding of its situation can be achieved. Those aspects which are better analyzed from this contextual scale than the more detail-oriented analysis of step 2 will be marked with a star (*) in the socio-spatial analysis sheets on p. 58-63.

By considering aspects mentioned in the SKB where distance can be a relevant measure, contextual site visits were performed and consequently measured through digital maps. For municipal planners and urban developers, internal GIS tools are available to facilitate collection of such data. Places for physical activity, green recreation and public toilets available within 500 m from the site were mapped. As can be seen on the image to the right, these amenities are fairly available, which contributes to positive social values for the site. The second map on the opposite side shows a performed network analysis produced by Spacescape (2024), using normalized angular choice (3 km) to measure betweenness centrality. As seen in the visualization, the chosen site is classified as having fairly high betweenness centrality within the system (7/9 or 8/9 along the stretch). This seems to fit well with the many traffical functions outlined in the comprehensive plan, wherein the street segment is also classified as a main street.

Combining these observations shows that the site is well connected to its surroundings from a spatial syntax perspective, and not isolated from amenities and nodes mentioned in the SKB for example for physical activity, play, green recreation or public toilets. In other words, the site seems well connected in its geographical context.



Step 2 - Socio-spatial analysis

On the following pages, a socio-spatial analysis will be performed in more detail and using the principles found through literature to evaluate the chosen site. Firstly, a general presentation of the site from the perspective of human perception is presented through photographs and commentary. Following this, each of the six identified categories of design principles for social values of urban design will be evaluated. On p. 58-63, an effort has been made to clearly communicate the socio-spatial analyses through geographical mapping, guiding lists of the found design principles, photographs, cumulative assessments and reflections in the form of "socio-spatial analysis sheets". As can be seen on the pages, Both the presence, absence, and potential of the design principles have been mapped. It can be noted on p. 58-63 that some design principles recur in different assessment categories. These are marked with the corresponding color, to be easily identified. As predicted, not all design principles were applicable on the site. Being a streetscape, a spatial priority of the design principles aided in choosing which principles to look for (according to Zamanifard et al.'s (2019), Krishnamurthy (2019) and others' distinction), with some adjustments to the selection based on the site's unique configuration. It was found whilst conducting the analysis that not all principles are best represented the same way. Some are easy to draw in the map, others to photograph, and some to reflect on in the cumulative assessment. **These different** representation techniques are used together to meet the diverse characteristics inherent to the different types obsevations, and form a holistic representation in the socio-spatial analysis sheets.



Mapped aspects from the SKB which could be measured through distance



Spacescape (2024). "Så mäter vi stad". Betweenness centrality measured by normalized angular choice (3 km)

On this spread, some photographs are presented from the site, to create a foundational description of its physical configuration. As can be seen, there is a continuous, wide almost highway-like space for cars and busses along the street, with a barren patch of gravel running along the center. Up to six files for motorized traffic is found along the site, but no place for resting or spending time leisurely - the only seating is at the bus stop.

No real vegetation design can be found, although the large canopies of old chestnut trees from adjacent private yards provide some shelter. Towards the city center, a narrow space for bikes suddenly appears among the space for cars - however, this vanishes after just a few meters as one continues to travel east along the stretch.

When travelling up and down the stretch, the lack of engaging design, complexity of scale, use of color or artful installation is glaring. By its configuration, a bend in the street makes it disappear from view quickly when coming from the central city.

There is no sense of safety from the racing cars, and although the amount of cars isn't perceived as alarmingly high, the huge volume provided for them seems to make drivers speed up way past the speed limit, and almost every car is observed to ignore pedestrians at crossings - who have to wait until the coast is clear. For pedestrians, this is not the only physical risk. With no shelter towards traffic, the uneven and highly slippery tiled pavement provides another worrisome element.

Across from the visual barrier created by the bend in the street, the street seems even more dead. The lack of vegetation, space for bicycles and any kind of design complexity continues until the end of the chosen site, where the bus stop provides some change in the monotonous urban landscape. As is evident from this summary, the social qualities of the site is of great relevance to assess.

SENSE OF SAFETY

Cumulative assessment:

When considering how the site relates to perceived safety, the general lack of traffic security and peripheral seating that provides good overview is an important factor that impacts the entire site. However, some non-obstructing greenery can be seen along the edges, although the site is in most part completely stripped of any green elements. Due to the vast openness of the streetscape, some open sightlines are made possible in part due to adequate lighting.

Possible mitigations:

Clear territorial markers and adequate seating would be positive changes. The bend obstructs the sightline when looking towards the central city, which greatly adds to the sense of separation from the surrounding city. By adding volume at the bend, this broken sightline would be less obvious, and could instead be turned into an interesting attractor for movement

Identified 🔀 Not identified ! Development potential

	ENSE O	F SAFETY
Spatial	priority	Assessment guides
1	2	√X
		Interesting, comfortable places that attract people
0		Clear and predictable territorial markers along paths
		Distinctly programmed spaces that signal clear uses
		Peripheral seating with good overview
		Private zones within public space
		Vegetation that doesn't obstruct views or movement
		Alternative routes to and from space
		Invites visitors to spend time leisurely
		Easily understandable path systems
		Adequate lighting and sight-lines
		Other (add comment)
Streets	capes	Parks 😰 Squares & open spaces

ACCESSIBILITY & CONNECTIONS

Cumulative assessment:

Based on the available data and site visits, the accessibility and connections of the site are deemed to be generally low. The homogenous traits along the path such as low spatial priority for pedestrians and bikes and no visual attractors adds to the intensity of the negative effects of these aspects, as well as slippery material and unclear territorial markers. However, connecting paths and a public transport node are some positive traits which should not be compromised.

🗹 Identified 🔀 Not identified ! Development potential

ACCESSIBILITY & CONNECTIONS

Spatial	priority	Assessment guides	
1	2	✓×	
0		Minimized physical obstacles and barrie	rs
		Clear and predictable territorial markers	along
•	۲	Minimized space and speed for cars and	moto
		High betweenness centrality and space i	ntegra
•		Connected, orientable and clearly lit peo	lestria
		Non-slippery gently sloped and even gro	ound
		Visible connections to neighboring areas	5
		Alternative routes to and from space	
•		Public transport along central paths	
		Visual attractors that encourage movem	ent
		Other (add comment)	
Streets	capes	Parks Squares & open spaces	* Asse

Possible mitigations:

Reconfiguring the spatial priority between different modes of transportation seems like a neccesity to mitigate the current situation. The central bus platform and space for public transport should be maintained. Adding predictable markers, visual attractors and new ground material would also mitigate current effects of the design.

HEALTH & WELLBEING

Cumulative assessment:

Although there is some fringe vegetation, this is inaccessible to the general visitor, with no resting places and placed away from the public space of the barren streetscape. With much volume programmed for cars, no clear separation for bicycles and no shelter or diverse functionality along the streetscapes, there are several factors that come together to make the experience of a hostile streetscape. The lack of scale complexity does however contribute to wide pedestrain paths which leads to a rather orientable pedestrian experience, and some shelter can be found under canopy and at the bus stop in the form of roofs at the platforms.

Possible mitigations:

By considering the streetscape as a coherent totality rather than separate transportation paths, many of the negatively impacting aspects of the current design might be improved, as the effects of each aspect cumulates to a general experience of hostility. Minimizing car space, programming bicycle space more clearly and adding more complex green elements may be a few contributing factors of such a process.

Cumulative assessment:

No benches or other types of seating are found along the stretch, furthermore there are no decorative or natural elements. As a streetscape, these aspects would be most relevant to encourage social life and meetings, but as it stands there is very little chance for this type of activity. The exception can be seen at the bus stop, which provides shelter and seating in connection to the platform.

Identified 🔀 Not identified ! Development potential

$\Omega \Omega$ Social Life & Meetings

Spatial priority		Assessment guides
1	2	✓X
		Common places for gardening, play, sports, food
		Flexible use for co-presence between different g
		Gradient of activities throughout a place
		Peripheral seating with good overview
		Places that encourage exploration
		Public art or beautiful views
		Unexpected or unique elements
		Visual attractors that encourage movement
		Private zones within public space
		Other (add comment)
Streets	capes	Parks Image: Squares & open spaces

Identified 🗙 Not identified ! Development potential

HEALTH & WELLBEING

Spatial	priority	Assessr	nent guides
1	2	✓X	
•			Minimized space and speed for cars and motor traffic
•			Connected, orientable and clearly lit pedestrian system
•			Wide and even pedestrian paths without obstructions
•			Clear divisions between bikes, cars and pedestrians
			Less than 500 m to area for physical activity *
			Less than 1000 m to green recreation area $$ *
			Shelter to reduce weather, climate and noise impact
	0		Playable designs that allow for development through use
			Visual attractors that encourage movement
			Visible and accessible vegetation (preserved if possible)
			Other (add comment)
Streets	capes	Parks	Squares & open spaces * Assessed in step 1

60

Possible mitigations:

The complete lack of seating should be mitigated by a holistic seating plan, ensuring good overview and variation. Furthermore, combining this entirely new function of Amiralsgatan with something nice to look at such as public art visible from the resting spaces would greatly add to the positive effects. In the same way, new greenery or art could be added in sightlines from surrounding areas to attract movement.

Cumulative assessment:

The vast emptiness of the streetscape allows for visibility from all heights and fairly easy maintenance. However, this same emptiness makes the streetscape unappealing to visit and walk through, unattractive for most with nothing to really look at or experience, and lacking in scale complexity. The only contrast is the bus stop, which provides shelter, seating and a clear function.

Possible mitigations:

By adding vegetation of different types, both shelter, scale complexity and general attractiveness of the street could be improved. Furthermore, finding approprate points along the stretch to "break up" the homogenity of the street design could add to a more attractive experience. Lowering the speed and number of cars would also promote the general experience of walking along the site.

Image: Construction of the place of the

🗹 Identified 🔀 Not identified ! Development potential

© EXPERIENTIAL QUALITIES

Spatial	priority	Assessment guides
1	2	√X
		Comfortable places for sitting, standing och walking
		Variety and complexity of scale and functions
		Distinctly programmed spaces that signal clear uses
	00	Connected greenery with several different user functions
	0	A mix of practical, social and recreational functions
		Overall appearance attracts a diversity of perspectives
		Shelter to reduce weather, climate and noise impact
0		Places that attract walking for the experience
0		Visibility from all heights
		Designs that allow easy and frequent maintenance
		Other (add comment)

EQUALITY OF USE

Cumulative assessment:

As stated, the vastness and lack of complexity in the current design provides good visibility and clarity for pedestrians, as there really is nothing more than tiled pavement along the stretch. However, the lack of clear divisions between different modes of transportation and priority of space for pedestrians and bikes are some negative effects of the current vast streetscape. Also lacking are varied forms of information cues, non-slippery ground material, seating and smaller meeting spots at the intersections of paths.

🗹 Identified 🔀 Not identified ! Development potential

● EQUALITY OF USE

Spatial	priority	Assessn	nent guides
1	2	ХV	
		$\mathbf{\nabla} \Box$	Visibility from all heights
	۲		Clear divisions between bikes, cars and pedes
			Minimized space and speed for cars and moto
	٢	\mathbf{V}	Connected, orientable and clearly lit pedestria
	0		Flexible use for co-presence between differen
D			Smaller meeting spots at intersections of path
			Paths free from obstacles with accessible seat
			Varied forms of information cues (sight, sound
			Non-slippery gently sloped and even ground
			Accessible public transport and bathrooms $*$
			Other (add comment)
Streets	capes	Parks	Squares & open spaces * Asse

🌓 Streetscapes 🚺 Parks 🔮

Squares & open spaces

Possible mitigations:

Without loosing the positive aspects such as good visibility and orientability for pedestrians, a re-organization of space with clear demarkations along different paths would be a positive change. By adding a strip of varied seating and greenery, such a barrier could be achieved whilst also providing a more pleasant experience althogether. Some path intersections could also be fitted with grouped seating to provide easier access to rest and meetings.

essed in step 1

Step 3 - Mitigating measures

Generally, the socio-spatial analyses point to the chosen stretch of Amiralsgatan providing very few socially beneficial aspects throught its current design. Many of the considered design principles, such as clear divisions between different modes of traffic, priority for walking and biking over cars and a varied and interesting design with regard to scale and function cannot be found anywhere within the site. The empty vastness of the streetscape lacks variation and scale complexity, something which could be amended by changing the general mobility structure, and reprioritizing the space between different modes of traffic, whilst also focusing on how these parallell paths can be divided, and adding more experiential qualities. By overlaying the particularly interesting potentials and existing values from the analysis, some key places and potentials to work with can be identified. These places are described on the right side of this spread. Below can be seen a summarized list of the main insights from the socio-spatial analysis. This more general analysis together with the identified places with clustered potentials will be the basis for the mitigating design proposal.*

- Add clear territorial markers between different modes of transportation
- Add volume and attractive elements at the bend of the streetscape
- Minimize space and speed of cars
- Maintain bus plattform and space for public transport
- Add predictable markers along paths
- Create visual attractors such as vegetation and art
- Introduce non-slippery, even ground material
- Program bicycle space clearly
- Create holistic seating plan, ensuring good overview and variation.
- · Add vegetation of different types to increase shelter, scale complexity and general attractiveness
- "Break up" the homogenity by creating smaller zones for stopping within the site
- Maintain good visibility and orientability for pedestrians
- Connect path intersections and add seating where appropriate

*As the network analysis and contextual mapping of the site portrait in step one revealed, the issues with the chosen site do not seem to lie with its relation to adjacent areas or surrounding urban system. Therefore, the mitigating measures presented within this step will focus mainly on a smaller, design-oriented scale rather than a larger, planning-oriented one.

At its connection towards the inner city, there is a large swath of open space which holds much potential to be furnished in a way that promotes more meetings, movement and shelter.

This area is situated at the end of the main sightline, wherefore some attractive element either natural or more decorative could be used to draw attention and curiosity, simultaneously hiding the existing drab curve that blocks view of the street from the central city. Furthermore, this area connects two small walking paths by a crossing- although the paths today are slightly disconnected by the configuration of the crossing. This could be mitigated by widening the pedestrian area across the street, preferably in conjuncture with the added decorative elements. On either side, the entryway to the smaller walking path could allow for social seating groups and shelter from the large chestnut trees which should be preserved to promote health-, social- and experiential values.

Existing shelter at bus station, including accessible seating. Potential of adjacent green spot and intersecting paths as well as focal point for main sightline suggests that this area could be expanded by adding attractive elements that promote movement in connection to the existing bus node.

Mitigating measures - Illustration plan

Double-sided bicycle lane with clear separation in the form of vegetation or height difference allows for easy travel with bicycle along the stretch, connecting it to the larger system.

Green physical divider provides ample

division between pedestrian space and faster vehicles. Height differences and ground material are also used to clearly mark space for different modes of transportation.

Space for resting and

decorations adds a green infrastructure with complex vegetation and smaller pockets for seating along the stretch.

modes of transport contributes to higher priority for pedestrians and bicycles, as well as minimized space and speeds for cars, while maintaining enough room for two parallell bus lines. The continuos physical divisions contribute to maintaining a predictable and orientable pedestrian system. Furthermore, the ground material is swapped for a more even and non-slippery option.

A: Segueing space See p. 68-69

B: Shared connections See p. 70-71

C: Multifunctional mobility node See p. 72-73

Re-organization and prioritization of space for different

A: Segueing space

By refurnishing what could be considered the segue between the central city and Amiralsgatan, a spatial connection with the neighboring square can be achieved. Varied vegetation and seating arrangements for good overview is added, as well as amenities for bikes. By working with the same vegetation palette here as along the stretch (and perhaps in the future on the neighboring square Nobeltorget) the sense of division which is so overpowering today may be mitigated.

The 'Accolade' cherry tree is already a present accent tree in the area, which was discovered during the site visits conducted in step 1 and 2. Some examples can be seen to the left. By adding vegetation design with the accolade cherry taking center stage here, at the connection towards the central city, a visual connection is made. The accolade cherry can then be found all along the proposed design, to promote a sense of place identity from the segue to the city center.

This image shows the most adjacent part of Nobeltorget, which is located just across the street, within the city center limit. Much of the spatial themes can be picked up and further contribute to creating the sense of connection across the current barrier. For example, sculptures in a similar style or material as the one found here may be added, but smaller to promote scale complexity. The same type of flower bed and seating group can also be incorporated in the new design.

In addition to contributing to visual connection, strengthened identity, triangulation conversations, increased lighting and good overview, the design is thought to contribute with comfortable seating amongst varied vegetation. All in all, the proposal may promote several potential social values identified in step 2

B: Shared connections

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This section shows the spatial organization generally along the stretch. As can be seen, differnt modes of transportation are separated with vegetation barriers or leads, pedestrians are given ample space and seating is provided continuously along the stretch as well as smaller scale alley trees for shade.

Volume and attractive elements are added at the bend of the streetscape to promote general attraction and movement from neighboring areas. This also helps to break up the homogenity of the streetscape, and connects intersecting paths with added seating groups. Creating an elevated section of the car space and lowering the speed limit for this section would help to minimize acceleration along the entire stretch. Lastly, adding a public artwork promoting a local historical figure from the area might contribute to a sense of identity and local pride. Suggested to the right is a statue of the author Mary Anderson, who famously lived in and wrote about the area.

In this section, the spatial organization showed in the illustration to the left is shown. Whilst still keeping clear divisions in the ground material, the space for cars is elevated at the bend, and speed is limited. Furthermore, the crossing is given additional values - with seating groups at the intersecting paths and central platform, the design signals priority for pedestrians and visitors on foot. The identity-strengthening statue proposed and presented to the left further contributes to the space becoming a place to take notice of and stop, rather than hurry through.

C: Multifunctional mobility node

Rhus typhina Pulsatilla vulgaris 'rubra' Pinus mugo Crocus vernus 'Queen of the Blues' Prunus accolade Hedera helix

The analysis clearly indicated that the bus node provides several positive values and potentials. By elongating the platforms, adequate space is still in place for the bus stops, and easier access to and from connecting paths can be made. Furthermore, the added space can hold some opportunities for seating and vegetation. By picking up the accent tree (Prunus accolade) in abundance at the platform design, a continuity is signaled, and a recognizable theme can assist in creating a holistic travel experience from Rosengård towards the inner city.

Spot-posts for lighting, accolade cherry, abundant seating and several crossing options add both function, connectivity and a positive visual experience to the bus node. Furthermore, letting the bike path continue uninterrupted by bus files (but interrupted by pedestrian crossings), the configuration contributes to smooth travel for inclusive transportation modes.

Exxample of platform planting which might fit the socio-spatial design principles by providing clear views, attractive qualities all year, and low understory. The vegetation composition was chosen to handle the dry harsh climate of the streetscape.

Achillea filiperna parkers variety Papaver orientalis Nepeta nervosa Aster sericeus Zinnia grandiflora

Step 4 - Adaptions

Step four of the approach is meant to consist of adaptions based on how goals and interests outside the scope of the SOCKA conflict or synergize with its resulting mitigating measures. Within this project, the scope unfortunately makes any kind of participatory activity or involvement of stakeholders for adequate knowledge on conflicting interests or sustainability goals too time consuming. Therefore, this part of the test will relate back to the comprehensive plan and consider how the proposed measures relate to the many functions described for the site.

According to the comprehensive plan, the site is supposed to provide several functions - it should be a main street, with ample bus connections, proper infrastructure for bicycle transport and with a priority for pedestrians (Malmö stad, 2023). However, following the performed socio-spatial analyses, it is clear that several features fall short of providing social values or living up to the functions as described in the comprehensive plan. Described as part of the "prioritized areas for walking", the current design provides little to no motivation to move through or along the stretch by foot. The heavy traffic and uninteresting design with no seating or views makes walking challenging, made worse by the clear visual separation from the inner city that the curved street creates. Furthermore, the current design creates a streetscape that is almost impossible to bike along, with no designated space for bicycles, fast and heavy crossing traffic and low orientability. The comprehensive plan also points out the stretch as an important bus street, wherefore the bus node and space for busses is important to maintain. Lastly, the street is planned as a "main street", something which today can only be seen in the width and ample space for motor traffic, however no experiential qualities of a main street can really be found along the site, as can be seen in the socio-spatial analysis sheets (p. 58-63).

By providing amenities, space, visual attractors and shelter for pedestrians, the street can more clearly fit the description of a prioritized area for walking. Wide and attractive paths for bicycles with clear physical separation from other modes of transport also aligns well with the comprehensive plan. Maintaining the bus stop and clear, separated bus files whilst re-organizing the hierarchy of transportation modes along the stretch helps to not take away from the street as an important path for connecting bus lines. Lastly, considering the planned status of "main street", the added attractive elements such as new and varied greenery, public art, seating, thematic tree plan and welcoming connecting places at either end both towards the city center and Rosengård, are changes that can hopefully create a better sense of a "main street" while also providing social values. The designs presented in step 3 where meant to provide more social values along the site and it appears that in doing so, the site would be more aligned to its description in the comprehensive plan. In conclusion, the changes made to complement the current situation according to the sociospatial analyses fit well with how the street is meant to develop according to the comprehensive plan.

Following this consideration, no adaptions are suggested to the mitigating measures that would align them more clearly to the comprehensive plan. As stated, the scope of this project unfortunately makes further investigation into conflicts and synergies and consequential adaptions to the proposal impossible. Furthermore, the mitigating suggestions were produced with a holistic mindset, and with other sustainability factors, logistics and interests in mind. Examples of this include resilient plant choices, negotiated space for different mobility options and designs that can be realized through realistic municipal budgets. Without further empircal data, outside knowledge or participatory practice (which the scope of this project will not allow), no further adaptions can therefore be suggested. However, performing step four of the SOCKA in great detail as part of the approach will be interesting to follow in future studies.

Malmö comprehensive plan -Main streets (Malmö stad, 2023a)

Malmö comprehensive plan -Public transport structure (Malmö stad, 2023a)

according to the socio-spatial analyses fit well with how the

Malmö comprehensive plan -Prioritized pedestrian zones and Main bike paths (Malmö stad, 2023a)

"the changes made to complement the current situation street is meant to develop according to the comprehensive plan"

PART FOUR

Discussion

Method discussion: Developing the SOCKA

Interviews for knowledge about development objectives

This paper aimed to propose an approach for assessing social impacts of built urban spaces. Using Malmö municipality's current model for social impact assessments as a base, unstructured interviews were performed with two civil servants at the municipality, to gain understanding of the tool and its development potentials. The interviews revealed the following development potentials: Social aspects being evaluated should be anchored more robustly in relevant research and praxis, guidance for how to measure or interpret different aspects should be provided, and the tool should be flexible enough to be usable throughout the planning process and provide learning loops, whilst maintaining a firm focus on spatial qualities rather than policies.

The interviews worked well to produce qualitative knowledge about the tool itself, and also its different uses and development potentials. By interviewing two civil servants from different parts of the organization, insights could be uncovered from both the more strategic and operative parts of the urban development process. Given more time and resources, a more thorough interview process could have generated even more dynamic insights into the biggest development potentials of the tool. In such a case, it would have been interesting to also interview citizens who might have experienced negative outcomes of urban transformation projects, and together with project leaders or participants try to pinpoint which impacts were overlooked and why.

Document analysis and literature review for nuancing concepts and finding research-based knowledge

In order to adress the needs expressed in the interviews, a literature review was performed to identify social aspects based in relevant research and praxis, as well as to nuance these concepts. The literature review was conducted by analyzing the current document for social impact assessments (SKB) and finding recurring spatial qualities - rather than policies - to assess, in accordance with the discovered development potentials. Six different categories of such spatial qualities were found, relating to ensuring a sense of safety, accessibility and connections, health and well-being, social life and meetings, experiential qualities and equal possibility of use through urban design principles.

By firstly identifying the general themes or categories to look for in the current SKB, and then using these findings as key words to locate relevant literature, a selection process which maintained focus on the relevant urban design principles was achieved. After getting familiarized with different concepts through the literature review, the categories seemed to encapsulate social aspects of urban design in a very encompassing way. Several design principles were found to recur in more than one category, something which suggests that few issues were left out of the bigger picture. Furthermore, this overlap is to be expected, as the social, experiental and human perspectives of urban design are subjective and often quite changeable by their very nature. In general, the literature review proved effective in finding socio-spatial aspects achlored in relevant research to assess. Naturally, the outcome of the literature review would have been different if different key words would have been discovered from the document analysis or if the scope of the project had allowed a larger literature base and longer time for reviewing theoretical sources. Furthermore, it could be argued that a future reconfiguration of the SOCKA to be used specifically in Malmö municipality may perform a more limited literature review. For example, such a review might be focused only on Swedish sources or other more localizing contexts, in order to produce more niched knowledge about the issues facing the municipality. However, as this project is part of an academic study, an international approach seemed appropriate, to gain as much knowledge as possible on the identified social aspects of urban design.

Synthesizing knowledge into process-based approach and relation to development potentials

Following the literature review, much knowledge had been acquired from relevant research and praxis regarding how social values of public space can be achieved through physical configuration. However, additional development potentials for the current SKB had been identified through the interviews, namely that the tool should provide guidance for quantitative and qualitative assessments and be flexible enough to work in different ways and parts of the planning process. In order to synthesize the found knowledge into a flexible and guiding approach, knowledge from this authors background as a landscape architect and municipal urban developer were used. Methodological references were used to propose interpretative, participatory and measuring methods, and the experiences from working as an urban developer within these processes were used together with stated needs from A and B to suggest a flexible framework. The process of proposing the SOCKA was therefore both intuitive and goal-driven. Given more time and resources, several more voices would have been used to suggest adaptions to the approach, something which will certainly be needed should the SOCKA continue to be developed within municipal practice. Considering the scope and resources of the project however, this method worked well to produce a tool that adressed the needs described by A and B.

Results discussion: Using the SOCKA

As stated, the SOCKA was constructed with the intention of allowing flexibility both in terms of site specificities and phases of the planning process. On p. 79, an illustration shows in which ways this inherent flexibility was used during the test performed in part three of the thesis. The test focused on an existing streetscape, excluding participatory actions and processes, due to the scope of the project. This also meant that limited input was available for major adaptions, wherefore step four was adjusted to reflect on the proposed mitigation measures in relation to the comprehensive plan's goals for the site. The project produced conceptual design suggestions as mitigating measures, since the analyses pointed to the more detailed scale within the site as most relevant to mitigate. As can be seen in the illustration on p. 79, a selection of recommended methods were used to best fit the context and analysis of the site.

Another way in which flexibility is built into the approach is within the presented socio-spatial analysis sheets. By providing aspects to look for, but allowing for different representation methods and the opportunity to sort criteria based on site-specific qualities, the assessments could be made relevant and observations could be represented in the ways most fitting for each insight. In future uses, it would be interesting to see the SOCKA used on a proposal for new development. Without the opportunity to perform site visits, step two will have to rely mostly on digital maps and other visualizations to produce analyses. The challenges this might involve would be interesting to test, and consider how the flexibility of the tool might be reconfigured in a better way for new development.

Using SOCKA to evaluate a current streetscape and its context

Translating the theoretical findings into a practical approach required empirical testing to determine how functional the SOCKA might be when put to practical use. Starting the process with creating a "site portrait" proved very valuable, as some of the found criteria for increasing social value of urban design was easier to identify in a larger scale. Furthermore, it can be surmised that this step is needed as all places have different historical, social and biophysical contexts, requiring a first step to any site-specific analysis to be open-ended enough to allow relevant information to be identified. Relating to the comprehensive plan's localized goals for the site also provided valuable knowledge of the municipal intentions, and could be used as a sounding board throughout the process, particularly in the final reflections.

In general, the socio-spatial analyses worked well to identify values, issues and potentials of different design principles in the chosen site. Combining different representation techniques depending on the nature of the measured principles and their character on site is considered an important discovered value of the SOCKA. In this way, the problem discussed by A and B of social impacts being focibly measured through means that do not fit them, can be avoided. Further use of the socio-spatial analysis sheets would be interesting to explore in a municipal capacity, to see how this technique might work in different situations. Another valuable insight relates to spending time on site and walking up and down, observing behaviour, taking photographs etc. This activity generated much knowledge and a kind of more 'abstract familiarity', which in itself did not seem to aid much in the identification of different socio-spatial aspects at first. However, as a place becomes

more familiar and its complexity gets noticed in greater detail, trails of thought and interplay between different aspects come together.

The relationship between separate "data points" like wide car lanes, no place for sitting or artful elements stop being simple checks on the list, and start to become hints for a bigger, more intuited picture (an illustration of this experience can be found on p. 80). From this iterative cycle of objective/structured "checklist" analysis and subjective/abstract intuiting exploration, deeper reflections could be made, which were represented partly in the cumulative assessments of step 2, but also present during the design process of proposing mitigating measures.

Using insights to guide mitigating design suggestions and adaptions

As described, it was discovered during the test that a combination of observational/quantitative methods and qualitative judgements combined favorably in the socio-spatial analyses. It was also discovered that, during the process of designing mitigating proposals, this combination worked well to generate needs-driven ideas, in a creatively inspiring way. The process could be described as the results of the analysis being clear, small dots to return too for foothold regarding the "*why?*" - the reasoning behind different design decisions. Simultaneously, the intuitive knowledge gained from spending much time on site and experience as an urban developer helped in driving the "how?" - the way in which the identified potentials and issues could be adressed. Again, a representation of how these perspectives were perceived to interact can be seen on p. 80. This creative process is thought to add to Jonna Bornemark's reasoning about the importance of qualitative judgement and trusting certain immeasurable skills to be gained and used by professionals, certainly within the architectural field.

When testing the SOCKA, step three almost became an amalgamation of analyzing impacts and a more traditional design process. It was however found that the idea of designing quickly faded into a problem-solving process. This shone a light on the value of being able to use the approach throughout the planning process, including for already built spaces. Hence, using the SOCKA as an in-depth evaluating tool rather than a broad pre-emptive one is considered an important result of the project. By looking into the effects of finished projects, we can learn how

to consider upcoming transformations - but we can also take measures in hindsight to adapt finished projects. In this way, the SOCKA can be used as a sort of learning loop or knowledge production tool for urban projects, to make sure the social sustainability goals for existing places aren't forgotten, whilst also lending insights to upcoming urban projects.

Using the "cumuluative assessment" option in the socio-spatial analysis sheets to start considering mitigations in a more abstract sense proved to be a good way of building a bridge between step 2 and 3. After the socio-spatial analyses, several main potentials to consider while constructing mitigating measures were found, all of which were central to guiding the suggestions presented in step three. As stated, adaptions to the proposal were difficult to motivate, as new perspectives or empirical data would have needed to be collected through for example participatory processes, which was outside the scope of the project. Furthermore, it was found upon reflection that the mitigating design presented had been made with both logistic and sustainability- factors in mind, to the best ability of the author, for example through resilient plant choices and designs that can be realized with realistic municipal budgets. In short, adjustments without involving more perspectives proved difficult. However, in future studies it will be interesting to consider performing the SOCKA with an emphasis on participatory processes, to see how this might enhance the insights and adaptions. To add a reflection from municipal practice, the action of involving citzens in design processes can often seem looked down upon by architects and others with aesthetic or spatial professional skills. These processes also often seem to be misunderstood or simply not understood at all - sometimes viewed as part of information campaigns or simply "checking the box" of communicating with a user group (in line with the thoughts presented by Zamanifard et al. in the literature review). However, as was discovered by using the SOCKA, qualitative knowledge is a constant negotiation

between different perspectives through a certain professional lens. Therefore, interpreting participatory knowledge into sustainable urban spaces should be understood as a highly qualitative design skill, which needs to be studied further within the field of architectural processes.

Development potentials

In addition to its merits, several development potentials were found by testing the SOCKA on Amiralsgatan. As stated, exploring the approach through more participatory methodologies could provide guidance for how to implement the needs and wishes of site users in the design process and allow for comparative analyses. Furthermore, a digital development of the tool in line with many comprehensive plans today might streamline the efficiency and pedagogy of the tool for holistic municipal use across different departments. A literature review more geographically focused on Malmö might add more specific principles to the different categories of socio-spatial aspects to consider within the approach. It was also noted that the amount of data available through open source channels is quite limited. Municipal planners and urban developers have far greater access through their professional roles to data relating to everything from travel statistics to perceived sense of safety analyses and interviews with focus groups. As discussed, introducing the SOCKA to municipal practice at different parts throughout planning timeline might produce valuable insights into how existing knowledge can aid the assessments. Akin to the test performed within this thesis, an iterative exploration would be needed to sort and try different data types in the different steps.

As was discovered in the test, some of the social aspects to consider were more easily mapped in step 1 (Site portrait) and other through a more detailed socio-spatial analysis in step 2. By continuing the development of the SOCKA within municipal practice, this consideration may become more clear. Although it would certainly benefit the current approach to employ more of the quantified data available through municipal tools, a reflection of what not to lose can also be added. In the test performed within this thesis, the lack of open source data meant that a lot of time was spent on and around the site, gathering information and noticing how different sensations, behaviors, climates and interactions took place. Such knowledge cannot be found by studying a database, or visiting a site one time in short order, but must be formed through a caring and curious quest to understand the place in a deeper sense. This can be considered particularly true when assessing social aspects, as the very essence of these are subjective, perceived and bound to the experience of being on site. Within the SOCKA, these reasonings are picked up by irking the assessor to first perform a site portrait, thereby implementing contextual understanding into the approach, before any measures or interpretations can take place.

Author's interpretation of balancing quantitative and qualitative perspectives in social impact assessments. Whilst quantifiable data points can be very valuable, a synthesis between them and wider, more abstract concepts is needed to understand the more qualitative aspects and bigger picture. In short - all knowledge is valuable, but must be appreciated for its inherent values - and is best understood through looking at the relationships between different perspectives. Although much of urban planning processes today are, in line with Jonna Bornemark's and Ignasi de Solà Morales' reasonings, moving towards dogmatic systems of efficiency and short timeframes, this thesis evokes the question if such a paradigm really is possible to merge with a genuine desire to understand the social impacts of our urban development and planning processes. The findings from this first test indicate that time is as valuable a resource as some data points or mapping tools. Without the chance to spend enough time experiencing a site, much of the interpretive aspects being assessed can never truly be found, wherefore the balance of qualitative and quantitative perspectives becomes warped.

In short - the SOCKA may have much to gain by finding more quantifiable data through iterative municipal use. However, the value of a qualitatively attempting to know a site by spending time intuiting its interplays and complexities cannot be overlooked as vital for assessing the social impacts of built urban spaces.

Reflections and conclusions

Shifting the dogmatic paradigm: Contributions and practical applications in sustainable urban development

This project is thought to contribute to a more succesful praxis in sustainable urban development by offering contemporary criticism to the current field of social impact assessments. Furthermore, the project applies this criticism by exploring a new approach thought to improve the practical application of such assessment processes through iterative municipal testing.

There are several components of the proposed SOCKA approach which might have a strong impact on the current practice and discourse around social impact assessment. Firstly, widening the focus from mainly policy-driven, large scale and early planning-aspects is key for architectural competences to be put to greater use. The design principles presented within this project might be adapted through further testing and localized selection. However, providing concrete focus on spatial aspects (in addition to contextual ones) which are robustly anchored in research is considered an important contribution to the praxis. In the same vein, providing an approach that is flexible enough to invite learning loops and provide pre-emptive, mitigating and evaluating functions is thought to make the SOCKA usable throughout the planning process. By meeting this need (as stated by civil servants working with such processes today) a synchronization of perspectives between different municipal bodies can hopefully be promoted. Such a thing might ensure that sustainability factors mentioned in early planning stages of a project are followed through on throughout the planning process, and can even be evaluated after construction, ensuring higher quality of our built urban spaces.

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On a more detailed level, the four steps of the SOCKA are thought to contribute by allowing both very open and very specific steps. Starting with a site portrait allows each evaluation to consider the broader circumstances of the site at hand, as well as tying in the larger scale municipal goals into the assessment. The socio-spatial analyses move focus to the here and now. In allowing for completely focused and site-specific methods, this step permits the use of both architectural competences, qualitative judgements, guidance from research and cumulative assessments of the particularities of the site. In step three, this focus is maintained, to ensure that any interventions are mitigating what is discovered during the analyses. Step four, however, once again opens up the scope of the assessment. By already having circled what is important from a socio-spatial perspective, synergizing and compromizing with other factors and sustainability aspects becomes more clear and easily reasoned about. This structure is thought to strengthen the arguability of the analysis results, without limiting the end goal by excluding alternative perspectives.

As has been discussed, spending time on site proved vital to ensure qualitative assessments. By performing the SOCKA and showcasing these results, the currently limited time for spatial analyses in urban development processes may be altered. Together with clearly tying mitigating measures to needs and potentials discovered in the analysis, this could have a powerful impact by minimizing ad-hoc design desicions, or personal aesthetics of civil servants deciding the physical configuration of public space. Instead, analysis-driven interventions that clearly meet the day-to-day needs of site users can be the foundation for development proposals. This goal may also be attempted through other means. By allowing for different groups to assess the same place using the four steps, interesting comparative analyses may shine a light on how different perspectives interact in the urban space. Such comparisons may contribute both to specific projects, but also to a more systematic knowlege production surrounding our understanding of both professional and user group perspectives.

In the test performed within this thesis, the 'socio-spatial analysis sheets' were produced to test how different representation techniques could interrelate. While some aspects could be drawn geographically (such as trees, favorable potential for seating groups and so on), others were less clearly captured in this way. This exploration led to the conclusion that a mixture of assessment- and representation techniques must be provided. Further iterations may explore how a digital tool might facilitate this mixture of opportunities for summing up different types of observations, for example by incorporating GIS, guiding design principles, attaching photos and cumulative texts.

As stated in the beginning of this thesis, the current national praxis of social impact assessments is fractioned across different municipalities - and even within the municipal praxis, this fragmented quality can be seen to continue across different departments and planning offices. Rather than trying to find one unifying way to for every office and municipality to follow, the SOCKA suggests focusing either clearly on the detailed scale, or clearly on a project's (both physical and more policy-driven) relationships. In this way, we can strengthen the site-specific whilst allowing for stronger reasoning about the general. Similarly, allowing for qualitative and quantitative aspects to work together allows for aspects to be judged in the matter which most relates to their circumstance, rather than forcing different elements to all be measured in the same way. These more "allowing" perspectives which recurr throughout the SOCKA may be extrapolated to the general field and in so contribute to a unification of the national discourse going forward.

Lastly, it can be said that this project aims to add to sustainable urban development not by adding yet another one of these disaggrergated approaches which divides us across the country and within our municipal bodies. Rather, the project hopes to contribute by starting to challenge the problems that exist in the field today (see "Summary" below). This critique and continued exploration of how to adress it could be extended to contribute to a national discussion on the values, needs, challenges and potentials of social impact assessments in urban development today.

Summary

This thesis asked how development potentials of Malmö's current social impact assessment model could be met through a balance of measurable and interpretive perspectives, and how this knowledge can contribute to a more successful praxis in the field of sustainable urban development. Through interviews with civil servants at Malmö stad, five main issues with the current model were found, namely that:

- There is not enough guidance for how to combine the qualitative assessments required when considering social aspect with the quantitative discourse of the field of impact assessments.
- The tool is not usable across different municipal bodies involved in city development, nor in the entire timeline required to develop and maintain urban spaces.
- The tool encompasses too many different social themes and policy-driven aspects in a way that is more confusing than helpful to identify the actual parameters of social sustainability in the physical places being developed.
- The tool does not invite evaluating or learning loops but rather puts a rigid focus on "predicting" social aspects instead of finding insights in pre-exisitng environments.
- The social aspects stated within the tool are confusing and poorly motivated, albeit with some very important factors of social sustainability mentioned here and there, but with a confusing end result.

By combining theoretical findings with practical knowledge of the planning processes, these points were adressed through the proposed SOCKA approach. The approach is meant to combine quantitative and qualitative assessments in a way that can adapt to a site's specific context, whilst providing clear and spatially focused guidance. By offering a flexible approach, the SOCKA is meant to invite learning loops and provide pre-emptive, mitigating and evaluating functions. This flexibility makes the approach usable throughout the planning process, which is hoped to aid in the synchronization of perspectives between different municipal bodies, for example the Planning Department and the Technical Department at Malmö stad. Through a thorough document and literature review, six main categories for socially valuable design principles were found. These categories were named Sense

of safety, Accessibility & connections, Health & well-being, Social life & meetings, Experiential qualities and Equal possibility of use. Design principles within these categories were used in a clear and tangible way as criteria within the SOCKA, anchoring it robustly in relevant research. Following the construction of the approach based on the development potentials expressed by civil servants at Malmö stad, the SOCKA was tested on Amiralsgatan in Malmö.

Testing the approach generated several insights which can hopefully aid in future developments. Amongst other findings, the test revealed that spending time on site can be viewed as a vital tool for understanding many socio-spatial aspects intuitively. This qualitative knowledge production could be premiered more and should realistically be given more time and focus in current assessment processes in order to fully meet its potentials. At the same time, a deeper application of quantitative data through municipal use can also improve the knowledge production. It was also found that the approach holds great potential for being used throughout the planning timeline, that representation of observations should be adapted to their respective characteristics in the socio-spatial analysis sheets, and that translating different kinds of knowledge into functional designs should be understood as a highly qualitative design skill. Furthermore, considering design as a means of mitigating negative social impacts could be a powerful tool for architects to explore in the future of the field.

By considering changes to the physical configuration as solving the problems or meeting potentials of the design rather than imposing an external aesthetic, we might move closer to the essence of social sustainability in urban developments. Lastly, the test revealed several incremental changes and adaptions to the approach - hinting that a continued use and testing is needed to iterate further developments in accordance with municipal practice.

In conclusion, this project answered the research questions by developing a new approach for performing social impact assessments (SOCKA) and testing it in Malmö through a balance of quantitative an qualitative methods, flexible processes and socio-spatial aspects robustly anchored in relevant research. The project finds that such an approach can aid in assessing social impacts and guide mitigating interventions for projects through a number of generated design principles and processes. Continued exploration of similar methods in future research is vital for social sustainability to be acknowledged for the important potentials it holds for architects and urban planners.

Final reflections: Humility in architecture and urban development

As has been discussed, this thesis shines a light on several challenges within the current field of architecture and urban design which might explain why exploring the social impacts of said designs have become so decentralized in municipal practice. Firstly, understanding social impacts through their inherent values, rather than forcing them into existing modes of evaluation has proven to be a key insight. Although the current discourse raises voices both for and against an "equalization" of sustainability factors through homogenizing their impact assessment methods, this thesis suggests that such a process can only serve to continue the subordination of SIAs. Instead, employing a balance of quantitative and qualitative measures, which adapt to the aspects at hand rather than the other way around, must be considered the best way to truly understand the social impacts of our architectural interventions. This approach may agitate those who wish to compare, monetize and prioritize urban developments based on a market economy, as it makes such comparisions impossible through purely quantitative measures. However, shifting focus from what we can measure to how different sustainability values can be understood puts the focus back on the end result for citizens, rather than the presentation of achievements for the developers.

In general, this author believes that a certain humility needs to enter the field of architecture at this point, both with regards to what we are creating and to those we are creating for. This is especially true for municipal urban developers, who can only realize their designs through the use of tax revenue. In this system, our "investors" pay us blindly and by law, with low control over how this payment is translated into changes in the urban landscapes. Such a system puts the urban developer in an incredibly disproportionate position of power, and begs a question in line with Ignasis de Solà Morales' stance (see p. 52): should we use our competences within the complex field of urban design to force our own aesthetics onto various sites in the city? Or should we use our competences to attentively and sincerely find the most value for every krona spent by our blind investors?

Again, the idea of a more humble architectural field going forward becomes relevant. Opening up for adaptions based on other sustainability factors, negotiations of mitigating proposals and public participation are all examples of this. Furthermore, by considering design as mitigating measures, carefully promoting simple positive changes in everyday life for our citizens, and avoiding extravagant interventions with no assessment of impacts, we use the revenues with a greater respect for both the sites we design and the visitors who pay for it.

Lastly, the very objective of this thesis can be discussed from the perspective of humility in our field. Every year, new recommendations, matrixes and strategies are being produced and neatly shelved in municipal offices around the country. Rather than wishing to finish this thesis with a similar "answer", this author would like to continue the question.

There is something to be said for the exploration itself, the curiosity of testing new approaches which makes us (perhaps immeasurably?) better architects and planners on an individual level. By starting within oneself, and finding the desire to explore the true implications of the changes we impose on urban environments, a greater value might be achieved than by pointing fingers in other directions. This author believes that our field needs to nourish curiosity - not by trying to give each other finished roadmaps and toolboxes to carry out the same cookie cutter procedures over and over - but rather by igniting each others' thirst for deeper understanding of these questions. The answers themselves are complex and changeable and cannot be found in a single thesis. Still, it is hoped that this paper will help fanning the flames of architects and planners continuing to ask the important questions, and the exploration of social sustainability perspectives within our complex and fascinating field.

REFERENCES

Allport, G. W. (1954). The nature of prejudice. Reading: Addison-Wesley

Antonson, H. & Levin, L. (2018). A crack in the Swedish welfare façade? A review of assessing social impacts in transport infrastructure planning. Progress in Planning, 138. https:// www.sciencedirect.com/science/article/pii/ S0305900618300035

Badland, H., & Schofield, G. (2005). Transport, urban design, and physical activity: an evidence-based update. Transportation Research Part D: Transport and Environment, 10(3), 177-196.

Baran, P. K., Tabrizian, P., Zhai, Y., Smith, J. W., & Floyd, M. F. (2018). An exploratory study of perceived safety in a neighborhood park using immersive virtual environments. Urban Forestry & Urban Greening. 35, 72-81. https:// doi.org/10.1016/j.ufug.2018.08.009.

Boverket (2022a). Hälsa först! Cited 2023-12-27. Available at: https://www.boverket.se/sv/ samhallsplanering/stadsutveckling/halsa-forst/

Dikeç, M. (2019). Urban rage. London: Yale University Press

Edirisinghe, J. (2019). Making an Accessible City: Consideration of Universal Design Principles in City Planning.

Swedenmark, Elin. (2020). Jonna Bornemark: "Vi måste odla omdömet". Aftonbladet. https:// www.aftonbladet.se/nojesbladet/a/0KKpWB/ jonna-bornemark-vi-maste-odla-omdomet

Fathi, S., Sajadzadeh, H., Mohammadi Sheshkal, F., Aram, F., Pinter, G., Felde, I., & Mosavi, A. (2020). The role of urban morphology design on enhancing physical activity and public health. International journal of environmental research and public health, 17(7), 2359.

Franck, K. A., & Paxson, L. (1989). Women and urban public space: Research, design, and policy issues. In Public places and spaces (pp. 121-146). Boston, MA: Springer US.

Gehl, J. (2010). Cities for people. Washington: Island press

Hashim, N. H. M., Thani, S. K. S. O., Jamaludin, M. A., & Yatim, N. M.

IAIA (International Association for Impact Assessment (2024). Social Impact Assessment. https://www.iaia.org/wiki-details.php?ID=23

Jacobs, J. (1961). The death and life of great American cities. New York: Random House.

Joseph, M. L., Chaskin, R. J., Khare, A. T., & Kim, J. E. (2020). The organizational challenges of mixed-income development: privatizing public housing through cross-sector collaboration. In Transforming Social Housing (pp. 125-147). Routledge.

Kahn, A. (2005). Defining Urban Sites. I Burns,C., & Kahn, A. (Eds.). 2005. Site matters: design concepts, histories, and strategies. London:Psychology Press.

Krishnamurthy, S. (2019). Reclaiming spaces: child inclusive urban design. Cities & Health, 3(1-2), 86-98.

Legeby, A., Berghauser Pont, M., & Marcus, L. (2015). Dela [d] Stad: Stadsbyggande och segregation: 2 Metoder: sociala stadsbyggnadsanalyser.

Lis, A., Pardela, Ł. and Iwankowski, P. (2019). Impact of Vegetation on Perceived Safety and Preference in City Parks. Sustainability. 11(22), 6324. https://doi:10.3390/su11226324.

Listerborn, C. (2000). Tryggare stad: kan man förändra rädslans platser?Göteborg: Stadsbyggnadskontoret.

Listerborn, C. (2002). Trygg stad: diskurser om kvinnors rädsla i forskning, policyutveckling och lokal praktik. Göteborg: Chalmers Tekniska Högskola

Lynch, K. (1964). *The image of the city*. MIT press.

Malmö stad (2020). Processledarmanual för sociala konsekvensbedömningar. https://malmo.se/ download/18.1a3f5d7f170c3af5c0319490/1588 594443070/2020%20Processledarmanual.pdf Malmö Stad (2023a). Översiktsplan för Malmö. https://gis.malmo.se/portal/apps/storymaps/ collections/420a390c2f784fb19908746dfad5e 97a?item=1

Malmö stad (2023b). Sociala konsekvensbedömningar. https://malmo.se/Sa-arbetar-vi-med.../Agenda-2030-i-Malmo/Malmokommissionen/Socialakonsekvensbedomningar.html

Marcus, L., Giusti, M., & Barthel, S. (2016). Cognitive affordances in sustainable urbanism: contributions of space syntax and spatial cognition. Journal of urban design, 21(4), 439-452.

Mayblin, L., Valentine, G., Kossak, F., & Schneider, T. (2015). Experimenting with spaces of encounter: Creative interventions to develop meaningful contact. Geoforum. 63, 67-80. https:// doi:10.1016/j. geoforum.2015.03.010.

Peters, K. (2010). Being together in urban parks: Connecting public space, leisure, and diversity. Leisure Sciences. 32(5), 418-433. https://doi:10.10 80/01490400.2010.510987

Rokem, J., & Vaughan, L. (2019). Geographies of ethnic segregation in Stockholm: The role of mobility and co-presence in shaping the 'diverse'city. Urban studies. 56(12), 2426-2446. https://doi:10.1177/0042098018795561.

Shankar, K., & Larson, K. (2015). An Introduction to P [art] icipatory Urbanisms. Berkley: University of California.

Solà Morales, I. (2013). Terrain vague. In Terrain Vague (pp. 24-30). Routledge.

Spacescape (2022). Barns trafiktrygghet i Malmö. https://www.spacescape.se/wp-content/ uploads/2023/01/Barns-trafiktrygghet-i-Malmo_221221_lowres.pdf

Spacescape (2024). Så mäter vi stad. https:// www.spacescape.se/teori/sa-mater-vi-stad/ natanalyser/

Ståhle, A., Marcus, L., & Karlström, A. (2005). Place Syntax: Geographic accessibility with axial lines in GIS. In Fifth international space syntax symposium (pp. 131-144). Techne Press.

Swaffield, S., & Deming, M. E. (2011). Research strategies in landscape architecture: mapping the terrain. Journal of landscape architecture. 6(1), 34-45. https://doi: 10.1080/18626033.2011.9723445.

Swedenmark, E. (2020). Jonna Bornemark: "Vi måste odla omdömet". *Aftonbladet*. https:// www.aftonbladet.se/nojesbladet/a/0KKpWB/ jonna-bornemark-vi-maste-odla-omdomet

Valentine, G. (2008) Living with difference: reflections on geographies of encounter. Progress in Human Geography. 32(3), 323-337.

Vanclay (2003). International principles for social impact assessment. https://www.tandfonline.com/doi/pdf/10.3152/147154603781766491?needAccess=true

Varga, T. (2015). Sociala konsekvensbedömningar i Malmö stads planering. [Kandidatuppsats, Lunds universitet.] Lund University Publications. https://lup.lub.lu.se/ luur/download?func=downloadFile&recordOId=5461979&fileOId=5468434 Varna, G., & Tiesdell, S. (2010). Assessing the publicness of public space: The star model of publicness. Journal of Urban Design, 15(4), 575-598.

Whyte, W. H. (1980). The social life of small urban spaces. New York: Project For Public Spaces.

Xiong, H., Bairner, A., & Tang, Z. (2020). Embracing city life: physical activities and the social integration of the new generation of female migrant workers in urban China. Leisure Studies. 39(6), 782-796. https://doi:10.1080/02 614367.2020.1800802.

Yung, E. H., Conejos, S., & Chan, E. H.
(2016). Social needs of the elderly and active aging in public open spaces in urban renewal.
Cities, 52, 114-122.

Zamanifard, H., Alizadeh, T., Bosman, C., & Coiacetto, E. (2019). Measuring experiential qualities of urban public spaces: users' perspective. Journal of Urban Design, 24(3), 340-364.

