Stockholm on the edge
Defining quality in the red-green interface of Årsta

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STOCKHOLM ON THE EDGE

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ABSTRACT

One of Stockholms great qualities is the large amount of green areas in the city. Yet the city needs to densify. Such is the case in the residential neighbourhood Årsta, where the popular Årstaskogen, an urban woodland, may have to make way for new housing, meaning a redefinition of the red-green interface of the area. This study involves a series of methods (literature review, document analysis, semi-structured interviews and research-by-design) through which the definition of quality in this interface is defined. Typologies of both interfaces and the motivators of quality in both residential neighbourhoods and urban woodlands were created. These typologies were linked to the qualitative perceptions of the green-red interface of the interviewees, and some were translated into visualised design approaches. The research showed that perceptions of quality are multi-interprettable and can be linked to certain types of interfaces in multiple ways, making a definition of quality arbitrary in this case.
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Introduction and methods

The city and nature have for a long time been partly defined by them being an antithesis of the other, urbanity as non-nature and nature as non-urbanity (Braun, 2005). Yet nature has continuously been developed as an inherent part of the city (and vice versa), with urban woodlands and parks emerging in cities for enjoying nature within an urban setting (Konijnenburg, 2000), providing what we we would now call 'ecosystem services'. Where nature ends and the city begins and vice versa has become somewhat ambiguous over the last couple of centuries. The need to establish liveable and sustainable cities have caused cities to intertwine the ‘red’ with the ‘green’, creating large green structures and residential areas with a green image.

Stockholm takes the cake when it comes to establishing a green city as it was awarded the title of European Green Capital in 2010 (Kaczorowska et al., 2016) among other appraisals of the natural features of the city. The inherent cultural value of woodlands in the archipelago of Stockholm and the suburban development of the sixties has created a city veined with woodlands and parks (Wells et al., 2017). But these qualities are under pressure as its population is growing and the city authorities want to densify. The high exploitation pressure together with the slow acknowledgement of ecosystem services in formal planning practice (Kaczorowska et al., 2016; Wilkinson et al. 2013) puts one of Stockholm’s most valuable and unique urban assets under threat. Furthermore, Hedblom et al. (2017) state that continuous densification in cities will lead to a lack of ecosystem services.
Figure 1: The high rises at the end of Marviksvägen as seen from the forest.
But it is not only a threat for the future, as Stockholm has lost 50% of its centrally located green areas due to urban expansion since the 1970’s (Colding, 2013).

Proposed plans end up in conflict between residents and authorities about ambiguity about what to do with new housing and green areas. There is an overall trend in Sweden that wants to shift its approach for urban green areas from “quantity” to “quality” (Littke, 2015), but it is unclear what quality entails, and quality is not something that is directly present in calculative and cost-efficient green space management. Quality being an ambiguous concept, also within the designed built environment, is in need of a clearer understanding to make it operational and understandable for urban planners and policy makers. Moreso, there is also ambiguity about different spatial aspects of both new housing and green structures. Many densification plans are going to move the edge between the built and the green area, or at least change the interface in some way; and although compensation propositions are made for green areas and detailed urban designs are made for new housing, the interface of green and red is in danger of being ignored. The transition of the built environment into the green area can however define qualitative aspects for both housing and green areas, affecting the area as a whole.

An example of the local impact of the processes described above is the case of Årsta and Årstaskogen in Stockholm. Due to densification plans of the city, plans have been made to extend the housing area into the northern woodland area of Årstaskogen. To compensate for the decrease of forest area, the remaining part of Årstaskogen will receive a nature reserve status. But according to residents, this does not compensate for the parts of the forests that will be removed and accuse the city authorities of unjustified and unsubstantiated actions (Bevara Årstaskogen, 2018). The city however wants to put the revenue of the new housing back into the area by creating a nature reserve, improving the accessibility and public character of the woodland.

**Problem Statement**

Green space management and densification strategies are a colliding in Stockholm as there is little constructive interaction between planning authorities and citizens, causing them to face each other on opposite viewpoints on the matter (Khoshkar et al., 2018). The densification plans of Stockholm and the appreciation of local green structures for ecological, cultural and recreational value have resulted in local conflict over the housing plans for Årsta and the preservation status of Årstaskogen. The discussion thus far seems very concerned with the delineation of the areas and rules and regulations about ecosystems and housing. The discussion about the interface of building ground and nature reserve only concerns where that boundary of either feature is, instead of acknowledging this boundary, or interface as a feature itself, and more importantly, how it affects both housing and nature on its respective sides. For woodlands this is important, because these are often fragmented in urban areas resulting in a large edge to interior ratio (Larsen & Nielsen, 2012). Since urban design and planning always aim for a qualitative environment, the issue on quality has to be raised here as well. Because such an interface is often not recognised in formal planning, being able to safeguard quality in this sense can be problematic. Delivering insights on these qualities may help to gain a better understanding of the interface between these two formally defined areas and could
also serve as a guide for contextual similar urban development. The qualitative aspects of Årstaskogen or the new housing are often emphasized in the discussion, but there is no visual aid to able to discuss the quality of the plan. A visual outcome of this research may be able to shed light on this.

**Research questions**

The objective of this research is to gain a better idea of what defines quality when it comes to designing the transition between green structures and the built environment, in the specific case of Årsta. The general research question for the research is:

*What defines quality concerning the design of the interface of green structures and built environment in Årsta?*

To help answer this question, the following sub questions are used to help guide this research.

- What defines the interface in urban design literature?
- What defines quality of urban and green areas in literature?
- How is quality defined in the interface in the current area and in the new plans for Årsta?
- What are different views on quality and interfaces of green and built areas?
- How can approaches to quality in the green-urban edge be visually explained?

**Overall research design**

To get a better understanding on the idea of quality and a firmer grasp on the design of the transition of the housing area into Årstaskogen a certain set of theories and methods are required. Both the subjective concept of quality and the practice of spatial design may cause difficulties for single traditional research methods, which is why I propose multiple methods.

The problem statement and its terms used such as ‘quality’ and ‘interface’ require a more in depth analysis by a literature review on how they have been employed and framed within spatial practice over the years. A typology will be made of ways to describe and perceive landscape interfaces, which have gradients within their types and can be combined with other interface types. The concept of quality will be researched by reviewing literature on urban woodlands and residential areas, which will result in a typology for different ways of perceiving qualities in both situations, and what the points of motivation are to define an area or interface as qualitative. These literature analysis will answer the first two sub question and will to a certain extent operationalise some of these terms and set the frame in which they will be researched. The two typologies resulting from this literature review will attempted to be combined to answer the general research question through several methods. By linking types of interfaces with motivators of quality, a better understanding can be made of how quality is perceived within different types of interfaces. Three different methods will be used to link interface and quality types.

To gain insight into the specific case at hand and to answer the third and fourth sub question, a spatial analysis of the larger site is needed describing its current characteristics, as well as an analysis into the study for proposed densification plans for the area. The latter will take place in the form of a document analysis of the planning documents and other related files about the current Årsta development case. The document analysis will more specifically assess
and discuss the features of Årstaskogen and the northern part of Årsta. This will be paired with a small history and linked to spatial analysis of the site, where also the initial intentions for the first design of the area and what its proposed qualities and values were supposed to be there and remain today, among other perceived qualities by the researcher. Spatial analysis, just like many other parts of this research, is not necessarily conditional, but will have an iterative character throughout the research, gaining more knowledge as the research goes on.

To answer the fourth sub question of this research, semi-structured interviews will be held with four stakeholders related to the development in the area. These stakeholders are chosen on their importance, but also their variation of intentions and supposed different interpretation of the term ‘quality’, which partly result from the document analysis. These stakeholder groups are:

- City authority (planning department)
- Spatial experts (urban designers, architects)
- Local stakeholders (Residents, Bevara Årstaskogen)

The semi-structured interviews will be recorded and made into a transcript (which can be found in the appendix), which will be analysed. The interviews will be analysed in different ways, first for the general opinion on the ongoing developments and the area, framing their idea of quality by indicators of their motives.

The fourth subquestion is not necessary to answer the main research question, and will instead be addressed in the discussion of this research. The themes which have been derived from the analysis will be translated into design approaches. These approaches will provide insights and guides for creating general design proposals in which general approaches to quality of the interface will be shown. To operationalise quality for the current practice means making the conclusions visual, and applied to our case study. For the conclusions to also be helpful to the actual case in communicating quality between stakeholders, visualization can play an important role.

Tyrvaïnen et al. (2005) found that using visual communication tools for designs and management of urban woodlands could greatly benefit the discussion about spatial changes in Nordic countries. But presenting the conclusion in a visual way also serves another function, whereas testing out the definition of quality in a visual design is also a research within itself. A conceptual spatial design approach will in this sense also be utilised as a research theory. The theory used is that of research through design (RTD). Although design has for a long time been more related to the arts, spatial design in a research context has been slowly gaining recognition and validity as a scientific research method over the last decade. In research through design, the designing activity itself is used as a method for gaining new knowledge and insights (Deming & Swaffield, 2011). It is not to be confused with similar sounding terms such as ‘research for design’ (research aimed to inform design to improve quality and validity) or ‘research on design’ (research aimed on a design procedure or outcome) (Lenzholzer et al., 2013). The concept of research through design is utilised when traditional research methods are difficult to apply to a certain research topic. Since the topic at hand involves a heavily subjective term which is quality and the context is spatial design, the theory on urban design can prove useful to a research on this topic for Årsta (Figure 2).
Figure 2: Schematic diagram showing the research method
In this chapter, an attempt will be made to derive a typology of the physical manifestations of spatial interfaces from classic and contemporary urban and landscape design literature. By analysing literature on urban design from perspectives such as urban phenomenology and urban sociology that consider the interface or similar terms as a type of feature of the urban realm, a list of ‘interface types’ will be made.

The specific concepts and topic of this research is to a certain extent unconventional for common scientific research. Terms like quality are highly subjective, and an interface between urban woodlands and residential areas in a spatial context is also not very well acknowledged in scientific papers. The relatively small acknowledgement of spatial design as a science may be the reason that ambiguous terms like spatial interfaces, edges, and boundaries are not that well represented, at least not in the context of urban green areas and built environments. However, urbanists have tried to develop ideas in which the individual experience to single physical structures, or the ‘urban form’ relate to the experience of individuals of the routes through and along these physical structures, connecting them, which is called the ‘urban code’ (Dobson, 2011). Clarifying urban spatial structures and giving tools on how to use them in urban and landscape design is often the point of classic urbanist literature. Although generalising certain features of urban design design is always risky, since spatial design always has to consider the local context or genius loci, an overview in
Figure 3: A series of urban interfaces at the Garonne waterfront in Bordeaux.
this case can provide insights when considering the differences between the literature cited and the focus of this research. It has to be noted that this research considers the interface between two different phases, whereas urbanists, when considering spatial interfaces usually consider that between two similar urban areas. Another point has to be made considering the wording of phenomenon that is discussed here. Some of the terms used by authors are ‘edges’, ‘borders’ and ‘boundaries’, described by the Oxford dictionary respectively as “The outside limit of an object, area, or surface.” and “A line which marks the limits of an area; a dividing line.”. What has to be noted about these definitions in how they treat areas, is that they are one-directional, since they both use the word area in a singular sense. They can have an ‘inside’ and an ‘outside’, but which is which depends on which phase the edge ‘belongs’ to. When researching a single area, this term would be applicable, but in this research it is about the interaction of both housing and green areas.

This is why the term ‘interface’ will be used in this research, because it implies a two-way system in which two systems, in this case areas, interact. Although the term is often used to describe the interaction between the user and the landscape in urban design context, the interaction between two types of landscape are meant here. However, the user-environment interface is also present in this research, since it lies at the basis of the urbanism discipline. Another point is that terms like ‘edge’ or ‘boundary’ already state the shape of these phenomena, being a linear element. The term ‘interface’ is more useful in this sense as well; it implies a difference between two things, but does not state how that difference manifests itself in a spatial manner and if there is a presence of an identifiable edge. An interface defines how two phases relate to one another.

One of the first names that comes to mind when speaking about the phenomenology of the urban element such as the ‘edge’ is Kevin Lynch. Lynch talks about the ‘edge’ as being one of his urban elements in his book “The image of the city” (Lynch, 1960), where he discusses and explores a language for making the city legible, or in his words, imageible. Among the five elements he mentions (paths, edges, districts, nodes, landmarks), he describes edges as linear elements that bound off two phases and break continuity. His primary description involve the edge as a barrier, although it can also be a path, such as a highway or a simple footpath. But besides (penetrable) barriers, he also notes that edges can be ‘seams’, binding two phases together. In the examples he mostly refers to high streets which share this trait, being a place that attract people from either side of the edge. A lot of his examples however tend to view edges as being boundaries, referring to water and other inaccessible spaces. He notes the disruptive and fragmenting effects that edges can have on a city physically, but also in the minds of people. Although Lynch has been critical of his research later about its validity and interpretation (Lynch, 1984), it had a large impact on urban design research. Some researchers extended his ideas, in which several elements were added or altered to get further insights into its workings. Stevens (2006) attempts to reevaluate Lynch’s elements from a phenomenological perspective. The edge here is translated to the ‘boundary’, in which the element becomes more interactive for the subject. Boundaries can be experiences up close, or can be attempted to be crossed and moved. The boundary here is not fixed, but is played with and tested by people. Another element is also added to Lynch’s element, that of the threshold. A threshold is described as a point where a path crosses a boundary or edge. Although Stevens is mostly focused on the
threshold between buildings and the outside, the element is applicable to thresholds of districts as well. A clear crossing of a boundary is often indicated by some sort of portal, a landmark that signifies the transition from one place to another. Portals are described by White (1999) as points where a path transitions into a place, generally exemplified by streets and urban squares. White’s portals are often quite literally arches and doorways, but can also be less explicit. A portal can also be defined not by being a landmark itself, but by a strong contrast between the phases that the portal connects. Examples can be the presence and absence of trees, or a difference in elevation, making the portal defined by a slope or staircase. The point of the portal is to create an entrance, a landmark to orientate towards, and orientate the new space from when having passed through. A good portal according to White is heavily dependent on the quality of the path and place it lies between. Attention in design of portals can also be a factor of success.

Another staple work in urbanism is that of Christopher Alexander’s ‘A pattern language’ (Alexander, 1977) in which an attempt is made to uncover the features or ‘patterns’, which are all interconnected to create a functioning city. The city is divided in several identifiable places, neighbourhoods, of which one its patterns is a neighbourhood boundary. Alexander makes a boundary into a crucial element for making a neighbourhood identifiable. He makes the comparison of the neighbourhood as a cell in an organism. A cell wall or membrane is necessary to make a single cell distinguishable, but to make a cell work, it allows and regulates substances to pass through them. Alexander notes that a boundary on a neighborhood scale needs to ‘strong’ in order to ‘maintain its character’. This is related to another pattern, the ‘boundary of subcultures’, where groups of people need a boundary to distinguish their own habits and identity. But a neighbourhood boundary is described as being more morphological, having as its most important feature a restricted access. In this sense he means a limited amount of paths that go into the neighbourhood. Those paths will become gateways, another pattern. At first glance his perception of boundaries seems very isolating, but Alexander points out that in between these gateways a ‘boundary zone’ must provide a public space with functions that can be used by multiple neighbourhoods. Examples of these boundary zones include among others parks, or in his word anything that forms a natural boundary. Alexander also points out that buildings should orientate inwards, to focus on the neighbourhood itself rather than the outsides.

Besides these works that draw relations between physical urban elements and the experience of being and moving in a city, the notion of area edges can also be viewed from a perspective of socially produced space instead of just phenomenological space. Although Jane Jacobs talks very implicitly about the city in a morphological sense in her book the Death and Life of Great American Cities (Jacobs, 1961), she does make some remarks on explicit morphological features of the city, such as the ‘boundary’. The difference between Lynch and Alexander is that she does not acknowledge it as a necessary part of a neighbourhood or district. In fact, she criticises the idea of ‘bounding off’ neighbourhoods, saying that these result in uninteresting, long city blocks. Vibrant neighbourhoods in fact have overlap and interweaving, with a whole variety of streets constantly going around the corner. She also specifically said that features like parks and other public amenities should be used to knit the city together instead of to ‘island off’ specific
neighbourhoods. Not the boundary is leading for distinguishing a neighbourhood or area, but rather its difference makes for identifiable areas and the cross use of areas. “It’s not boundaries that make a district, but the cross use and life.” She does however acknowledge that edges of these districts do exist in a physical form. But those should be defined by the size and workings of a district, not the other way around: a boundary defining a district. As is the case in most of her book, Jacobs criticises the formal American planning practice of her times and their top down decisions on boundaries of district, while districts and their boundaries more spontaneously come to be by the interactions between neighbourhoods crossing those boundaries.

Within the literature above several useful things can be noted in how boundaries are viewed. Lynch and Alexander focus mostly on an edge as separating the two, rather than connecting them. Spatial manifestations include mostly disruptive linear elements in Lynch’s case, being large roads and waterfronts. But Lynch also notes the edge as a seam, with a focus on connecting naming another linear element, the ‘main street’ which can attract people and activity from both phases at its sides. Alexander does not necessarily identify the edge as a linear element, but rather focuses on the physical neighbourhood structures that can demarcate its limits by proposing limited access points. Between neighborhoods he proposes the use of intermediate areas that serve a public function, such as parks, with some
other amenities at the access points (figure 4). Here the interface between neighbourhoods manifests itself in the form of an area, rather than a linear element. Jacobs’ approach to the edge is that there is none: the difference between two neighbourhoods are created by the life in and between neighbourhoods itself. This has more of a ‘laissez faire’ approach in it, the idea that edges or boundaries do not have to be created, but will become the eventual result of how people on either side of the districts will make use of the amenities in both neighbourhoods and move between them. It has to be noted that the authors discuss the meeting of edges between two similar elements, these being neighbourhoods. This research attempts to uncover the interface quality of two different elements however, one being the neighbourhood, the other being an urban woodland. Although the elements of the interface differ, we can make some general notions and approached of the edge can be valid when the context are considered.

An upcoming topic however is the ‘rural-urban’ interface, with related terms such as urban-wildland interface and more specifically peri-urban interface and rural urban fringe. This concept seemingly goes out from a viewpoint of a classic town-country dichotomy, yet it is mean to criticise this dichotomy in planning practice and get a better understanding of transitory zones that seem to exist between cities and their hinterland. Although this concept focuses on a much larger scale than the topic of this research which is more on a neighbourhood scale, this spatial interface may prove useful for understanding the interface between two different spatial phenomena. The peri-urban area is situated in between the urban and the rural situation, having traits of both but it does not classify as either city or country. It is an intermediate zone within its own right (Allen, 2003). These areas are very often classified as being cluttered and uncontrolled, being a blind spot in urban planning. Although these uncontrolled landscapes are often unloved and seemingly uncared for, containing many unwanted functions, some see a certain value in this ‘in between’ zone. Shoard (2000) coined the term ‘edgeland’ for these areas in which the anarchic and interesting variety of periphery functions creates an area with a character and quality of its own. Although the focus of this research lies within a city and has a smaller scale, the general idea here is an intermediate area as an interface which does not belong to either side, and is ‘left open’ for uses and perspectives. It is also often the area where wildlife has ‘free reign’, because both sides on the interface pushes them out because of intensive use.

An intermediate area in between two phases and the previously mentioned interface being a boundary may have already implicitly exemplified some characteristics of spatial interfaces. When talking about edges, whether that is in urban design or generally, there is often the characterisation of edges being either ‘hard’ or ‘soft’. Simon Bell describes ‘landscape patterns’ (Bell, 2012), which can be heterogeneous consisting of different ‘mosaics’. A way to identify these is by the structure and shape of the boundaries between mosaics, where he lists some basic features. The shape of the edge can be more geometric or organic in nature, edges can be ‘hard’ or ‘soft’, and edges can be defined by contrast of structures or phases. Geometric and organic edges are often defined by the amount of human involvement; straight edges and patterns are often human made, organic can also be made by nature. The shape of the edge also influences the hardness of one. Hard edges constitute of a sudden, almost binary transition into another
phase. A soft edge is more transitional, having a gradual change of phases as its character. A soft edge can also by shape and composition be a different areas in itself. For instance, a ‘rugged’ edge between two phases can create enclosures and exposures, such as bays and coves next to the sea. A forest edging a field can include an intermediate zone of shrubs and young trees. Bell also notes that a contrast in composition and structure between phases can influence the hardness of the edge. For example, the edge between a meadow and a lawn may appear softer than that between a meadow and a forest. Edges are always defined by the phases they lie in between.

Back to urbanism, Jan Gehl also points out the hardness of edges when it comes to a very local scale, the one between buildings and public space (Gehl, 1987). He stresses the importance of a good flow of activities and people in and out of building, happening on the interface between the two. Activities spilling out from a building will have a positive effect on the public life. Although these things are partly spontaneous, proper design can make a difference as well. The fluid character of the inside and outside in residential areas make a good and pleasant neighbourhood. Other studies on edges in urban and landscape design have been done by Dee (2004). She provides a visual approach on landscape morphology in which the edge and thresholds are some of the elements she describes. The edge is often neglected or ignored by spatial designers according to her, while they are so important in an experiential and cultural aspect. The relations between these design elements are similar to those of Lynch and the additions to it, but also features more in depths insights on the characteristics of these edges. These can be rugged or smooth, have boundaries or gradients. Edges in design can also be ‘interlocked’, like a puzzle piece, making a small sub-space like a niche. Edges can be defined through design by topography, vegetation, built elements and water. Although designed, there is an implicit distinction again between the human-made edges and naturally made edges, giving examples like steps and cliffs, beaches and piers. Dee also makes a distinction between ‘edges’ and ‘thresholds’, similar to the types Stevens (2006) describes when broadening Lynch’s elements. A threshold described by Dee is defined as a space on the edge or a space of transition. It lies on the transition of one phase to the other, but is neither. This is somewhat similar to Stevens (2006) thresholds which are places where paths cross a boundary, or a portal as described by White (1999). More generally, one could say it is an entrance, where an entrance could be demarcated and acknowledged as a place. Entrances, although being a standalone element, includes characteristics of both phases it lies in between. Entrances allows people to acknowledge ‘passing through’, but also provides opportunity to wait, arrive, and meet one another. They can also be smaller spaces to provide variability compared to the larger spaces it connects, and differentiate in function between the two (Dee, 2004).

When talking about the phases an interface is connected to, we have so far mostly talked about different phases in materiality, character or function. What is however an important, implicit difference in character in urban spaces is that of the public and private. The soft edge that Gehl describes for residential neighbourhoods is not only one that mediates functions, but also the publicness of the street versus the privateness of the house. The public-private interface is a popular research subjects, especially when it concerns the interface between buildings and landscapes. These inside-outside interfaces are crucial design
elements at the ‘human’ scale in urban design. It is therefore not strange that popular authors that have been previously mentioned in this chapter have also written about this public-private interface. Lynch considered the degree of publicness in a space to be dependent on several ‘rights’ an urban dweller would have, which are those of presence, of use and action, of modification, of appropriation and of disposition. The interfaces between public and private space in the city is where these rights either emerge or disappear (Lynch, 1981). Alexander’s pattern language goes from the scale of the city down to that of the individual dwelling, and discusses publicness and privateness, accessibility and seclusion implicitly or explicitly in many patterns (Alexander, 1977). Jacobs considers a good public-private interface essential for safety, pointed out by her ‘eyes on the streets’ theory, and a fluid and vibrant ‘sidewalk ballet’ for the activities that happen in a street.

Dovey & Wood (2015) make an attempt at creating a typology for describing public-private interfaces between buildings and urban space, derived both from practice and the input of many urbanist writers over the years, using an ‘assemblage’ of a set of variables. The interface here is described as a mediator of power relations, and a way through which we acknowledge the presence and closeness of others who are present in the city. The first variable is accessibility, which concerns the permeability of the public-private threshold. The second variable, the presence and extent of a setback considers the amount of space in between the public and the private and the the presence of a transition between them, perhaps through the presence of a subspace. Third, transparency considers the ability to know what is going on at ‘the other side’. When there is little, the other side can remain a mystery rather than a legible space. Fourth, the mode of accessibility. In the city this often comes down to the interface being penetrable by cars or pedestrians, and in some cases bikes. Who can enter and by which means has a presumed effect on the private-public interface, similar to Gehl’s speed of moving in the city. The use of the assemblage theory means that public-private interfaces can be defined by the interactions and combinations of these variables resulting in types of interfaces. Although the variables here focus on a inside-outside interface, it can also be relevant on a larger scale. Gehl gives in ‘The life between buildings’, besides the notions of hard and soft edges on a larger scale, also attention to the gradient of the public-private interface (figure 5). Rather than a very lawful approach on what is public and private, the public-private interface can be stretched over a larger area and be more based on feelings rather than laws. A main street may feel very public, a residential street semi-public, a courtyard semi-private and a house a private area. Gehl notes that these transitions and feelings of areas are necessary to distinguish certain areas within a neighbourhood. Gehl argues that it gives a better sense of belonging and security within residential areas. Generally however, there should be gentle transitions between these different public characters of place in a neighbourhood, which consists of transparent and legible transitions while being clearly demarcated (Gehl, 1987). The publicness of a forest within the city, even if it is a nature reserve, is very appreciated in Sweden. The public-private interface through several gradients of residential areas and the public forest has to be considered in design.

Above, the public-interface is often described through an inside-outside perspective. This can also mean an interface in discipline when designing these places, the interface between
landscape and architecture. Berrizbeitia & Pollak (2003) point out that this specific interface works through several 'operations', conceptual approaches to both disciplines. Reciprocity ‘levels’ the playing field for both architecture and landscape, nullifying the hierarchy between them and marking them both as constructs. The operation of materiality finds common ground between the two disciplines, since they are both concerned with shaping the physical environment. There is an operation on thresholds, focussed on establishing a specific place of transition between the inside-outside interface with similar features as the previously mentioned thresholds. The fourth operation is that of insertion, putting the local inside-outside interface into a larger context, reconfiguring the urban continuum by creating new breaks in it. This is similar to the last operation, called infrastructure, that creates new connections that do not necessarily fall within the bounds of architecture or landscape. What makes the operations of Berrizbeitia & Pollak interesting is the connections between the physical interface and the interface of practices, and how they both influence each other.

What makes this work interesting is that it attempts to construct a common language between two design disciplines. Commonly however, there are barriers between disciplines or departments in urban and landscape planning and design. This is inherent in planning as it has historically been concerned with the spatial separation of functions. These kind of borders in planning and design are all social constructs, which have their effect on the physical environment. For example, attention on effective urban ecosystems management have been marginal because it lies beyond the border for urban planners, but also for ecologists (Sandström, 2006). A border is meant to divide, and when that means a divide in ideas or disciplines, it can result into a divide in the urban landscape as well if said disciplines are concerned with the city. And although we need to divide certain things to make landscape planning and design possible considering the complex and holistic nature of the city, it can result to mismatch and little attention on the ‘border’ itself, whether that border is institutional or in the physical environment (Steele et al., 2013).

The irony of this also lies in this literature review where the interface has more or less only been discussed through the scope of urban design literature. And although urban design does consider a wide range of knowledge fields within its theory, even though not explicitly, some points about interfaces in other disciplines can help make things more clear. Specific focus on edges and interfaces lies in biology, specifically ecology, where edges and interfaces between biotopes play an important role in ecosystems. The ‘edge effect’ in ecology concerns the large biodiversity that is present at the interface of two different biotopes. Exactly the transition between two different biotopes can sustain specific and interesting species. Sometimes the interface can be a specific biotope itself, called an ‘ecotone’. Examples of these are shrubs at forest edges or banks of waterbodies. These transitional zones can change over time and can be a couple of meters to several kilometers wide and have a dynamic nature by being influenced by its meeting biotopes over time (Dee, 2004). It is interesting that several urbanists have adopted some of these terms for explaining people’s behaviour in public space. After all, humans are an animal species themselves. Gehl (1987) talks about the ‘edge effect’ when speaking about people’s behaviour of ‘sticking’ to the edges of public spaces rather than locating themselves centrally when sitting.
or waiting. This finding is similar to some theories found in environmental psychology theory, such as the ‘prospect refuge theory’ by Appleton (1996), where people prefer places that have cover in the back and openness in front of them. Another similar term used in both biology and (recently) urbanism is ‘thigmotaxis’, basically meaning ‘contact loving’, but also the urge to stick to edges. A mouse running along a plinth of a wall is a good example. Although drawing links between human behaviour and ecological theory is a bit risky, it can help to at least explain some human behaviours near physical edges and interfaces.

Considering the literature above, we can derive a large range of features and typologies an interface can have. These will be listed as a possible typology for determining interface types and characteristics. These types are mostly based on a phenomenological effects of interfaces, with varying degrees of explicit physical manifestations. Most types are dichotomies of two opposing characteristics of interface manifestations. These are not necessarily binary, they can also be a scale with intermediate characteristics.
• **Closed versus open:** In the different kinds of wording of an interfaces, some words are already defining if an interface is closed or open. An interface can be a border or even a barrier, meaning the interface as something that is not crossable or permeable. Closed interfaces can intend to keep something out, or keep something in a certain area. Permeability, interlocking, entrances, portals are all indicators of an open interface, although the interface may not be crosseable along the entire interface but only at certain points. Closed versus open can vary in degree and location. It does not only have to do with physical barriers, but also with how inviting the interface is to cross. This has to do with feelings of publicness and privateness, where a person considered the question whether he or she is welcome to cross the interface.

• **Connecting versus separating:** An interface can mark a meeting between two phases (a connecting interface) or mark a separation between two phases. A connecting interface draws people, views and activities towards the interface itself, whereas separating interfaces mean to draw people away from the interface. Another type of wording for this is whether two phases face inwards or outwards. An example of this can be buildings, that either have their entrances facing away from an interface or have their entrances facing outwards, towards the interface. In Lynch’s wording, a connecting interface can also be called a seam, stitching together two phases letting them meet. The shopping street that lies in between two districts is a good example of this. Although similar to the open or closed interfaces, a separating interface does not have to be closed.

• **Hard edge and soft edge:** Interfaces can transition from one phase to the other either abruptly (hard edge) or smoothly (soft edge). A hard edge can often emphasize the contrast between two areas, whereas a soft edge marks a transition. A soft edge can be a gradient, a ‘dissolving’ of two phases into each other.

• **Rugged versus smooth:** Somewhat similar to the hard edge or soft edge, however this has to do with the length and bending of the interface rather than the width or form. A smooth interface has little curves along the two phases, whereas a rugged interface can be wavy, and can make ‘bays’ or ‘interlocks’ into another phase like a puzzle piece. A rugged interface can ‘wedge’ into another another phase making the both phases appear close by and interlinked, but can diminish the qualities of a phase of a large area as well.

• **Control versus laissez-faire:** Edges are often ignored by designers and planners, but that does not necessarily has to be a bad thing. Described by Shoard (2000) as ‘edgelands’, uncontrolled areas can stand for freedom and variety. This describes a laissez-faire approached, letting an interface develop spontaneously with limited or no planning or design controlling it. However, spatial design can add a lot of quality to these spaces as well of course.

• **Thresholds and paths:** Physical interfaces are often perceived as linear elements, such as edges. This means they can take the form and function of other linear elements, such as paths. A path being an interface means an infrastructural element marking an interface between two phases by being present in between them. An
opposite to this presence of a path is the threshold, where paths are not parallel with the interface themselves but perpendicular, permeating the interface with a connection from one phase two another instead of along the two phases. Thresholds can take the form of individual points along an interface, being entrances, portals or crossings. A path along an interface can also branch off along to phases, combining it with thresholds. The hierarchy of the infrastructure however defines which of the two is dominant.

- **Lineair or area based:** Although interfaces are often perceived as linear edges, a line can also have a width, making it an area. This means a difference of being a one-dimensional feature or a two-dimensional one. This also comes down to the legibility or imageability of the environment, where something may be seen as an place or an area itself, rather than the edge of a place. An interface can be an ‘in between’ area or a ‘buffer zone’, with its own identifiable characteristics that are present in neither of the neighbouring phases.

- **No interface: the area as a whole:** The presence of an interface means a difference in an area, meaning two phases can be defined. However, an interface can also be absent. This means that two phases are seen as a whole, and although there can be internal variation, these phases still add up to create a whole. This characteristic can also have intermediate forms, where there can be a hierarchy of variation. An area that is a whole, but can be divided into sub-areas.

- **Variety vs consistency:** An interface can be characterised by certain things along its entire length between two phases, but can also internally vary. An interface can have some parts that are open, other parts that are closed, some parts wider and some parts thinner. Variety can make for a more interesting interface which can be used in more ways than just one, but can also be confusing or chaotic. Consistency can create a strong character and be easily legible and clear in use, but can also be dull and to narrow in function.

- **Vertical difference:** One- and two-dimensional interfaces have already been discussed, but interfaces can also be defined by a third dimension. A contrast or difference between vertical and horizontal elements are one of the most obvious presence of edges, such as the sides of buildings, or a forest edge. The ground itself can also mark an interface when differing in height: a shallow slope or a steep cliff for example. This difference can give the perceiver also an indication how to relate themselves to a phase. Next to a wall, a person will very likely face the open side rather than the wall itself.

- **Interfaces in disciplines:** Interfaces do not only appear in the physical realm, but can also be present between disciplines when it comes to designing or planning urban landscapes. Interfaces in disciplines can also be hard and soft and open or closed, and can determine the outcome of a spatial interface.
Figure 5: An urban green area right behind the city hall of Santiago de Compostella.
THEORETICAL FRAMEWORK

Quality in urban woodlands and residential areas

Characteristics and types of interfaces are not standing alone. They are the result of the actions or non-actions of those involved with the urban landscape, whether those are designers and planners, or politicians and residents. Each of these actors have their own views and ideas on quality. These ideas of quality echo through in the establishment and perception of spatial interfaces. Since the interface lies in between two areas or phases, they can also be a result of the qualitative assessment and intervention of one or both phases. This chapter will attempt to give an overview of the term quality in both urbanism and urban woodlands, making it representative of the Årsta case. The chapter will result in a list of notions of quality within these contexts. These notions of quality will be linked to the interface types in the next chapters with a spatial analysis, secondary document analysis and interviews, and will exemplified in visual approaches to interface design.

An interface is present between two phases that are perceived as being different. The case in Årsta is about a neighbourhood, being part of the city and an urban woodland, being part of nature. The supposed dichotomy between nature and the city, has been undergoing a transition the last century. Industrialisation with the rapid expansion of many cities led to cramped, dirty, unhealthy cities. Pioneers in landscape architecture and urbanism like Frederick Law Olmsted provided a public park as the antidote. A representation of nature in the middle of the city was envisioned as everything that the city was not; the urban
victim could ‘escape’ the city and get ‘healed’ in the park. Even though the revolution of the public parks meant that cities would change forever, the technological advancement in construction and economic interests caused people and cities to be divided further. Urban development has sometimes not included nature as an integral part of the city, with expansions of the built environment ignoring ecological and hydrological systems and further distance being created between the city dweller and indigenous flora and fauna, clean water, food and other resources. The environmental revolution in the 60’s and the increased focus on the environment in urbanism in the 80’s and 90’s caused a shift in this type of thinking. Cities became seen as being an integral part of nature, but also vice versa. In her 1984 essay ‘The Granite Garden’, Spirn makes a case for a city that is a part of nature itself. In terms of urban design, similar messages were conveyed by Ian Mcharg, making a case for designing with nature, taking the natural system as the key component in spatial design. These ideas can also be seen within the viewpoint of Landscape Urbanism, where natural landscape processes are at the basis of a city and continuously flow within them (Waldheim, 2006). The impact that rapid urbanisation of today together with the impacts of climate change also mean that city building has to be more integrative with natural processes, considering them if the goal is a livable environment. The manifestation of nature in this sense can come in many forms however. ‘Nature’ or ‘green’ in the city are extremely broad terms, and need narrowing down for operationalisation for urban design and planning. At the same time, the question at hand touches upon the things that makes nature and the city of value, and what their differences are to define the interface between the two.

The manifestations of nature in the city can come in many forms, of which some already are described above. Landscape can serve as the medium through which the dichotomy of the urban and nature can be defined (Corner & Tiberghien, 2009). Urban nature can be highly controlled, in terms designed parks, planted trees, maintained lawns and bodies of water. Nature in the city can also be present in the forms of green areas were spared from urban development. These areas can be relatively untouched by humans, but can also derive from historical production forests or hunting grounds. A forest in the city, even if designed by people, is in an urban context however relatively nature-like as it contrasts with the heavily controlled and designed built environment (Konijnendijk, 2008). It can also be the city itself, which is the more integral character that Spirn (2005) also describes in her essay, with nature being the thing that pervades the city in every sense, being also the air we breath and the earth we live on. The perception of what nature, and more specifically urban nature, is is of the question here and defines which types of urban nature include. Spirn believes that nature is a continuum with the city at one end and wilderness at the other. And although humans are a part of nature as well as their cities, the juxtaposition of green area and the built environment makes a relative dichotomy on a local level, especially when that green area is not intensively cultivated. When it comes to comparing this kind of nature to nature outside the city, ‘urban nature’ falls into its own category as the results of the research of Rink & Emmrich (2005) show. Different kinds of urban nature like parks and urban woodlands over the long history of city building has resulted into culturally embedded ideas of urban nature. This also closely related to what is viewed as their use and perceived aesthetics. The context of the city does however puts limits to urban
nature, whereas the perception of wilderness or spontaneous nature is not often acknowledged, partly because this type of nature has not become embedded and recognised as nature that is a part of the urban fabric and lifestyles. In other words, nature has to be culturally embedded in some way, like a historical park or a park created by the neighbouring community for people to see its value (Rink & Emmrich, 2005). Some of these types can also be historically and culturally embedded, in such an extent that they become a type of itself. A predominant type in Sweden, but also in other European countries is the urban woodland.

Although the place of nature in the city and the dichotomy of city and nature, similar to the dichotomy of culture and nature is discussed, the urban woodland is a special case. Especially in Sweden, the place of woodlands in a nature versus culture dichotomy is that it is both, since the idea of this dichotomy in Sweden are thought of to be two sides of the same coin (Svensson, 2006). But urban woodlands, forests that are situated in an urban environment are even more so to be classified as cultural landscape because of their context. Konijnendijk (2008) therefore puts the emphasis on urban woodlands as cultural landscapes, that are heavily embedded into the urban thread and life. Their history, location and use by urban dwellers makes these places into a sort of nature/culture hybrid that falls within a category of its own. In return, urban woodlands are not only cultural products, but culture is also partly defined by forests. This especially is the case for Sweden, which has an abundance of forests. Andersson (1997) even states that in very little countries the natural landscape has had such a large effect on cultural expressions as in Sweden, also within creative disciplines like spatial design. The nordic light, the soberness of the landscape as well as its ancientness, being formed by ice, are landscape characteristics which have been at the basis of a spatial design where there is always a light tread, and the intention to emphasize inherent local traits of the landscape instead of changing them. The role of forests have always been cherished in

Figure 6: The historic city centre of Den Bosch (NL) right next to the countryside.
design, experienced by the Swede as a place which is not entered, but a place one sinks into (Andersson, 1997). This causes Swedes to be culturally connected throughout their lives, which starts early. Even in early education, direct encounters with nature has been an important part of the upbringing of children in Sweden, with the intention of teaching sustainability and environmental awareness among other things (Sandell & Öhman, 2010). The cultural importance of urban forests is also expressed through the research of Home et al. (2010), in which a recurring question is posed whether the appreciation of nature is innate or culturally developed. Their findings include that in cities, these boundaries of ‘cultural assessment’ and ‘biological assessment’ are blurred.

Even though the urban woodland is generally approached as a very cultural landscapes, it takes the form of an ecosystem in which there is a diversity and interaction of flora and fauna. Wilderness, depending on one’s perspective, comes in all shapes and sizes. The city houses an interesting ecosystem, which can consist of species of plants and animals which are adaptive to the harsh environment of a city, or opportunist, benefiting from certain urban characteristics. A shift has occurred from seeing the urban context as a threat of biodiversity, to a complex and unique ecosystem itself, to which biodiversity concepts can be applied to (Savard et al., 2000). And with urbanisation and biodiversity loss happening around the world at the same time, urban ecosystems have been taken more seriously, particularly urban woodlands. Urban woodlands contain high levels of biodiversity, throughout different scales and types, including the presence of endangered species (Alvey, 2006). The urbanised Stockholm County contains around two-third of species that are red-listed (Colding et al. in Alvey, 2006). The management of urban
forest areas has also resulted in areas being perceived as core areas or corridors. But this kind of ecological management strategies can sometime result into conflict, as there can be development pressures around these areas, but also because urban woodlands serve many other functions. People-wildlife conflicts can easily occur because the pressure of both humans and flora and fauna is high in the same area (Savard et al., 2000). This way, ecological management strategies can sometimes clash with aesthetic management of forests, as Tyrväinen et al. (2003) show in urban woodlands in Helsinki.

The fact that urban woodlands do not only serve a single function has been acknowledged through the term ‘ecosystem services’. Bolund & Hunhammar (1999) list the urban ecosystems, of which urban woodlands are one, and their respective services that are relevant to Stockholm. Recreational and cultural values, air filtration, water filtration, noise reduction, regulating microclimates and improving drainage capacity are all services which contribute and are vital to a good quality of urban life. Elmquist et al. (2004) add to that list nutrient retention, pollination and seed dispersal. In their research of the Royal National City Park (Swedish: Kungliga nationalstadsparken) they find that recreation is among the most important ecosystem services here, which also goes for many other large green areas of Stockholm (Sandström, 2002). They also stress the importance of management for better connectivity between green areas to maximise the effect of ecosystem services. However, ecosystem services are understood differently among spatial experts and add more complexity to land use planning in Stockholm, making the concept hard to implement into practice. The densification for Stockholm stresses the importance of the implementation and further acknowledgement of ecosystem services in the city (Kaczorowska et al., 2016).

The Royal National City Park in Stockholm has been a popular case for researching the role of green areas in the city. In management, use and perspectives on the park, the qualities in it are not always rated highest in terms of traits related to ecosystems or culture. The social value of the area has been expressed by a civil society organisation in and outside the area by weaving ‘protective stories’ to safeguard its protection from exploitation, often linked with links to cultural history. This research by Ernston & Sörlin (2009) describes these ‘protective stories’ as narratives that attempt to legitimise protection of these areas, which are socially produced by those involved in the area in different ways. Protective stories show that government appointed qualities do not always cover the full quality of green areas, since many qualities are defined and upheld from the bottom up. Who gets to decide to define qualities in green areas also plays a role in its defining the overall quality of a certain area. This is also important because social values of green areas itself are often underrepresented in management and decision making on urban woodlands. This is partly because these are difficult to inventorise. A study in Helsinki however used GIS and surveys to designate favourite spots in urban woodlands and combine them with the most prominent features in the appreciation of these places (Tyrväinen et al., 2007). In order to possibly solve both underrepresentation and ineffective social value mapping of urban green areas, Ernston et al. (2010) suggest the use of ‘scale-crossing brokers’. These mediators form the link between city authorities and local citizen networks on a meso-scale to communicate the management of green spaces in Stockholm.
The presence of social networks in forests can come from different kinds of users, such as environmental protection groups, allotment garden associations, or even from residents in neighbourhoods nearby. And this involvement does not only occur within the forests itself, but also where urban woodlands meet residential neighbourhoods. Fors et al. (2018) describe these interfaces as ‘ecotones’, but not solely in the ecological sense. The point of two overlapping phases in an ecotone can provide something unique and rich, in this case where residents can co-manage these ecotones to create an interesting transitional zone. A case study in Denmark showed that this cooperative management between private (residents) and public (city or forest authority) can provide varied recreational areas, but also acknowledged tensions as the ‘rules of the game’ have to be made clear. Negligence of the management of these interfaces can result into residential encroachment into the forest. These kinds of negative effects on forest qualities can be managed by fences or buffer zones, but have to be made in consideration with the accessibility of forest areas (McWilliam et al., 2010).

In Sweden and other Nordic countries, there is a strong tradition of publicness and accessibility of nature, whether that is within the city or outside of it. Allemansrätt (the right to roam) and friluftsliv (the outdoor lifestyle) have had its impact on ecostrategies and how nature is perceived (Sandell, 1991). An opposite of this idea and accessibility and presence of nature is that of the United States described by Hester (2006). In the plea for more ecological democracy in American urban design, accessibility is an important aspect. This counts for people living right nearby urban nature, but also for other urban dwellers who do not have the time or resources to get out of town in pursuit of natural environments. But in Sweden, there may be parallels but also differences between the right to roam and urban public space. Swanick et al. (2003) point out the beneficial social effects of green space as being accessible for all, and providing a neutral ground in which an urban community can develop itself. Urban woodlands can possibly be the the place which can be more acknowledged as urban public space besides only nature. In terms of urban form, green space accessibility in Stockholm differs between high density central urban areas and the presumably green suburbs. Ståhle (2010) found that the accessibility in more central urban areas of Stockholm was actually higher than the suburbs far away from the centre. The accessibility here was also measured by a space syntax methods, which show that an infrastructural network is very important as well for accessibility rather than just general proximity. Accessibility was also measured in perceived accessibility: were these areas also accessible in the minds of the local residents?

Proximity to urban forests is highly valued by urban residents, but it comes at a price. Both a certain decrease in distance to forest areas (proximity in distance) and a view from a dwelling on the forests increased housing prices in Salo (Finland) each by around 5 percent (Tyrväinen & Miettinen, 2000). One can ask the question the role of the forest in terms of a purchasable amenity for city dwellers, possibly decreasing its publicness. The perception of green areas as possible exploitation areas seems old fashioned, but is relevant again today with the growth wave Stockholm is facing. However, the acknowledgement of the benefits of green areas have been long present before in Stockholm, and also lists its importance for the structure of the city itself. Urban structure, the way in which green areas
help shape the physical city and urban life, but also city identity, the way in which green areas enhance awareness of this city structure making the city stand out are important points for Stockholm (Boverket in Sandström, 2002). This relates to the term ‘green infrastructure’ that emphasises the role of a multifunctional component that helps to shape the structure of a city. Infrastructure in this sense can also relate to a literal infrastructure, the way in which people use green areas to move on foot or by bike for example (Sandström, 2002).

Zooming in from the urban scale to an individual level, green spaces have been proven to have positive effects on mental well-being, restoring stress and attentional fatigue. Overall being present in green areas can improve physical health and mental health (Groenewegen et al., 2006). Although many literature on this is relatively recent, the restorative effects of nature have been known for a longer time in certain cultures. In Japan, Shinrin-yoku, meaning ‘forest bathing’ has been culturally embedded as a restorative activity (Park et al., 2010). It should also be noted that nature can adversely also cause stress, by inducing feelings of fear and anxiety. This may be in an urban cultural context the fear of criminals, animals (like large insects), together with low density of people and places (in a forest) to hide and conceal oneself (Konijnendijk, 2008). Another explanation for this is that it is a more deeper, primeval fear that is embedded into our minds (Groenewegen et al, 2006; Konijnendijk, 2008). How people perceive urban woodlands is two sided, but in many cases appreciated in terms of aesthetics and positive feelings on an individual level. These feelings in a Nordic context most prominently include tranquillity, naturalness and the feeling of being in a forest (Tyrväinen et al., 2007). The preferences for the physical traits of forest, also in terms of aesthetics include large trees and a mixture of species, but also the occasional presence of views and openness (Gundersen & Frivold, 2008). Urban woodlands have a complex interplay of qualities, but these are dependent on how they are viewed and by who. These qualities are well researched and versatile, but have proven to be difficult to be implemented in planning policy, even so in green Stockholm in which the forest holds such an important cultural status.

On the other side of the interface, there is the urban. In this case, the residential neighbourhood. Contradictory to the urban, this phase is heavily controlled and designed, formed by an interplay of urban designers, politicians and residents. The notion of quality in urban design lies at the basis for the discipline itself. The point of urban planning

Figure 8: An attempted hybrid of forest and park (Dzintari Forest Park, Jurmala (LV))
and design is to create qualitative environments for people and the environment. This notion of quality is not necessarily universal, but depends on the local context of the designed area. As discussed before, the notion of quality in design is also highly subjective, making it difficult to objectively assess. Dempsey (2008) however provides a good overview of the notion of high quality in the built environment, acknowledging the subjective nature of quality. Quality in design can be researched through different traditions of thought and design, focusing on quality in aesthetics, social dimensions and sustainability. The traditions consist of indicators of quality which are representative for those schools of thought. These traditions can be classified chronologically as the ‘visual-artistic tradition’, ‘the social usage tradition’ and the ‘making places tradition’ (Carmona et al., 2012). The visual-artistic tradition is focused on the visual and aesthetic built form, a narrow and architectural approach. Noteworthy representatives include Le Corbusier and Camillo Sitte. The social usage tradition includes the people’s use, experience and perceptions of the built environment, with the previously mentioned Kevin Lynch, Jane Jacobs and Christopher Alexander as its most famous representatives. The making places tradition is the most modern one, putting emphasis on turning spaces into places in urban environments. Placemaking for people is the main goal, putting its focus on the human scale and genius loci, while also synthesising the previous traditions. Dempsey (2008) compiled the points of quality from each tradition together with the residents’ perceived qualities into a list of features. These are high residential density, mixed land uses, accessibility, connectedness and permeability, legibility, attractiveness, inclusiveness, maintenance, natural surveillance, character and perceived quality of the neighbourhood. Some of these features relate to the qualities of urban woodlands as well, but also brings in some important new features. Legibility, diversity, inclusiveness and character are some of these, which are important for orientation, justice, and the distinctiveness of places. Some of these terms are also similar to that of indirectly related disciplines to urban design such as environmental psychology, like the landscape preference matrix of Kaplan & Kaplan. This matrix features variables that determine out preference of landscapes which are legibility, mystery, complexity and coherence (Kaplan & Kaplan, 1989). This goes to show that the urban design discipline is seated on individual general perceptions to good places. Ewing & Clemente (2013) also made a list of features of measuring good urban design quality, in which they included environmental psychology as well, which resulted in a list of fifty-one perceptual qualities, of which they shortlisted eight most important indicators. These indicators are imageability, enclosure, human scale, transparency, complexity coherence, legibility and linkage. Again, these indicators seem similar to the listed features of Dempsey (2008) in their respective design traditions (Carmona et al., 2012).

This shows that even though the concept of quality is subjective, we can make some universal estimations about good quality built environments. Even though designers may not use these in a direct way, they are always implicitly present in designs for the built environment. Yet the medium through which these qualities become visible are not only the new physical elements brought into the environment, but also the already present site and its genius loci. Considering all that has been said both about urban woodlands and urban design, a list of qualities can be extracted which are relevant to the case of
Årsta. This lists also attempts to cross the gap between urban and nature, taking an approach of qualities which applies to both the urban and the natural landscape. These qualities are in design and planning translated into physical design elements, such as different types of interfaces listed in the first part of this theoretical framework. The following list of quality can serve as a method for analysing qualitative intent when preferring a certain type of interface in Årsta.

- **Safety:** Feeling safe in both urban and natural environments is important in assessing its quality. In urban environments, safety can be perceived as a safe traffic situation with little and slow moving vehicles. Social safety can also be enhanced by 'eyes on the street' (Jacobs, 1961), by the presence of people on the street and the amount of social control. In woodlands, safety can be a quality overcoming the fear of woodlands, which can be fear of criminals, animals or getting lost.

- **Legibility:** Being able to oversee and understand the area one is present in is important in forming a ‘mental map’ of the area. Finding one’s way and back again makes sure people are comfortable and can move efficiently in the space. This can relate to the network of infrastructure, which has to have some sort of hierarchy and logic to follow. What is also important is the presence of views and open spaces, so that one can oversee the area easily.

- **Accessibility:** Accessibility is important in terms of how easily and effortlessly someone can get into a certain area. This does not only envelop general distance and a route that is easy to follow and access, but also how accessible someone perceives the place to be in relation to their abilities. This is especially important to people who may face limits to their abilities and resources. These can be the elderly, the disabled, children in terms of their abilities, or low income groups in terms of resources.

- **Publicness:** Somewhat related to accessibility, but publicness in this case means how comfortable someone is in a place and the perception of the place to being welcoming for everyone. This is opposed to privateness: the feeling that one is intruding on the land of someone else. It also means inclusiveness to a certain extent, whether someone identifies as being part of the public.

- **Tranquility:** Especially relevant for forested areas, but also for some neighbourhoods, people enjoy areas that are peaceful and quiet. Tranquility can also be linked with safety in neighbourhoods or the feeling of being in nature and wellbeing in woodlands.

- **Feeling of nature:** The feeling of being in nature is a collective term for the positive and restorative effect someone has when being in a natural area. Urban environments can incorporate this feeling to a limited extent by including street trees and other types of greenery, but the main point of this feature is feeling surrounded by a natural environment, rather than just small representations of it.

- **Education:** Especially related to natural environments like urban woodlands, interactions with certain types of landscapes and its flora and fauna in a playful and explorative way can greatly
benefit the development of children and youngsters. These positive effects range from learning about sustainability to risk-taking.

- **Recreation:** This quality is mostly related to urban woodlands, but can also be present in the built environment in terms of sightseeing and exploring cities. Recreation can take place in many forms, including physical activities like hiking, cycling and swimming, but also more relaxing activities such as sunbathing, reading or watching wildlife.

- **Ecosystem services:** Besides recreation as an ecosystem service, natural elements can provide certain benefits to the urban environment in a large number of ways, including mitigating urban climate, carbon storage, air filtration and pollination. These natural mechanics indirectly improve the urban quality of life and make the city a liveable place.

- **Purchasable amenity:** Urban woodlands within a city, but also neighbourhoods fall under speculation for densification in which certain qualities and characteristics of the environment can be used to create monetary value. Urban woodlands, although often public, can heighten the property values around it expressing its value and an amenity. This is a controversial quality, because not everyone directly benefits.

- **Identity:** An important quality of any environment, whether it is a built or natural one, is to create character and distinctiveness from other environments. This is what makes certain environments unique and interesting. Identity can work through different scales: an urban woodland or neighbourhood can have a distinctive identity in relation to other areas in the city, but also contributes to the overall identity of the city itself. An identity provides the means for residents and visitors to become attached and associated with a place.

- **Variety:** To make an environment interesting, it should have besides as certain character also some variety. Monotonous environments are deemed not to be very interesting to perceive or engage in. In urban environments this can mean a variety of uses (commercial or residential) or in building typology. In woodlands this can be a variety of vegetation and the presence of some open spaces and views.

- **Ecology:** The impact of the urban environment on a natural one can distort an ecosystem, which is why maintaining ecosystems and improving biodiversity is important, both in urban and more natural environments.

- **Cultural importance:** Some types of environments, both urban and natural, have their place in the culture of a social group, city or country. This is important for making people feel attached to certain places and to identify with them. In Sweden for instance, forests, rocks and water have an important place in culture, especially for Stockholm.

- **Aesthetics:** Beauty is in the eye of the beholder, so this feature is somewhat subjective. However, attention to detail in design and the usage of recogniseable aesthetic elements can be valued qualitatively universally in urban
environments, although there can be debate on what is beauty. The same goes for natural environments. Whereas someone would appreciate more managed and cultivated nature, others would appreciate a more wild image.

Having made a list of interface variables and a list of features to motivate high quality built and natural environments in an urban context, connections can be made between these typologies over the next couple of chapters. Using the case of Årsta, an attempt will be made to see how certain qualities are linked to certain characteristics of interfaces.
A spatial analysis of Årsta

Introduction and site history

Årsta is a relatively centrally located residential area of Stockholm and one of the first suburbs of the city. Before this suburb was built, Årsta was a forested hillside close to a bay (Årstaviken) on the northern side where several farms and estates were located, such as Årstagård (a small estate) and the Skanskvarn (Skans mill), as well as several old koloniträdgårdar, areas of allotment gardens from the early 20th century. In the 30s and 40s of the 20th century, the area became the focus of the urban expansion of Stockholm. These times were defined by social reform in the country, having its effect on housing in the form of Folkhemmet, People’s houses.
Figure 9: Orrhammaren as seen from Örrfjärdsgränd.
At the same time, economic growth was picking up due to industrialisation and Stockholm was rapidly urbanising and in need of new residential areas. In architectural practice, modernism propagated by Le Corbusier and CIAM made its way to the Nordic countries and was adapted to the Swedish context. During these times, parallel rows of uniform flats, called a lamellhus, of three to four stories high, placed with respect to the existing landscape features were becoming a new norm. A manifesto issued in 1932 called for typical modernist features for housing, such as equally sufficient presence of sun and air in between the houses to ensure the health and equality for its dwellers. This caused apartments to have windows on both sides, causing flat lamella blocks of around 10 meters deep, a type of lamellhus named the smallhus (narrow house), and the flats to orientate to the south-west (Hall, 2003). Aspects of this idea of urban design can clearly be seen in the first plans of Årsta.

In the late 1930’s the uniformity of parallel lamella housing was somewhat criticised in Stockholm for being monotonous and being absent of a sense of neighbourhood and community. In terms of housing, this called for more variation in housing types and infrastructure. Some main roads connect the area from east to west, and branch off into smaller roads which follow the existing topography. These smaller roads connect clumps and clusters of variations on the lamella housing, such as tower blocks, that sometimes orientate to the south west, but generally follow the local landscape features. The design treads lightly about the topography and existing natural elements, including pine trees and exposed rock, and despite the parallel placement within the clusters appears as rather informal. The steep slope on the northern side of Årsta was unbuilt, besides its respect for the existing nature the sleep slope which made it unsuitable for building.
and because of Strandkydd, the coastal protection law which required these areas to remain untouched. There emerged a sentiment that neighbourhoods should have meeting places with identity, which in Årsta led to the creation of its neighbourhood centre during the construction of the neighbourhood in the 40’s. Whereas suburbs used to have several ground floor shops spread around and a connection to the city centre, the new idea was to have a community centre with shops, markets, communal and cultural functions. The plan for the centre of Årsta was one of the most notable examples of this then groundbreaking phenomenon. Årsta was not supposed to be a ‘dormitory town’ but would form a socially vibrant community. An informal, colourful and playfully designed centre was designed around the middle of the middle of the neighbourhood, but had trouble succeeding because of the amenity costs and the competition from the nearby city centre. Commercial functions in later years changed and also spread in more places around the neighbourhood again, although several functions stayed at Årsta torg like the community centre and a cinema. Housing additions were made piece by piece throughout the next decades. A notable example is Orrhammaren, a round-shaped estate added in the 60’s in which was designed during a time of experimentation with non-rectangular blocks, which curved as to provide views and daylight.

**Analysis of the current situation**

Striking about the first design for Årsta (figure 10) is the generosity in the amount of open space and the placement of the buildings. There is no overall uniformity, but each cluster of houses feature a specific grid and orientation in which the rows follow the topographical features of the site. The variation between the lamella housing and the high rises, and other experimental housing types creates an interesting, playful variation of housing types. Even though many parts in between have been ‘filled in’ with new housing in the last decades, the area still appears rather open and veined with green areas, whether those are mountainous pine forests, lawns or gardens. However, the original plan seemed to pursue a idea of ‘living in the forest’, where there has been no strict demarcation in what the neighbourhood is and what the forest is: it seems to be one and the same. The additions and changes in housing that have been made in the decades after the original plan, have made a clearer distinction of what the forested part is and what the residential part of the neighbourhood is.

Both the height differences and orientative variation do not make the area too monotonous, which is an often heard point of critique on many modernist suburbs in Stockholm. But also the variation in housing types and styles makes the area interesting and varied. New additions have been made along somewhat similar lines in placement as the original design, by placing them in groups. The groups additions that have been made on the northern side are often simultaneously dead ends for car traffic and are located around a central parking lot. Other, older groups are often located along sideroads that loop back to the same main road. Together with the curving and somewhat irregular road network as a whole these loops, dead ends and loops for motor traffic create an infrastructural environment that has little car traffic since it limits itself only to the residents of Årsta. Even though it may sound like the dreaded cul-de-sac which is prominently featured in highly criticised American suburbs, the term ‘dead end’ only applies to cars here. Beyond road
loops and parking lots, an intricate network of formal and informal footpaths connects both the housing within the neighbourhood, but also the forest and adjacent neighbourhoods. These make local amenities like the forest, shops and schools easily and safely accessible.

The neighbourhood is in this way also very family friendly, with nearby green areas and safe play spaces for children. The amount of families with children today has not always been present, which is the reason that among the additions of new buildings on the northern side includes several schools and kindergartens. Another notable amenity on the northern side is the Årsta idrottsplats (IP), a football pitch on which mostly training takes place for local football teams. The forest itself contains a network of footpaths which connect to some open spaces of the road network of the residential area. These paths partly follow the lines of the topography of the site, but also go downwards to the path that stretches from east to west along the waterside. This side is a popular location for many joggers, but also for picnics and relaxing, also including several piers for swimming. Along the waterside, to the sides of the area are also two docks for recreational boating. The forest itself features many variations in height and vegetation, as well as several different locations of cultural heritage, like the earlier mentioned koloniträdgårdar and estates, but also newer places like small vegetable gardens of schools and a playground. The clear presence of cultural amenities in the forest shows the intertwinedness of nature and culture in Swedish society.

The variation of the area on a large scale is also present in the smaller scale. Generally the road profile is very generous in terms of size for all types of mobility. The street has roadside parking and the houses are somewhat set back from the sidewalk. The width of the road is not necessarily negative because of the low amount of car traffic in the neighbourhood due to the road network, but rather creates a generous cycling area and somewhat of a play space as well. Some of the housing additions instead have large parking lots, which is not a very attractive sight. In the older parts, parking has been more modest and in smaller scale. Where possible, there are small courtyard-like inner gardens which fulfill a social function, besides featuring small gardens of residents, waste collection containers and bicycle parking. The houses itself, although seemingly sober, feature many variation in colour and typology. Most houses follow the archetype of the earlier mentioned Swedish ‘smalhus/lamellhus’, but several of these are variations on this type with balconies, larger windows, or galleries and possible commercial functions in the plinths. In the forests, the paths are generally well kept, although some paths are quite steep or rocky. Some paths are paved, others more like small trails. The variety in maintenance causes some parts of the area to appear more wild, like a rocky, unpaved trail, as opposed to certain parts that are somewhat more like a park (these are often the parts closer the the housing and schools), that have lighting, benches and lawns.
Analysis of the current interface

In the previous pages, the area has been generally described as Årsta as a residential neighbourhood with an adjacent forest, somewhat separate from each other. However, one of the great qualities of the area lies in how the housing and the forest relate to one another. This current green-red interface in Årsta is somewhat varied, but also to a certain extent consistent in its physical expression within the urban and natural landscape. The eastern side of the area is bound off by the Skanstullbron, a composition of multiple car- and railway bridges across the Hammarby shipping lock. Beneath this area there are several points of access to these bridges as well as underpasses. These areas are not very well maintained or monitored, which in combination of the darkness of these tunnels could make someone feel unsafe. The metro station Gullmarsplan close to a local shopping square with the same name causes some liveliness in the area, as Gullmarsplan is also one of the quickest routes by public transport to the inner city. A busy bicycle route and walkway leads to this station, which is partly used by students of Värmdö Gymnasium close to the station. There is also a small recreational centre and sports complex.
in this area. Both buildings are positioned on the interface of built area and woodland, and facing south towards the neighbourhood. On the northern, forested side are some back roads with parking places, overlooking the forest and the bay below. There are some places with access roads to the waterside and its docks, but more notable a side road leading into the forest that is part of an area of koloniträdgårdar. Between the large buildings of the school and the forest, there seems to be a traditional zones of small allotment gardens with a very significant style, having well kept gardens and red fences along the paths. It seems here that the area of allotment gardens create an intermediate zone before arriving into the actual forest from this direction. Further along the interface the the forested side is higher, whereas along most parts the forested parts are situated lower than the neighbourhood. The vertical difference of the interface between the forest and the housing is generally defined by the forest being on similar level or lower than the housing, except for this hill. The steep area is very mountainous and is also historically significant due to old anti-aircraft placements on top. These areas are seemingly used by the nearby students to hang out, by the amount of trash on top of the hill and some students that are present on the hill. From this area, one also has a spectacular view of Stockholm. To the west of the hill is a primary school, the Skanskvarnskolan. The placement of schools on the interface of the neighbourhood is partly because of necessity (there were no schools in Årsta initially), but also shows the importance of nature in Swedish education with nature right at their doorstep. Around this school there are also some of the smalhu/slamellhus of that were present in the original plan. These houses face the road to the south and have their back to the forest. Here the forest is situated lower than these houses, but between the houses some paths leading into the forest can be found. On the backside of the houses that face the forest, there is a small lawn between the building and the natural vegetation. Many residents have made informal claims on these spaces, by lounger chairs, parked bicycles,
potted plants and bird houses on the trees. The road network of this area is not very straightforward and seemingly logical, also due to the later additions to the existing network. To continue along the housing closest to the forest edge, one needs to zig-zag in several ninety degree turns. For someone unfamiliar with the area, orienting oneself to the forest and the neighborhood may be difficult here. Some of these roads branch off into clear entrances to the forest with semi-paved or paved paths for both cyclists and pedestrians. Besides the housing of the original plans, an addition to the existing housing is also found as a side street of Gullmarsvägen called Marviksvägen. This part features a group of high rises (punkthus) facing around a central parking area and playspace. What is interesting is that this part keeps its distance to the old housing, coherent with the generous amount of spacing and the green veining of area. This area faces partly inwards toward the parking lot, but also towards the forest on the other side with a very broad view. The relation to the forest of this area is not just on a single side of the housing but almost all around, making the area seem like a small ‘enclave’ in the forest. The backside of the high rises facing outwards into the forest again shows traces of small scale use by residents, by the amount of picnic benches and grills. Some small informal paths here lead to the kindergarten close by, again right outside the
forests. Walking into the forest from here leads to a playground which is very much integrated with the woodland around and addresses many different age groups. Both parents with very young children play here on the designed part, whereas somewhat older children play individually on the fringes with sticks and such further into the woods, which can also be noted by the presence of makeshift huts.

Around that area the before mentioned Orrhammaren building complex can also be found. The round shaped estate takes a more literal approach to the relationship to the forest that we saw earlier along Marviksvägen, facing outwards all along the facade with an inner courtyard. The shape is however rather ‘closed’, making the inner courtyard seem very private. Here, the parking is located partly around the outer facade, making its relation to the forest somewhat distant and blurred. West of Orrhammaren is the Årsta IP, a football pitch and sports field with several apartment buildings along its access road. The sports field also seems somewhat like an enclave in the way it relates to the forest, which seems somewhat intrusive because of the relatively far protrusion into the forest. This area is also leveled and bound off by a fence, which makes it a somewhat disruptive element in the east-west connection, making it a bit harder for an outside to find his or her way around. A notable entrance from the neighbourhoods follows the edge of the football field with a wide and relatively busy path. Outside the northern corner of the field is a nice viewpoint with several benches. The viewpoint is made possible by it being on top of one of the steepest parts of the forest.

The part to the west of the football pitch is a large forested area without any formal paths. But looking closer, several small trails can be found in this area, mostly coming from between the old housing to the south along Sköntorpsvägen. This area is similar to the housing along Gullmarsvägen, but here the housing has small courtyards as well.
These are quite open, allowing the forest to be visible and accessible from the parts between the buildings. At the western end of Sköntorpsvägen lies a housing addition that is somewhat similar to that of Marviksvägen, but at a larger scale. This area is also a dead end for cars, having a large parking lot surrounded by high rises on a larger scale than the ‘enclave’ at Marviksvägen. Considering the context, this also seems to be more of an extension of Sköntorpsvägen rather than an enclave. What should be noted about this area considering the original plan is that initially, Sköntorpsvägen would continue further west for cars and connecting to Ottsjövägen. It however still does for pedestrians, with a significant and well designed park-like entrance on the western side. A footpath also goes around the outer side of the high rises, making the entrance also a node of multiple paths. The path westwards is somewhat more park-like in its maintenance, and also passes Årstaliden, an area with a small stage and pavillion. At the far side, the forest opens up to several daycares and a smaller allotment garden area. To the south, a park-like environment protrudes back into the neighbourhood with lawns and playgrounds. The adjacent housing area in also protrudes somewhat into the forest, causing an overall somewhat rugged or ‘sawtooth’ like interface between housing and forest. This causes the forest to be noticeable and infrastructurally connecting from many points, but to a certain extent lowers the natural values of these smaller
parts of forest. However, many of these parts do not have many paths or facilities within them, somewhat retaining their wildness. A similarly shaped ‘sawtooth’ is also present west of this built area, also with a green finger protruding on the south side. Here, the built area is has on its most northern side an old estate, Årsta gård. A brook flowing down here, complete with small waterfalls, little bridges and lawns with the old house on the upper side creates an image similar to the romantic English landscape style. A path along the brooks leads to the path that follows the waterside, and connects the harbor for recreational crafts on the western side of Årsta. On the utmost western side, Årsta is also bound off by two railway bridges, similar to the bridges on the eastern side.

Previous page: Figure 15: Forest path next to the high rises of Sköntorpsvägen

Below: Figure 16: Grills and picknick benches surrounding the high rises at Marviksvägen
Above: Figure 17: The entrances to Årsta IP and the forest.
Below: Figure 18: route into the forest between two buildings along Gullmarsvägen.
Conclusion

The interface of the housing and forest of Årsta has changed over the years. The original plan intended an idea of generously spaced housing within the forest, with the housing being subjected to the existing forest and topography. In this original situation, a physical interface on a large scale between neighbourhood and forest could not easily be located; the interface showed itself on a much smaller scale, that between the individual building and the forest adjacent to it. Considering this, the original plan intended no clear distinction to a neighbourhood and the forest; the neighbourhood was the forest. In other terms, an idea of feeling of nature, cultural importance and wild aesthetics was translated not into an interface, but the area as a whole. To this day, many of these green veins of the neighbourhood has been densified and filled in on a local scale, piece by piece, causing what is now known as Årstaskogen the only continuous forested area in Årsta. This caused a stronger distinction in residential area and forest on a larger scale, being respectively the southern and northern side of Årsta. However the interface today is quite soft, diffuse and rugged, with small residential areas and forested area interlocking, or being small enclaves. A great quality related to this is accessibility, because of the large circumference of the green area that causes the forest to be close from many locations. But also a wild aesthetics, by getting the idea that the wild forest permeates the neighbourhood. Overall however, Årsta has on a very local scale a large variety in its interfaces. Thresholds, both formal and informal are present along the roads and between the buildings, and when clearly present show a quality of publicness. The buildings themselves and the forest seem to generally face away from each other, with the buildings facing the roads and the forest facing the bay. Although facing away may sound negative, it keeps a respectful distance to the forest. In this way both tranquility and a feeling of nature is more present in the forest because of this distance. This separating characteristic of the interface also benefits ecology to a certain extent by soft edges with little noise and activity. The buildings around the interface that are not housing, such as the schools and daycares instead create a connection to the forest by its importance in education even though these buildings face mostly southwards as well. Even though there is variety in height differences along the interface, the forest is often somewhat lower than the residential area, making the area as a whole quite legible for the visitor. However, there are also many parts on the same level as the housing which makes both area equal in their importance. There are also parts of the forest that are higher than the residential area, which creates variety of the forest and interesting places along the interface.

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Figure 19: The high rises at the end of Sköntorpsvägen as seen from the forest.
Document analysis

Introduction

The proximity of Årsta to the city centre and the spaciousness of the original plan has caused Årsta to be a frequent focus of urban development in Stockholm. This is also why Årsta is very present in planning documents of the city, primarily because of its lush green and hilly character. This was already acknowledged in some of the first plans of Årsta, where the area is described as “topographically very characteristic, varied, and featuring great scenery. Considering the suitable housing locations, the design must be carefully studied especially with regard to terrain, vegetation and views.” The current Årstaskogen and its protection here is also mentioned, as “the forest ridge and the heights near Årstaviken could be preserved in its wilderness and untouched character, a natural resource of rare value inside a big city.” (Stockholms Stad, 1940).
This type of language is not very present in planning documents of the city anymore, as many documents have become very technical. The översiktsplan of 2018 for example, although it considers specific areas very generally, mainly mentions Årsta in terms of ecological potentials on the northern side, with the possibility of a nature reserve and its function in the ecological infrastructure of Stockholm. Urban development in terms of housing, offices and infrastructure considering Årsta is mostly focused on the south side and sides. However, the northern side is briefly mentioned, saying “It is also necessary to develop the interface between the built-up area and Årstaskogen and to add homes.” (Stockholms Stad, 2018) Interestingly, the need for a good interface is expressed here, but what it should be and how it should be done is very vague. Adding homes seems to be stated as a parallel necessity to that of the interface, but also here no motivation is mentioned, nor how it is combined with developing an interface. The small map of the Enskede-Årsta-Vantör subdivision of Stockholm shows an double headed arrow in the east-west direction along the interface of Årstaskogen and the built area, explained in the legend as a ‘strategic connection’, which can be “made by developing the cityscape with buildings, green corridors, activity areas, destinations and transformed streets” to create a more cohesive urban network, but is not specified in the text about Årsta.
Local plans

Documents on a more local scale about this part of Årsta has primarily been concerned with the development of a nature reserve in Årstaskogen. Although protection of nature areas is generally perceived as positive, the vagueness about possible housing in the area while considering the urban development pressure on Stockholm and the outlines of this nature reserve has caused some controversy among residents both of Årsta as well as other parts of Stockholm. In 2014 plans were made to develop a nature reserve, while at the same time Årsta was under consideration as a location to extend the city centre to. Although studies for housing in the area were not made by the city planning office, the idea of it remained in the upcoming years while the borders of the proposed nature reserve were continuously being moved on the map. In the 2014 plan, the outlines of the nature reserve considered the largest part of the forest and the report put a heavy focus on preserving a unique situation of urban nature, filled with ecological and cultural values (Stockholms Stad, 2014). In 2017, the preliminary plan for a nature reserve has been adapted in terms of its outline. In this decision, the idea of housing is suddenly present and has a major effect on the locations of the border of the nature reserve. These documents mention two parallel developments in Stockholm, that of keeping a green city and at the same time solving the need for new housing. This also implies a certain degree of dichotomy, that of green and red, although no conflict between the two is suggested. The general approach to the green areas in these documents is very technical, mainly focussing on biodiversity, ecological infrastructure and green connections. The city also points out that a forest like Årstaskogen differs from an urban park, including these factors. In a list of identified values of Årstaskogen, the variety of ecological habitats and its role as an ecological
core area is mentioned along the recreational and cultural values (Stockholms Stad, 2017a). On an individual level, the qualities of the forest are perceived somewhat differently. In a web survey on Årstaskogen by the municipality, the main reason to visit the park was for a nature experience, followed by exercise. To both the question what the Årstaskogen could have more of and of what a new built environment could supply, nature experiences were the main reason again, followed by peace and quiet. Both these things are abstract personal feelings, which makes it difficult to acknowledge as motivations in formal planning reports, even though these things matter most to visitors of the area (Stockholms Stad, 2017b). The first stated purpose of the establishment of the nature reserve in the 2017 proposal is however stated to protect the area for outdoor recreation and ‘experience values’. Biodiversity and cultural heritage are named respectively second and third. Later it is also mentioned that these values should enrich public recreation in the area. Within this proposal, recreation seems to be the leading motive, although the connecting function and place within the urban thread is also mentioned. Overall however, these words are very general and easy to agree with. The 2017 proposal, even though it omits several appendices, never really goes into detail as to how and why the limits of the nature reserve is defined. Even though the plan claims to consider future housing in a very distant way, the reader is left with the idea that process behind the public process remains unknown.

This could also be because the establishment of the nature reserve and a research for future housing development are kept somewhat distant from each other in terms of documents. A project was approved to study the possibility of housing development of Årstaskogen around the same time as the proposal for the boundaries of the nature reserve. The objective of this study is to research a possibility of 800 to 1000 housing units. Even though the purpose of this document is far from a detailed urban design, some designed features and characteristics are discussed. Interestingly, the discussed features concern primarily the design and possibility of a new interface. The study proposes a new ‘urban front’ to “improve the contact between the forest and the buildings”. Contact between housing and the forest seems to be discussed mostly in terms of accessibility to the forest and a way to create a more cohesive urban structure in the northern part of the built area, which would be the aforementioned east-west ‘strategic connection’. The study is upfront about the fact that the location of the outlines of the proposed reserve have been adapted to “allow for developments along a continuous string. The objective is to create more housing without a decrease in reserve size while accessibility and attractiveness of the forest increases.” This ‘continuous string’ (in Swedish: sammanhängande stråk) is explained in more detail as a foot- and cycling path along Årsta forest. This idea is still somewhat vague and somewhere between a conceptual study and a detailed design. It is however noted that it should have a public character and improve the accessibility and recreational value of the forest. It is not clear whether it is implied that new housing will limit accessibility which will need to be solved, or that the accessibility of the current forest needs to be improved. This study also acknowledges the loss of ecological and recreational values, but does not make any concrete suggestions for compensation for this loss. On the other hand, the study suggests that housing and increasing recreational and ecological value do not contradict each other, which makes compensation arbitrary (Stockholms Stad, 2017d).
The outline of the nature reserve is adapted attempting to spare areas for future development and to keep the amount of square meters of nature reserve area the same as the plan from 2014. Moving a planned edge in a landscape means defining its physical representation, although paradoxically, the planned edge is moved in this case to arrive at a zero sum game in terms of surface area. This seems like a very technocratic view, focused on surface area instead of local characteristics and values. That is only when it comes to the forest however, since the study for housing already features design proposals. Especially for the interface. The separation of housing development and reserve establishment is not only apparent in the separation of documents but also mentioned in the study. Researching the possibility of new housing will continue after the reserve has been established, the study states. Although plans about the reserve and housing are formally separate, both consider the other. However, a comprehensive and more detailed plan for entire Årsta would be better, both considering the forest and housing as a whole to look at the case from a different perspective. There is a constant idea of harmony that can supposedly exist between the ecological values of the forest and new housing, but this is not very well elaborated and not very helpful if stated in a document that is primarily purposed for the study of housing (Stockholms Stad, 2017d).

In multiple plans (Stockholms Stad, 2017c; 2017d) the statements of local stakeholders considering the plans have been included. Generally, the stakeholders have mixed feelings about the demarcation of the nature reserve. They are happy that Årstaskogen is being recognised as a nature reserve, but are sceptical about the current demarcation as not all the forested area is included. Parties like allotment garden associations are worried about the impact on ecosystem services for the area as well as the ecological value. But also the idea of a new interface is not well received for many parties. Stakeholders also use their local knowledge and day-to-day experiences to express the recreational qualities of the area. Multiple stakeholders state that the forested areas that are investigated for possible housing are actually the most accessible parts. Noteworthy is also the attention they pay to the identity of the area and the forest as well as the cultural value. The stakeholders rightfully question the implied added value of housing to the forest.
Conclusion

The first thing that becomes apparent in the documents is the approach of the relation between ‘red and green’ (built area and urban green) in the municipality documents. Although the proposal for the reserve (a supposed green objective) and the study for new housing (a supposed red objective) acknowledges the other perspective, they remain two different plans and documents. This implies an interface in disciplines, that of nature development and housing development which is partly combined, but also somewhat separated. This can also be noticed by the language in use in the documents, considering green and red as parallel motives that can exist side by side without compromise. Although the absence of conflict between green and red on a local scale in these documents may sound positive, it is the pretense of harmony of green and red which avoids a thorough discussion necessary for ensuring both their value.

The approach to the interface of Årstaskogen and the current and possible future housing is also somewhat mixed. From one perspective, the relation between the two is mostly discussed as one-dimensional, the interface being either the edge of the reserve or the edge of the housing. In this perspective the proposal for both housing and forest is more concerned with the areas of either development rather than the local characteristics of the edges. This can be seen in the approach of the amended outline of the reserve in the 2017 plan as opposed to the 2014 plan, where outlines had to steer clear of certain areas (for possible building) and include other areas to arrive at a same amount of area as the 2014 plan.

From another perspective, the interface is very much considered in the study. The consideration of the areas for future development while establishing the reserve is an example of this. This can however also be problematic, as offering space for future housing is not an objective when establishing a nature reserve. It has been attempted to avoid this by paying specific attention to the interface. A red thread throughout many studies and documents are the main qualities of the forest being recreation and ecological value. This has been consequently paired with accessibility and publicness, which has resulted in a possible future housing as well as a path along the interface with the forest. The view of local stakeholders and visitors differs of that from the municipality considering the quality of Årstaskogen. These are mainly a feeling of nature, tranquility, and local identity.

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ANALYSIS

Interviews

Introduction and method

To get a better understanding of the current and possible future qualities related to the interface, a total of five interviews have taken place. Six people have been interviewed (one interview took place with two people) of various disciplines, institutions and stances on the Årstaskogen project. It was important to find both people who have a professional background in spatial design and those that do not, to at the same time take their expertise in consideration but also acknowledge their position of power and background to define qualities and allow others to voice their views on quality as well. The interviewees could also very roughly be classified as ‘pro’ or ‘against’ the possible development of housing (three and three), although some were also very nuanced in their opinion. The open interviews were semi structured and most took around forty to fifty minutes. Half of the people were interviewed in their workplace, half of them on site in Årstaskogen. In this chapter, the interviews are summarised, partly by quotes of the interviewees. The conclusion will again link the types of interfaces to types of qualities found in the different viewpoints of the interviewees. The transcript of each interview can be found in the appendices.
Figure 21: An informally claimed garden in Årsta
**The municipality**

Two people from Stockholms Stad were interviewed who have been involved with the project from different departments. Hampus Olesund is project manager at the Exploateringskontoret (office for urban development) of the municipality. This department is mostly involved with the development of new housing for the city, where the revenue of sold municipal land can be returned to the city by public amenities. The exploateringskontoret researches the feasibility of a development plan, to see if a project is workable before moving towards the stage of a detaljplan, which is in the hands of the urban planners of the city. Creating a new nature reserve is usually not the usual project for this office, but there were significant political ambitions of the green party of Stockholm to establish more urban nature before the next elections. Although very little changes to the already existing forest, a reserve status can make it more valuable. In the interview the importance of the forest as an ecological core is mentioned, and that the possibility to combine the forest with new housing developments offers possibilities to improve the accessibility of the new reserve. In this interview there is no perceived conflict between new housing and keeping an attractive and valuable forest. The interviewee mentions that the area of nature reserve is the same as the 2014 plan and that ecologically, the important thing is keeping a connection on the eastern side. In his view, new housing could add more value to the forest in a recreational sense as well:

“...we could make new tracks that are not that steep and more accessible. We could also make newly designed places that would make the forest more attractive and add more things to do there.”

There is an objective of publicness according to the interviewee and let more people make use of the area, but acknowledges that with many designed additions to the forest it could be ‘parkified’, through which certain qualities could be lost:

“But there are a lot of people who would like the forest to be now as it is, because it is a forest and not a park. And adding these elements it would be more like a park which they do not like. A lot of people also enjoy that the forest is not that crowded, and enjoy the calmth and the feeling of being in nature instead of just looking at nature.”

Considering the development of new housing and therefore a new interface, the preliminary design proposals were also discussed in this interview. Especially the concept of a so-called ‘urban front’ and the idea of a continuous east-west path or road, where the focus lies on
establishing a new relation between the forest and the built area:

“They [the urban planners] thought that Årsta could face the forest in a much better way than today. Today the houses face the road and the forest is behind that, causing you to not know where the forest is. So the plan is to let the houses face the forest so that when you are on the road, you are between the houses and the forest. And the idea was to make the line easily accessible that connects Gullmarsplan to Årstaberg, not by car but by walking and bicycle.”

This implies that the current interface is not very qualitative. Olesund describes this mostly in terms of accessibility and public private interfaces, containing a lack of clarity and open access:

“...a lot of forested areas close to the housing today is not very accessible, since it is very hilly, and it is hard to know where the public space ends and the private space starts. Today it is very diffuse. The road could easily demarcate this distinction between private and public. The transitional zone is not very well used besides the people who live in the houses near that area. We see that building in these areas is not such a big loss because people can use the area a bit further into the forest. We always need to think from a bigger perspective, it would be better if more people could live there and make use of the area.”

One of the main inspirations of the proposal for the stretch along the forest had been the original plan from the thirties which features a road that was never realised. However, the interviewee is critical about that plan as well. The current interface of housing and forest being back-to-back, keeping each others distance is perceived as out of date:

“I also think there was a different way of thinking back then. Today we would probably make the housing face the forests instead of the roads and the other houses.”

The planner

Hampus Olesund refers to the planning office of the municipality several times concerning designs and spatial quality in the area. Sara Almén, områdestrategist at the urban planning department of Stockholms Stad was also interviewed for this study. She considers the nature reserve being a political move as well, and attributes the delineation of the nature reserve to follow the outline of suitable housing locations. The interviewee is however more nuanced on whether there will actually be housing developments in the future. Studying the possibility of a new interface is a way to make to study the possibility of new housing in general according to the interviewee.
“In doing so [establishing a reserve] the reserve has a strong legal standing, and in order to make sure we do not unknowingly make boundaries for ourselves for the future, they wanted us to look into the zone between Årsta and the forest. (...) With how the project is looking now, we have not proposed any building, we have just said that we are not making a reserve of these areas in order to have the freedom to do something there in the future.”

The proposed interface according to her, an urban front and the continuous stretch, is explained by Almén by solving a problem in the public-private interface in the neighbourhood, as well as making the whole area more legible.

“You don’t really know if you are allowed to be here, or if you are stepping into someone’s private area. It is a bit unclear sometimes, about what is private and what is public. So we had this idea of a clear line of what is public and what is private, using a built interface. (...) The point is to see if we can make clearer entrances and work with orientation, in order to make people see a sense of direction.”

Besides these two points, accessibility and connectivity are also main motives for this idea, and accessibility is approached in different ways. A new interface would also be heavily designed in this sense. There seems to be a motive of a very urbanised interface with active plinths and buildings right besides the forest.

“The point is to see if we can make clearer entrances and work with orientation, in order to make people see a sense of direction. Then there is also the aspect of physical accessibility of the stretch, so that people with difficulties can move easily. We tend to connect the stretch to the pathways within the forest so it is easy to understand how to reach and how to access the forest. The accessibility also lies in the connectivity of the ground floors and the outdoors, where the built environment meets up with the nature. But there is of course a path nowadays within the forest which you can use to move around, but it also depends on what you define as accessibility.”

“We were talking a lot about inspiration from Norway, where you can find these spots along the road where you can rest and have a nice view. That would be the extreme though, but having this pathway as something accessible and to elevate the idea of this stretch. And then to line up with buildings and housing. Those would of course have a very clear front. The ground floor should be in connection with this pathway, with some public function other than housing. Perhaps not along the entire stretch, but at least with some conscious relation the local features.”

The interviewee acknowledges that this idea is somewhat controversial and respects the point of view from opponents of the plan. Almén admits the process being confusing by two different projects running parallel, but also defends a larger perspective in a city where things have to happen. An economic motive for the Årstaskogen project is not present in her argumentation, but an attractive city as a whole. Whether that involves buildings or urban nature does not matter.

“We have the objective of the översiktsplan and we have the notion we have to build a certain number of housing units and the notion to densify inwards, we are not expanding Stockholm outwards. And that also has the inherent idea of living public space that we are trying to activate. We have different different strategies that we work with. But that may not of course be the way the residents see it. The person living next to the forest may be quite
happy with the way things are. And that is a very valid point of view.”

“So there are a lot of issues of which you can ask, ‘have you not thought about this and this and this? There has been a lot of confusion into this process, even for us, because we have these parallel processes. There is the reserve, and the potential for housing, which are impacting each other, but in the end these are two different processes. The reserve is now done, but these impacts have caused some confusion.”

“It is an attractive area to build in of course. But that [economic motive] is not a driving force here. Our goal is to make a functional and attractive city, and whether that is a built environment or a forest, there is not a clear answer to that in advance.”

The architect

From the municipal side, the study for new housing and a new interface is fairly recent and conceptual. But the initial idea for this dates back to 2014, where Årsta was proposed to be an expansion of the city centre in the översiktsplan and simultaneously a new nature reserve was being developed. Ola Andersson, founding partner and architect of Andersson Arfwedson Architects made a proposal for a combination of these two proposals in Årstaskogen in the form of a spatial design for the area. This is why he was also a interviewee for this research. In his perspective, the establishment of a nature reserve and housing development does not necessarily conflict. The proposed design is heavily based on the original plan for Årsta, where a northern road connection is missing in the current situation which would make the area better connected on that side. In this sense, Andersson says that the current situation is not very navigable.

“So now if you want to move through Årsta through an east-west direction, you have to move along Årstavägen, Hjälmarsvägen and Sköntorpsvägen which is very criss-cross. It would be no problem to do if you can find your way in Årsta, but it requires a lot of knowledge about the local infrastructure and if you are not a resident it if very difficult.”

Andersson does not think the forest features an accessible and integrated infrastructure that contributes to the neighbourhood. Unless you are a resident, the neighbourhood is supposedly hard to navigate and access to the forest is limited by later housing additions, the orientation of housing (being back to back to the forest), a lack of entrances and fenced off areas.
“I guess that if you are supposed to find your way you would have to walk on streets. You do not just walk into the forest if you want to go from one part of Årsta to the other. Unless you have the knowledge about the local situation. (...) But our point was that if all the forested area would become naturreservat, it would conserve a situation where it would be very difficult to access Årstaskogen from the south. (...) If Årstaskogen is going to be a nature reserve it is important that the public can have access to it.”

Again, the main motive seems to be accessibility and publicness to establish a new interface of the forest inbetween housing. The starting point is infrastructure according to Andersson, the interface being a leading feature defining the housing and access to the forest. A conflict between housing and forest is not mentioned as an issue. The ecological values of Årstaskogen are perceived as being primarily concerned with a corridor function. Public private interfaces seemed to be of concern as well, as well as an idea of publicness of a nature reserve.

“...the northern part would then be the nature reserve. What we understood from the inventories that have been made is that the important thing ecologically was to keep a connections from the east to the west. So we did not want to interfere with that, and as far as we could tell the upper (southern) parts of the forest were not that interesting from an ecological point of view.”

“The important thing is to ensure public access to the nature reserve. It is not just supposed to be a backyard for the people who live there. To take such a central part of Stockholm and turn it into a nature reserve, means that you have to guarantee public accessibility to everyone in Stockholm.”

But also visual and aesthetic motives were included in the design proposal. Andersson refers to roads that are located on the upper part of a forest edge overlooking a bay. But there was also the importance of actual accessibility, not just visual closeness. The interviewee is somewhat critical on the original plan in this perspective as well.

“You look over the forest, but also you improve the contact between the different parts of Årsta. The visual aspect is one thing, but it is also about physical access to the forest that can be arranged along the entire stretch.”

“I think the original idea was to have freestanding blocks in a green landscape at that point in time. I think that is a very visual idea, it does not have very much to do with the physical access to the green area. There are a few houses that are on the ‘forest’ side of the street, so you would not have access on those parts of the road.”

A new interface with added buildings as proposed in the plan would mean the loss of a significant part of the forest. This is not a very big loss according to Andersson. His view on the relation of city and nature appears to be very separate. According to him, an actual forest is unthinkable in a location like this. Andersson sees the forest from a more recreational point of view, and prefers a more controlled, park-like atmosphere to that of wilderness, because pristine wilderness is in his opinion not possible in the current context.

“As of now there are very little qualities [in the forest]. There are some beautiful views on some places but the the forest itself is very badly kept, with fallen trees and undergrowth. It is not like a ancient forest that has been completely untouched. There are too many people for it to be really pristine nature. If you want that kind
of forest, you should go somewhere else. The thing is that is inaccessible but it is still used so much that it is not in a good shape right now. I think in a place as this, only two kilometers away from the absolute centre of the largest city in Sweden, the idea to have a sort of virgin territory is absurd. I think the title of naturreservat is misleading, because I am very sceptical about the ecological value of this forest. It is obvious that the important thing is recreational value, which you can keep because you can maintain the part that is most heavily used along the water. There are some spots which are not used at all. There is nothing special about that kind of nature, it just looks like any other forest. If you look at the county of Stockholm, we have hundreds of square kilometers of forest like this. So if you have pristine nature, you have to go outside of the city. We tried to preserve these areas like pristine nature which would be untouched by humans, but it is impossible because it is in the middle of the city.”

"You can see how steep the slope really is here, these are not areas that you can really use for recreational purposes. Some parts are even more like a cliff than a slope. A lot of children use these flat surfaces much more. There are a lot of kindergartens around here, and all of them use these areas, daily or weekly. You often see a lot of children around during weekdays.”

“This reserve is established for the purpose of both ecology and recreation, for the people around. The fact that they take big chunks of the recreational part of the forest out of the reserve is very contradicting, people have been saying this from the very beginning. But also the ecological aspect is contradicting, because the leftover reserve area is so small. And no one really knows if the birds, plants and insects in the forest will actually make it. If the other parts will be developed there will be noise, pollution, and very little forest left. A nightmare would be that the wildlife slowly disappears and erosion will happen on the slopes.”

**The activists**

The proposed plans and studies have not been well received by the residents of Årsta. The possibility that large parts of the forest will be developed for housing has led to the creation of the network Bevara Årstaskogen (Preserve the Årsta forest). For this research, three residents involved in the network were interviewed to understand their viewpoint in more detail in regard to the red-green interface, both existing and proposed. One interview took place by a forest walk with two network members: Jenny Sverker, an attorney, and Martin Dahl, an ecologist. They question the purpose of the reserve, since the outline of the reserve in the latest proposal is not very effective, both in recreational and ecological aspect, because of the topography.

Even though the municipality claims to recreation and ecology motives for the reserve, the areas that are popular for visitors are excluded and the reserve size is small. Although the municipality claims that an ecological corridor is the intention, the forest also sustains the actual habitat of many species. Whether these flora and fauna will remain in the area is highly questionable if the excluded parts are turned into housing. The reduction in size in relation is also questioned in terms of other technical aspects, like the risk of erosion and noise pollution. Ecological value is by the interviewees mostly framed in terms of a diversity of species and vulnerable species, especially birds, whereas the municipality mostly looks at ecology from a drawing board it seems, considering it as a part of an ecological infrastructure.
“We know for a fact that there are a lot of red listed birds and other species living here, so it is not a very everyday piece of nature of which you could do without. It actually contains red listed species that should be cared about, for example the Duvhök (Northern Goshawk, Accipiter gentilis). The ecologist of Bevara Årstaskogen found around 28 red listed species on the EU and Swedish list of endangered species. So just the read listed species would indicate that it is not a suitable area to build.”

Especially the combination with more residents in Årsta making use of the area and a smaller habitat for plants and animals is feared to decrease ecological size. Conflict between recreation and ecology in the forest is seen as a big threat.

“I am not an ecologist, but the area will be a lot smaller and the amount of people in Årsta will increase due to the new housing in other parts, around twenty thousand new apartments. So if the forest decreases and the amount of visitors increases, there will be a lot of pressure on the forest that is left. Which will always have a negative impact on animals the forest. Not that I am not welcoming others, because in the forest as it is it is not a problem at all.”

The argument of accessibility for a new built interface, and the implication that the forest is currently not accessible is rejected by both interviewees. Instead, they say that if the areas excluded from the reserve will be developed, the forest will be less accessible than it was.
“Of course that is the kind of vocabulary they use from these building firms that came up with this idea of the forest being not accessible enough. You could see from where we came in next to the football field that it is very accessible. I could easily give you ten to fifteen easy access points from Årstavägen, which anyone could take. I think there are also five or six access points from the north that lead down to the water. (...) How could a smaller forest with just a slope and water be more accessible than the forest as it is? It is just not realistic. It would actually mean that if you build all those houses that they want to build, they would have to take down a lot of the mountainous areas and build walls down to the slope.”

Årstaskogen nowadays is very much appreciated by the interviewees and other Stockholmers. The importance for education is mentioned by pointing out the usual amount of children in the forest and the area is seen as unique, not to be taken for granted. A local identity is clearly present in this sense. Not just in Årsta, but the green urban areas are seen as a unique characteristic of Stockholm. There is a risk that this quality disappears according to the interviewees.

“Dog walkers, people working evening shifts, parents with children and a lot of kindergartners. It really is a fantastic place, I never lived in a place before where you are in nature right outside where you live. It has been one of the best things in Stockholm in general. I lived in many places in the city and I always had some kind of natural areas close by. Even in the city centre and also outside there is always a nice green spot. And I am really worried that they are making a mistake now when they densify as they do, that they are destroying something that a lot of big cities do not have. “

Besides the ecological and recreational value of the area, there is also a fear that the developments in Årsta could lead to more ‘parkification’ of Årstaskogen. More intensive maintenance leads to the loss of important ecological necessities of the area, but also a wild image of Årstaskogen where someone can really experience being in nature, according to the interviewees.

“They removed a lot of trees to mostly clear the paths, but also removed trees that were further away from the paths. Some of those trees were not affecting the accessibility at all. But you also see a lot of dead wood here that is so important for a healthy forest. A lot of insects and woodpeckers living, feeding and using dead wood as their habitat.”

“Spending time in a park is of course not the same as spending time in an actual forest. And not that many birds and species will live in a park. A park is also more depending on maintenance, whereas a forest takes care of itself. Another thing is that nobody goes to a park in the middle of the winter. This place is used all year round, and people are there all year round. With snow the forest is very nice, while the rest of the city looks very gloomy during that time of year.”

The residents currently very much enjoy their perceived closeness to nature. They are wary that all the developments will lead to an overexploitation of the reserve, which would eventually cause the forest to not be perceived as a forest before. Here is referred to the southwestern shore of Södermalm, which is overcrowded in their opinion.

“I do not think people would talk about the forest anymore, but of the standpromenaden (beach walk). Another fear of mine is that the southern
side of Årstaviken (the area of water between Årsta and Södermalm) would become like the
northern side where it is always crowded, with a concrete path with some lawns and gardens
on either side. Then there would be nowhere to go. Everyone would take the path so in
summer there would be a lot of people. The grass disappears because it is used so much
which will make it dusty and dirty. And one of my nightmares is that Årstaskogen will become
like that. The beachwalk in Tanto used to be a nice area but there is nothing left."

The idea of the developments being in the interest of the greater good is also rejected.
Instead, the interviewees express the importance of Årstaskogen in the larger scale
of Stockholm, pointing out its use by the Stockholmers all around Årsta. The function of
a forest is also extended in this urban context to it being public space and an important
infrastructural connection for cyclists and pedestrians. Although the forest is seen as
wilderness by both interviewees, the relation between city and nature is also very integrative
as the forest is acknowledged as part of the urban thread.

“I have a friend living in Södermalm living in southern Södermalm who cannot understand
that the city thinks that only people from Årsta care about Årstaskogen. There is very little green
space in Södermalm at all. For the people living on the south side of the centre Årstaskogen is
what Djurgården is to the people on the north side. It is just a walk away where you can breath.
I know that kindergartens on Södermalm also come here for their excursions. It is in the
educational programme that children learn about things like resilience, natural phenomena,
animals. And you can also use the forest for transport. If I go to Lilleholmen I do not go by
tram or bus, but I just walk and it takes the same
amount of time. And it is way nicer to walk or cycle in this area than it is in the city. I think a lot
of people do that. You also see people on their way to their job or school. A lot of people take
advantage of a bicycle ride through the forest in the morning instead of a packed metro. If
you live here you almost do not need public transportation if you choose to take a shortcut
through the forest or along the water.”

Considering the interface of the built area and the forest, they do not think that a new urban
front with a path along the forest will increase accessibility. Instead, the current housing
is perceived as being very considerate in relation to the forest and allow a more logical
connection. A new interface with a large vertical difference will reduce the accessibility of the
area. But also the neighbourhood as a whole is perceived as being very characteristic with
several important qualities, and the forest as being an integral asset to the area as a whole.

“It is a small town community feeling here that you do not get in the city centre. People know
each other. I think it is also because of how the area was built from scratch it was built with the
idea to create a sense of community. This was one of the first suburbs where they also had
a very clear idea on what to do. I think it was called something like ‘houses in the green’ or
something like that. Årsta torg is naturally one of the big meeting points.”

“I guess a lot of people moved here because of the nature as well. You know that they can be in
the forest, learn and grow up here.”

“I always say Årsta has two nerves; one is
Årstavägen that leads to Årstatorg and the other
one would be the path through the forest.”

The affinity with the neighbourhood, forest
and Stockholm appears to be taken to heart of the interviewees. It may be partly because of this, and the by them perceived illogical reasons of the municipality that they are very sceptical about the motivations for this project. According to the interviewees, money is the primary concern here.

“I think the entire point of this project is to sell prime real estate at a high price. Then you can buy luxury apartments with great views over Söder and the old Årsta. I think that is the whole thing, it is about money. The city needs the money for infrastructure projects and such, but they do not want to put in their own money in areas further out which are less attractive. (...) I think they want to squeeze out as much money as possible to compensate for investments for public transport that they should have done twenty years ago. They cannot really raise taxes because people are quite wary of those in Stockholm already. What I heard from people from the city is that Exploateringskontoret is the cash cow of the city, and this is a good opportunity to squeeze out a lot of money.”

A lot of the statements above are supported by another interviewee who is also active in the Bevara Årstaskogen network, Åsa Sahlström. She is a resident of Årsta, sociology teacher at Värmdö Gymnasium and local green party politician. Her role in the green party has made her aware of a conflict in sustainability politics. One one hand, there is a the ambition to densify the city, in order to make optimal use of the existing urban network. On the other hand, there is a risk that these densification happens at the expense of green space in the city, which is necessary to keep healthy, sustainable city. The interviewee is very worried about the latter, also criticising the way the municipality is supposedly trying to make a lot of money with these developments. At the same time, the issue is very personal because the Sahlström also lives and works in Årsta. She describes the neighbourhood in terms of community, small scale, and living modestly:

“The quality of this neighbourhood is quite different from the other areas in Stockholm. I lived in other suburbs where there was a completely other way of interacting. It is hard to say why exactly, but in Årsta the contact between neighbours is very warm. For example, my colony garden is very collective, which you take care of with everyone. In Årsta you feel an obligation to actually say hello to your neighbour and help each other out a little.”

“The way Årsta is built is amazing when you have kids. For kids to grow up here is great, you can actually take better care of your kids then if you live in a suburb, where you have to commute from and to everyday. (...) It is just more qualitative. In the inner city you cannot send your child out to play on the street, because here you can. There is everything you need here. Living
small, buying second hand, having a colony garden is the best way of city life in my opinion. I think I am speaking for a lot people in Årsta. It really is paradise.”

Sahlström is also very fond of Årstaskogen, pointing out a necessity for urban dwellers to be in nature for the benefit of their health, and the aesthetic and feel of a perceived wilderness. She criticises the discourse that occurs among the involved architects for the Årstaskogen project, basing their view on ungrounded lack of safety and lying.

“It is a piece of magic in the city. It is something wild, and the forest like it is now in size takes care of you. In some parts of the forest you cannot even see a building in the distance. You can almost pretend like you are in a big, wild forest. (...) Doctors here would never write a prescription to get into the forest, even though I hear they do it in Finland and Japan. In Stockholm there is only one therapist who is into this forest bathing, which is called Shinrin-yoku in Japanese. When we discuss with the architects who want to build in this forest, they use a type of language like they hate the forest. They would say that the forest is frightening, they would make up stories that people from Årsta are scared of the forest. They have the perception that it should be more like a park, and less wild.”

Besides her focus on the healing effects of forests, the place of forests in Swedish culture and education is also mentioned and linked to education.

“The Swedish people have a very deep and old cultural affection to forests, it is like a religion. There has been a lot of research also about kids who live near the forest and grow up in it can concentrate better and such.”

The motive of the municipality to make the forest more accessible is also ungrounded according to her, and warped because of their idea on what a forest should be, even if it is in an urban context. A forest should not be meddled with too much if the goal is to see it as a forest.

“Accessibility seems to be their favorite word. But they use it in a way like they almost hate nature, with wanting to use asphalt and such. The forest is good as it is now, because that just is what a forest is. The status of the nature reserve can make it a bit better, with more benches and better lighting, just small changes. But you also have to keep a unique forest. Because if you want it to function as a healing therapy for people, it needs to stay a real forest. You have to feel like it is a forest.”

Sahlström accuses the proponents of the possible Årsta development to be biased in the sense of what a city should be in this case, which is according to her very much like the inner city. The current densification approach is also criticised generally, by focussing on big cities that have to become more urban, ignoring important ecosystem services.

“I think that is a typical expression of those who want to make it more like the inner city. This architect was saying that Årsta is more of a front from Södermalm, but they are not going to see a forest but a city in that case. So it is really coming from a subjective aesthetic that you do not like nature and want to make it more urban.”

“I think the city is moving in a wrong direction. The first reason is climate change, this month was very warm and dry. And the trees and the green areas really lower the temperature for example. There is a lack of vision, where politicians do not look beyond the growth of the already biggest cities. It does not make sense because it gets
really crowded and such. (...) There is no big picture, and they are building apartments with incredibly high prices. Youngsters in Stockholm live with their parents until they are thirty, while luxury apartments in Liljeholmen are empty. Who are they building for? Also this forest is going to be really expensive. There is no demand for those kind of dwellings anymore.”

Considering the proposed interface with a path and urban front, the interviewee fears that the forest will have a very hard edge, being ‘bound in’ on almost all sides by buildings. and roads

“I would be afraid that the forest would become very enclosed by roads and buildings, that it is almost fenced of.“
As mentioned before, the interviewees can generally be divided into two opposing sides. Many of their opinions on one side about the project are generally the same, although their motivations behind these opinions can very much differ. Similar to the document analysis, the main motive according to the interviewees of the municipality and the architect is accessibility. This is related to the motive to make the area more legible for visitors to move around, and to ensure access to the forest which should have a high degree of publicness. These motives led to a designed idea which is mainly focused on the interface itself, centred around a path along the edge of the forest. The parts south of that can contain new housing that faces Årstaskogen, with the path creating an urban front along a clear and smooth line alongside the reserve edge.

However, these perceptions of qualitative interfaces are criticised by the residents who are against the proposals. They claim that the motivation of accessibility is ungrounded since the existing situation is also very accessible via the existing entrances or thresholds. Although entire Årsta is quite hilly, the current interface at the entrances do not have any vertical difference, allowing easy and logical access. The soft edge between neighbourhood and forest lets the forest have a wild aesthetic, like several interviewees have mentioned ‘the feeling of being in a real forest’. This wild aesthetic is strengthened by the high ecological values that the residents seem to appreciate a lot. A feeling of nature combined with tranquility is highly valued among the interviewees and residents. The interviewees are personally very connected to the neighbourhood and the forest, making it part of the friendly and green identity of the area. The integral character of how forest and built area relate to each other causes entire Årsta to be seen as a whole, rather than an explicit distinction between two areas. Moreoso, there is the idea that the actual motivation of quality for the municipality is the forest as a purchasable amenity.

There are two types of discourses which contest primarily the meaning of accessibility. This quality of accessibility often derives from a wider frame in which other motivators are involved. Generally, it heavily depends on how the relation between nature and city is viewed, more specifically nature within an urban context. On one side, a forest of this scale and context close to the city centre is deemed as an intermediate form, between a park and ‘real nature’, causing it to be regarded as having very little quality. On the other hand, this kind of nature right in the middle of the city is regarded as unique and of valuable quality. This is also linked to aesthetics. Årstaskogen can appear messy and unregulated to some, who prefer a more ‘parkified’ image. Others appreciate the unregulated natural image. A similar conflict happens between recreation as well. Whereas some want to keep the recreational value high by maintaining the wild image, others see a higher number of visitors as a good measure of recreation value. The latter does not always benefit ecological values, but is being defended by keeping the forest well connected to others in an ecological network. Ecological value is however dependent on more factors, like the amount of vulnerable species in the area. The perception of a wild forest with little maintenance or controlled is also attempted to be framed as unsafe, although it is deemed very safe and pleasant according to residents.
### INTERFACE vs QUALITY

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**vs**

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### CONTESTED QUALITIES

- accessibility
- aesthetics
- ecology
- recreation
- safety
Figure 27: Årsta as seen from Dianelund
Conclusion & discussion

Stockholm is on the edge of a new growth wave. The general approach is to densify the city on a large scale. However, on a small scale, there is often a case of expansion into areas that currently make up the unique character of Stockholm. These green areas, like Årstaskogen, have built up an identity in how they relate to the built area of Stockholm, especially in the inner city. Expansion into these areas does not only mean a change in area, but also the establishment of a new interface. The current interface of Årsta has been researched by the movement of the researches and observable networks in its original plans and current situation. A nature reserve for Årstaskogen has been contested and motivated by the delineation of its border, with the border relating to the area outside the reserve as well. Stakeholders criticise the meaning of certain motivations for the proposal of the reserve and possible future housing.

Although interfaces are supposedly often underrepresented in spatial design proposals, the Årstaskogen case shows something different. The study for possible development of new housing in the area is centered about the design of an interface, with a pathway and urban front along the forest being the backbone of this kind of plan. An interface being at the centre of a proposal in this way also attempts to compensate for a loss of area, as if it claims that both phases, both the neighbourhood and the forest, will benefit more from a new interface even though the forest decreases in size. But also those who are against developments in Årstaskogen use the interface in their argumentation, specifically by critiquing the proposal.
Ensuring accessibility in the red-green interface keeps returning throughout several documents and interviewees. Accessibility of Årstaskogen is one of the main points of discussion considering the interface between the built area and the forest. This touches upon the very definition of an interface, a point of interaction and exchange between two phases. The metaphor with an organic cell wall is relevant here: an interface can make two phases distinct and separated, but is at the same time permeable and allows exchange from one phase to the other. The latter function of interfaces seems to be the most important in an this context, as it pushed as one of the main arguments for new developments, linking it to an interface of a path along the forest edge. However, those against this proposal link accessibility to the current situation and criticise the proposal due to the vertical difference affecting accessibility among other things. It is important to note that the protest against possible developments in Årstaskogen are heavily based on the loss of forested areas; accessibility is merely considering the interface.

Accessibility is also the most important quality linked to an interface because it is highly contested in this case. A motivation in quality for a certain kind of interface cannot be interpreted in a single manner. What the quality of accessibility exactly means and how it is translated into a spatial interface is one of the main points of discussion concerning the possibility of a new red-green interface in Årstaskogen. But also the framing of other qualities in relation to certain types of interfaces can be multi-interpretable, such as recreation or ecology. How these motivations are valued and framed has a significant effect on how a project is defended or protested against.

Another conclusion related to the different types of interpretation of qualities is that not all motivators of quality such as accessibility, ecology and recreation are parallel and superficial. Some motivators of quality are combined or supported by other qualities in order to substantiate the motivation. For example, the motivation of accessibility is motivated by an idea of publicness of a nature reserve by the municipality, or the motivation of recreation has to be ensured by a high ecological value to make it an enjoyable forest for both visitors and wildlife.

The different layers and ways to frame certain qualities are implicitly very relevant to the view on the relation between city and nature. The way someone approaches nature in an urban context has a lot to do with how someone perceives and qualifies certain types of interfaces. Someone who considers a very hard distinction between the two could say that a forest in a city cannot exist, and should therefore be developed or turned into a park. Someone who considers the relation between city and forest to be very overlapping could argue that a wild woodland is an absolute necessity in the city because it supplies the habitat for both people and wildlife. Årstaskogen is a very interesting case in this sense, considering its location near the city centre of Stockholm, the size of the forest, the way it relates to the built environment, the amenities and the features that can be found within the area. Årstaskogen is not as controlled as a park, but also lacks a scale and location of a very wild and untouched forest. However, the forest fulfills many needs in the nearby area and for Stockholm that cannot be fulfilled by a park or a large but distant forest. It does not offer a true ideal of pristine wilderness, but it is right outside one’s doorstep. It is not a typical park in its function, but is still very varied and
accommodates many different activities. Furthermore, it provides a considerable habitat for many important flora and fauna, along with other benefits like carbon storage, mitigating urban heat island effects and air filtration to name a few.

Some benefits of a green area like this are hard to operationalise into a sound argument for the conservation of this type of forest, considering the technical language that is often in use within a municipality. The personal affinity, a typical identity or the calming and therapeutic effect of surrounding oneself in nature is on a different level of argumentation than so to say an amount of species, visitor count, or carbon storage. This can make debate about what values are important in the are difficult. But personal and cultural qualities are however very important to enclose in this discussion, regarding the place of the forest in Swedish culture. This could also explain why accessibility in regard to publicness is an important point of discussion in this case, because of the high regard of publicness in Swedish nature. However, in this specific context, publicness can also be related to urban public space.

The integral character of Årstaskogen in its urban context does not only mean it fulfills functions to those of parks or forests, but also general functions of cities, like infrastructure for pedestrians and cyclists, meeting places and space to relax.

Discussion

The complex and abstract nature of interfaces and qualities have posed some challenges for this research. Although various research methods have been used, each method had certain difficulties in regard to the objective of this research. In the spatial analysis, the researcher was used as a research tool. Although the use of the researcher's expertise is valid, the outcome of this section is subject to a certain bias. The background of the researcher, not being Swedish, is on one hand beneficial because the matter can get researched by a somewhat unbiased, outside view. On the other hand, there is not as much familiarity with the context of the case as a native Swede would have. Especially considering the analysis of planning documents there was a language barrier to a certain extent. This means some parts of these documents were roughly translated, whereas the point in this research often lies in its the details of the language in use. The point of the interviews was to get a large range of people, both in profession and in their view on Årstaskogen. The subject of this interview was not very clear to some interviewees, which made some interviews a bit more superficial than others and made comparing the interviews somewhat difficult. The interviewees who were all residents of Årsta and against the possible developments were also primarily concerned with the significant decrease of forested area of Årstaskogen if the areas spared from the reserve would be developed into housing. The focus of the protest is not fully or mostly on the interface.
for them, which caused the interview to often change track. However, their concern with one of the phases (Årstaskogen) of the green-red interface made those parts relevant as well. The focus on interfaces and their perceived qualities have also caused this research to possibly miss information that could have been relevant if the focus of the interview would have been broader. Financial interests have been mentioned several times as being a supposed primary motive of the municipality for the development of housing in Årstaskogen. Although very important in a wider frame of this project, the focus of this project remained on the interface and qualities in spatial design.

**Recommendations for interface design and planning**

As said before, the subjective nature of the term ‘quality’ of this research touches upon the nature of the spatial design profession. Whereas the goal is to create qualitative environments, these can be contested by different ideas of what quality entails. Generally, quality means creating a functional and aesthetically pleasing environment that is suitable for the context. The theoretical framework can help with thinking about certain ideas of quality, what they entail and how they relate to physical environments. This framework can be used by planners, designers and citizens, perhaps not to literally motivate their designs or comments on designs with, but to question and relate certain features of an interface design. What is it that a design proposal tries to convey, and how is quality framed? How can those qualities be questioned and defended by the designer or planner? And is the related type of interface really the best, or only design feature to apply to this quality? These are all relevant questions that should be asked in each spatial design, and are rightfully asked in the case of Årsta by the activist network. Design proposals resulting in conflict with citizens are not always negative: they allow a thorough investigation in what quality exactly entails quality and where the motivation for a design comes from, and if there are alternatives. However, an inefficient conflict can drag on for a long time and is not very constructive for decision making. Even though plans are still in early stages, more methods should be explored to have a constructive discussion about what a proposal tries to convey, or how an alternative could be better. Related to the main question of this research is not only about what defines quality, but also how it is defined. And as often said, an image says more than a thousand words. Creating visual aids to communicate plans or designs is always better than a description. The description of the proposed interface by Stockholms Stad is very abstract, and the intent of the description is not clear. It can be questioned if an actual design is made or not. If not, there should be nothing discuss. If there is, it should be properly presented. Instead, Bevara Årstaskogen uses many visual aids in their cause by nature photography, maps and diagrams criticising the description of the proposed interface. By showing the effect of several types of interface designs through visuals, maps and diagrams, a discussion can take place in a more constructive manner.

By using the typology of interfaces and the typology of qualities, four examples of interface designs have been made. In these design approaches, qualities make clear what the effect of certain qualities and interface types are. These examples are varied in their different qualities and interfaces, some more than others. Some differences in interfaces or qualities can have a significant effect on the physical environment. It is important to note that although they partly derive from the context of Årsta, they are not necessarily fully
applicable to that case. One design approach is not necessarily better than others. The point of showing these design approaches is exploring a visual element to the outcome of this research, and to spark discussion on how these qualities and interface types are visually translated.

The first two approaches are examples of heavily designed hard edges. There is contact and interaction with the forest in both examples, but the dividing line between the two is very slim and clear. The interface is in this case is linear shows a sharp divide between forest and city. Both design approaches also show a path along the edge, causing a visual connection for visitors to be fairly constant. The built area also faces the forest in both examples. The two approaches also differ in hardness.

The first approach shows a higher degree in urbanity on the side of the built environment. More hard surfaces and plinth functions cause a sharp contrast to the forest. This approach also shows a height difference in the interface, with the forest being on a lower level than the urban area. This causes the area to be legible and safe, but to a certain extent limiting the accessibility of the forest because of the descent into the forest. The sharp contrast also causes the forest to have formal ‘entrances’, since there forest cannot be entered everywhere. The balance between forest and city is also very much shifted to that of the city, with the forest being somewhat subjected to the built area. The path along functions more as a balcony rather than a path.
The second approach is somewhat softer than the first one in its interface. Although the dividing line is also rather sharp in this case, there are several reasons that make the forest and built area more balanced. In this approach, forest and built area are on the same level, and the residential function of the built area with some green in between causes the two areas to be balanced. The effect of a semi-hardened path along the forest with small benches also creates a more natural and friendly atmosphere. The forest being on the same level as the housing causes the forest to be almost continuously accessible.

Figure 29: Design approach 2: A hard interface, but more gentle and green.
The third and fourth design approach also have less of an urban feel. Contrary to the first and the second design approaches, the interface in these approaches are softer and more area based. The third approach shows an area based interface which is multifunctional and is somewhat of a ‘buffer’ zone between forest and housing. In this area, some public and semi-public functions could take place like sports, urban farming and gardening. In this case, a more cultivated green area lies on the interface, making it very soft, yet accessible and varied. This approach is designed in a more informal manner, letting variability and spontaneity guide the quality of this area. A downside of this approach could be that some of these areas, like gardens, can be semi-private, decreasing its publicness.

Figure 30: Design approach 3: A soft interface with a multifunctional intermediate zone.
The fourth approach shows an incredibly soft edge, also area based, which has a very ‘laissez faire’ approach. In this approach, the housing and forest do not face each other, but keep a significant distance between them. An ‘ecotone’, a natural forest edge allows a buffer zone between the forest benefitting ecological values. The forest can still be accessible through thresholds with paths, but can also be informal with trails going into the forest. The distance to housing and its orientation allows the forest to appear more wild, and provide a better feeling of nature and more tranquility. The forest in this case could be an important tool in the education of children that can explore and play in an actual forest.

Figure 31: Design approach 4: A soft interface with a ‘laissez faire’ approach in its design, including a natural forest edge
The last design approach shows an interesting feature of distant interfaces and their perceived quality. Instead of always want to connect and close gaps between red-green areas, it can benefit both phases if there is a respectful distance between the two. This can allow both phases to excel in their quality. The forest can be a forest, and housing can be close to the forest. Keeping distance and being separated is often assumed as being negative traits in planning, but sometimes it is for the best of both phases. And not everything has to be meticulously designed, a bit of wilderness or spontaneity can result in interesting environments. An interface is always defined by the traits of the phases it lies between. Therefore, allow an interface to define itself as well. It can result into a quality that stands out, and can develop over time into something unique.
Bibliography


Ernstson, H., Barthel, S., Andersson, E., & Borgström, S. (2010). Scale-crossing brokers and


McWilliam, W., Eagles, P., Seasons, M., & Brown,


Stockholms Stad (1940). Beskrivning till förslag till ändring utvidgning av stadsplanen för delar av stadsdelarna Årsta och Johanneshov i Stockholm. (translated through Google Translate, retrieved from https://bevaraarstaskogen.wordpress.com/dokument/)


Stockholms Stad (2017a) Inrättande av Årstaskogen - Årsta holmar naturreservat.

Stockholms Stad (2017b) Årstaskogen: Medborgarenkät 2017

Stockholms Stad (2017c) Förslag till beslut för Årstaskogen-Årsta holmar naturreservat.


and cultural heritage in the forest. FORESTRY AND OUR CULTURAL HERITAGE, 106.


IMAGE REFERENCES

All images were entirely made by the author, with the exception of the following:

Figure 10: Source: Stockholms stadsbyggnadskontor, (Plan nr Pl 2353)

Figure 13 & 20: Basemap and map outline retrieved from Appendix 2 of Stockholms Stad (2017a) Inrättande av Årstaskogen - Årsta holmar naturreservat.

Figure 14: Aerial photograph of 2009 retrieved from https://open.stockholm.se/oppna-data/geodata/
Appendix 1

Interview transcript Hampus Olesund
24-5-2018

My name is Hampus Olesund, and have been working at the city of Stockholm for four years. My title here is project manager, and I am mostly focused on housing projects. The new housing projects are on land that the city owns, which gives us the opportunity to tackle both the housing shortage and have a bigger influence on what a development should be. When we sell the land, we can also make something else with the revenue.

So the point is putting the profits back into the city, in the form of public amenities perhaps?

Yes, in general I think we make more money than we spend. But still, if we build somewhere where it is very green, we should compensate for that by using the money we made on selling that land by ecological compensations and so on. So that is a part of my responsibilities as a project manager. I am not working on the oversiktsplan in general, but all of our projects need a new detaljplan. So that is just a part of the whole process. Someone comes to us with an idea on how to develop an area, then we discuss that with the urban planning office and decide with them if it is a good idea or not. If we do think it is a good idea and correlates with the oversiktsplan, we can move to the next step of the detaljplan. In the early stages of such a projects we also make economic analyses to see if it is feasible and doable. There can be obstacles like roads, railways and nature or topography. We start to think about those things. In Årsta, which is close to the city centre the land price is quite high, so there there is a lot of money for new roads or develop parks around a development. The detaljplan is mostly in the hands of the urban planner. In a project we are responsible for everything that is not private, so all the public amenities like roads and parks, because that is where the city has to spend money on. But we also keep in touch with the project developers to know about their perspectives. The urban planners carry the overall responsibility for the detaljplan, also because they know the design part. But we need to make sure that the plan can be realised.

Your office has been involved with establishing the nature reserve in Årsta. What is the point of the reserve in your opinion?

It is not really what we are used to, to make nature reserves. Maybe it is not necessarily our task, but someone should do it; and it also has be paid by us. The politicians are kind of proud that there are such big forests close to the city centre. Some of the main ruling political parties is the green party, so they want to show they care about green issues in the city. Creating nature reserves are a part of that. The forest overall has some important values, like an ecological core area that also connects to other areas through corridors on the east and the south. There have been some small developments to fill spaces between the current urban area where we also had to look into ecological effects. I think the idea for the nature reserve came first, and after a while they came to think that they could change the delineation of the nature reserve in case of future housing development. There was a proposal from
2014 for constellation and the city changed their way of thinking and asked us if it would be possible to build more houses.

This change of thinking of the city about Årsta has caused some uproar among the local residents. They are worried about the parts of the forest that are not included in the reserve will disappear because of housing. What is your view on their perspective?

The perspective of my office, not necessarily myself, is to build housing, or at least see if it is possible to make more housing without destroying the core values of the forest. There is also an idea that building more houses could, with the accompanying infrastructure make the forest more accessible, and can ensure that more people can move through or along the forest. I think that is kind of smart to do that, also because the size of the nature reserve today is as big as it was before, with the first proposal some years ago. There are of course a lot of people who want the entire forest to be a nature reserve, including the areas that we excluded. I think in ecological terms it is most important to look into establishing a reserve with good connections with the east. We can also include parts in the nature reserve if we know that there will never be developments in those areas, since including areas is easier than excluding once a reserve is established.

You said that the development of the new housing can help make the reserve more accessible, according to some people of the city. Can you elaborate on that?

That is something that the urban planners should try to explain a bit more. We said quite early that by building we could make the forest more accessible, to which people of course responded with asking how the forest could become more accessible when there will be buildings there. Point is that it is very hilly in the area, so with the money we could make with building houses and selling the land, we could make new tracks that are not that steep and more accessible. We could also make newly designed places in the forest that would increase the attractiveness of the forest and add more things to do there.

So you would use the revenue from the housing to create a new edge as well. How would you describe that?

We think the forest could be used much more by Stockholm. There are so much qualities there that are not known by people. The good parts of the forests could be enhanced and we can add reasons to go there, and make it more widely known. Not necessarily at the edges, but I am talking about making things inside the nature reserve that the regulations allow. For example, a lookout point over Södermalm that is also accessible for people who are less mobile. Or use elevated paths or viewing platforms in the area so that people can move around easily, which will be nicely designed. But there are a lot of people who would like the forest to be now as it is, because it is a forest and not a park. And adding these elements it would be more like a park which they do not like. A lot of people also enjoy that the forest is not that crowded, and enjoy the calmth and the feeling of being in nature instead of just looking at nature. By making these designed elements more people are going to be there, and we think that more people could visit it. Today we do not work on it that much since the project is on hold. But it would be interesting to see what we could give back in terms of amenities.
So there is some give in take in terms of money, but also in area, which resulted in the current delineation of the nature reserve. What do you think are the main motives for these borders?

It is mainly because to see if it is possible to build buildings in the areas that are outside the borders. The politicians were very keen on making it happen. There is an election coming up this year, so the current party wanted the reserve to be there so that they could show results. But it was also to see where to build and plan that in a longer term and in more detail before we set the borders of the reserve, or we can also say to set the reserve to see where the highest values in the forests are. But at the same time, the entire area of the forests is very valuable. Considering the exact delineation of the reserve, there were some points of which we said from the beginning could be entrances, so they could be easily accessible. In combination with the green ‘fingers’, which are at the same time the eco-corridors to the south, one could pass by and easily locate the reserve and access it.

In some of the planning documents there were ideas of a new ‘urban front’ for Årsta, with a continuous road from east to west. Is that still a main concept or is that under discussion?

At the moment there are not fixed plans, but for the urban planners it was a big deal. They thought to build more houses in line with a new road and that face the forest instead of the other way around. They thought that Årsta could face the forest in a much better way than today. Today the houses face the road and the forest is behind that, causing you to not know where the forest is. So the plan is to let the houses face the forest so that when you are on the road, you are between the houses and the forest. And the idea was to make the line easily accessible that connects Gullmarsplan to Årstaberg, not by car but by walking and bicycle. Nowadays it is very popular to walk along the shore, but on the upper side it is not so easy to walk from one side to the other. But there is also a part where there is no border of the nature reserve, which means that there can be no houses there. So this idea does not work everywhere along the forest.

So the main purpose of a route along the forest would be to improve accessibility?

Yes, because a lot of forested areas close to the housing today is not very accessible, since it is very hilly, and it is hard to know where the public space ends and the private space starts. Today it is very diffuse. The road could easily demarcate this distinction between private and public. The transitional zone is not very well used besides the people who live in in the houses near that area. We see that building in these areas is not such a big loss because people can use the area a bit further into the forest. We always need to think from a bigger perspective, it would be better if more people could live there and make use of the area.

Like you said, there are ideas but no fixed, detailed designs yet how to fill in the areas. However, the border of the nature reserve is now fixed. Is this problematic in your view?

Yes, ideally it would be better to know where, how and if it is possible to build before you create a nature reserve. We have tried to see until what extent to see if a path along the edge could be realised including housing, but
of course it would be easier if the line was not so fixed as it is right now. But the edge is quite well looked into in regards to topography, so to see it would not be too steep.

**Considering the original plan for Årsta, how would new additions of housing fit in?**

The original plan is one of the inspirations, because it features a road along the forest that was never realised. That road would make it more easily accessible. I also think there was a different way of thinking back then. Today we would probably make the housing face the forests instead of the roads and the other houses. We would probably not build like this, considering the public-private discussion and knowing where the forest is. It would be nice for the people who happen to live there, but not for visitors.
Appendix 2

Interview transcript Jenny Sverker (J) Martin Dahl (M) 25-5-2018

How do you see the area that is now becoming a nature reserve according to the current plans?

J: The part that will now be the reserve is basically just the slope and the area along the water. The forested parts that are flat are looked into for building. And if you put two and two together, overlapping the application map of one of the building companies and the map of the forest area that is not part of the reserve, you can see that those two match very well.

M: You can see how steep the slope really is here, these are not areas that you can really use for recreational purposes. Some parts are even more like a cliff than a slope. A lot of children use these flat surfaces much more. There are a lot of kindergartens around here, and all of them use these areas, daily or weekly. You often see a lot of children around during weekdays.

You are saying that the actual ‘useable’ part of the forest is now spared from the reserve to possibly be developed in the future?

J: You could establish a reserve for several reasons. It could be ecology, wildlife, recreation, etcetera. This reserve is established for the purpose of both ecology and recreation, for the people around. The fact that they take big chunks of the recreational part of the forest out of the reserve is very contradicting, people have been saying this from the very beginning.

But also the ecological aspect is contradicting, because the leftover reserve area is so small. And no one really knows if the birds, plants and insects in the forest will actually make it. If the other parts will be developed there will be noise, pollution, and very little forest left. A nightmare would be that the wildlife slowly disappears and erosion will happen on the slopes.

M: Yes, if you remove the trees, the stabilizing factor of keeping the soil together will disappear which will probably lead to erosion at the slopes. Building with concrete, making impermeable surfaces on top will also lead to water runoff down the slopes which can wash away the soil. Normally the forest ground would take up the moisture but with asphalt and concrete it will end up in the slopes.

J: Ultimately, this could destroy the pathway along the water as well which is used by a lot of people. Another aspect is that the area as it is is not very big in width. It is not like you can use some parts of the area and still have a lot of forest left. So there is not much forest left anyway due to earlier building projects. Then there is also an aspect of noise reduction for the entire forest by the trees. The planes for Bromma airport fly in over the water between Södermalm and Årsta with around twenty, thirty flights a day. You already hear them, but if you cut down half of the trees that noise would increase. There is also a lot of car traffic around Årsta as it is.

Would you then say that the forest as it is is quite silent?

J: Absolutely, that is, both the silence and the birds, almost all year round. And if you would cut half the trees, it would be mostly aeroplanes and traffic.
M: A lot of the bird species need a big area to live in. Reducing the area by around half its size will cause a decrease in species. So it will affect the ecological value.

Speaking of the ecological value: although Årstaskogen is not one of the sacred ‘green wedges’ of Stockholm, many documents describe it as an important ecological area. What is your view on this?

M: It is like an ecological corridor that connects to Hammarby Sjöstad and Nackareservatet and so on.

J: I think it is considered important as it connects Nackareservatet in the east and then Vinterviken and Lake Mälaren in the west. So even if it is not a full stretch from here to Vinterviken it still provides a probability for the species to move. And that is also what the city itself says in many documents, that is important to keep the connection from east to west. We know for a fact that there are a lot of red listed birds and other species living here, so it is not a very everyday piece of nature of which you could do without. It actually contains red listed species that should be cared about, for example the Duvhök (Northern Goshawk, Accipiter gentilis). The ecologist of Bevara Årstaskogen found around 28 red listed species on the EU and Swedish list of endangered species. So just the read listed species would indicate that it is not a suitable area to build.

Do you think the establishment of the nature reserve will affect the ecological values in any way?

J: The establishment of the nature reserve itself will probably not affect it but if they choose to build on the parts that are left out, there would probably be an effect. I am not an ecologist, but the area will be a lot smaller and the amount of people in Årsta will increase due to the new housing in other parts, around twenty thousand new apartments. So if the forest decreases and the amount of visitors increases, there will be a lot of pressure on the forest that is left. Which will always have a negative impact on animals the forest. Not that I am not welcoming others, because in the forest as it is it is not a problem at all.

Part of the idea of the nature reserve according to the city is to make it more accessible for other Stockholmers. How do you see that?

J: Of course that is the kind of vocabulary they use from these building firms that came up with this idea of the forest being not accessible enough. You could see from where we came in next to the football field that it is very accessible. I could easily give you ten to fifteen easy access points from Årstavägen, which anyone could take. I think there are also five or six access points from the north that lead down to the water. And I know because I have been here with the pram in winter, spring, summer autumn. In winter I would actually prefer to walk on the upper part rather than close to the water because it is more easily accessible. You see people with prams and also a lot of old people walking in the forest. That would mean that it is very accessible as it is. It could maybe use a few signs, or a map to see where the paths are if you do not live here so you could get around. It would not be a bad thing if there would be a couple of other amenities like public toilets. But that talk of availability and access is to me just marketing talk. How could a smaller forest with just a slope and water be more accessible than the forest as it is? It is just not realistic. It would actually mean that
if you build all those houses that they want to build, they would have to take down a lot of the mountainous areas and build walls down to the slope. This would be similar to what they did in Fredhäll, which we know was an inspiration for the people coming up with this. In Fredhäll you would have a beachwalk with a wall next to it. They would need to do that because of the risk of erosion.

There are actually not that many people out right now. I think the kindergartners are asleep and a lot of people have lunch now. But normally if you take a walk here for like twenty minutes you would meet around forty people. Dog walkers, people working evening shifts, parents with children and a lot of kindergartners. It really is a fantastic place, I never lived in a place before where you are in nature right outside where you live. It has been one of the best things in Stockholm in general. I lived in many places in the city and I always had some kind of natural areas close by. Even in the city centre and also outside there is always a nice green spot. And I am really worried that they are making a mistake now when they densify as they do, that they are destroying something that a lot of big cities do not have.

**Densification currently is a popular way to accomodate more people in the city, but you are sceptical about the way it is being handled?**

J: I think some of it is good, I think some of the projects in Årsta are good when they found places with no real value at all and put up a housing block. It has been done partly very well here, but this plan is the worst idea I could imagine. There is also a limit where you cannot densify anymore without the place losing its character. The fact that there are so many people moving in also increases the need for childcare. So there are not enough locations for kindergartens so they tend to build into the forest since so many do not have a backyard or an outside area. To have the kids outside they have to take the kids to the forest, and the forest is better than a park in this sense because those get destroyed easily.

**Speaking of parks, are you afraid of this area becoming more like a park with the establishment of the nature reserve and with possible developments in the future?**

J: It would definitely be a mistake, because it would not be the same. They have done some things to some area which makes those parts more like a park than before.

M: Yes, they removed a lot of trees to mostly clear the paths, but also removed trees that were further away from the paths. Some of those trees were not affecting the accessibility at all. But you also see a lot of dead wood here that is so important for a healthy forest. A lot of insects and woodpeckers living, feeding and using dead wood as their habitat.

J: Spending time in a park is of course not the same as spending time in an actual forest. And not that many birds and species will live in a park. A park is also more depending on maintenance, whereas a forest takes care of itself. Another thing is that nobody goes to a park in the middle of the winter. This place is used all year round, and people are there all year round. With snow the forest is very nice, while the rest of the city looks very gloomy during that time of year.

**How do you relate your home to Årstaskogen?**

M: I live right next to the forest. I can actually
J: When people ask me where I live, I say a block away from the forest. I think almost everyone in Årsta would say they live almost right next to the forest, because the area is so small. From almost every house here it takes around five minutes to walk to the forest at the most.

**How would that perception of closeness be changed if the areas spared from the reserve would be built?**

J: I do not think people would talk about the forest anymore, but of the standpromenaden (beach walk).

M: What people would define as the forest would disappear. People would not refer to it as the forest anymore.

J: Another fear of mine is that the southern side of Årstaviken (the area of water between Årsta and Södermalm) would become like the northern side where it is always crowded, with a concrete path with some lawns and gardens on either side. Then there would be nowhere to go. Everyone would take the path so in summer there would be a lot of people. The grass disappears because it is used so much which will make it dusty and dirty. And one of my nightmares is that Årstaskogen will become like that. The beachwalk in Tanto used to be a nice area but there is nothing left.

M: I think that some of the wear and tear has increased in Årsta already during my time living here. More people are moving to Årsta and making use of the forest. Reducing this area will increase the pressure even more.

J: I have a friend living in Södermalm living in southern Södermalm who cannot understand that the city thinks that only people from Årsta care about Årstaskogen. There is very little green space in Södermalm at all. For the people living on the south side of the centre Årstaskogen is what Djurgården is to the people on the north side. It is just a walk away where you can breath. I know that kindergartens on Södermalm also come here for their excursions. It is in the educational programme that children learn about things like resilience, natural phenomena, animals. And you can also use the forest for transport. If I go to Lilleholmen I do not go by tram or bus, but I just walk and it takes the same amount of time. And it is way nicer to walk or cycle in this area than it is in the city. I think a lot of people do that. You also see people on their way to their job or school. A lot of people take advantage of a bicycle ride through the forest in the morning instead of a packed metro. If you live here you almost do not need public transportation if you choose to take a shortcut through the forest or along the water.

**How do think the forest relates to the rest of Årsta now and how do you think possible new housing could affect that?**

M: I think the accessibility now is very high, and that it will start to decrease if you build more houses here. In the new plans they wanted to have the doors towards the forest. I think that it will be more like a front.

J: The area now is built with the forest into consideration. When they planned the area from scratch they saw the forest as a huge advantage. They planned the houses to allow access to the forest and allowed the forest to be an important part of the city. But if you start building, or eating your way into the forest, I think it will be a great challenge to keep that access, also because of the slopes. How will you
What would you say are the main qualities of Årsta now and how will that change?

M: Obviously the forest is a big part of this quality. It feels like you are living in a small city, but also very close to Stockholm. You feel that this area is more relaxed, not really a city but more like a small town. So it is the best of both worlds.

J: It is a small town community feeling here that you do not get in the city centre. People know each other. I think it is also because of how the area was built from scratch it was built with the idea to create a sense of community. This was one of the first suburbs where they also had a very clear idea on what to do. I think it was called something like ‘houses in the green’ or something like that. Årstatorg is naturally one of the big meeting points. As soon as the spring sun would come the old people would sit on the benches. When I came living here there were not many families but they came later.

M: I guess a lot of people moved here because of the nature as well. You know that they can be in the forest, learn and grow up here.

So you could maybe say that the forest is an integral part of the neighbourhood?

J: Absolutely, I always say Årsta has two nerves; one is Årstavägen that leads to Årstatorg and the other one would be the path through the forest.

How do you think a new edge or interface with the forest affect the neighbourhood in general?

M: I guess the feeling of Årsta is these old houses. Nothing has really changed since they built it. I mean, it was built during the forties
and the fifties I guess, so there would also be a clash in terms of aesthetics.

J: The buildings are very characteristic, in colour and shape. It is a big area which is very homogenous in the way it looks. The new housing would of course be different in the way they look. I think new buildings would be very high, like eight or ten stories. So it will definitely be a change.
Appendix 3

Interview transcript Ola Andersson
31-5-2018

My name is Ola Andersson and I am one of the partners in Andersson Arfwedson architects. We have been doing a project about Årsta and Årstaskogen because we think it is a very important question for Stockholm and an important step in the extension of the inner city of Stockholm. We made a proposal for Årstaskogen in which we combined possible new housing and the nature reserve. It started with the comprehensive plan for Stockholm, the översiktsplan. When it became accepted by the city in 2012, The whole of Årsta was marked as one of the areas for the extension of the central city. At the same time there was this idea to make a nature reserve, and we became interested with the question if you could combine a nature reserve with the plans for the extending the inner city. The plans would initially conflict with each other, so we went back to the original plan of Årsta. What you can see is that on this plan there is a street that went through the whole area. The idea for this street was abandoned and not continuously realised because certain parts were left out (like the part between Ottsjövägen and Sköntorpsvägen). So now if you want to move through Årsta through an east-west direction, you have to move along Årstavägen, Hjälmarsvägen and Sköntorpsvägen which is very criss-cross. It would be no problem to do if you can find your way in Årsta, but it requires a lot of knowledge about the local infrastructure and if you are not a resident it if very difficult.

Does this difficulty of finding your way in Årsta counts for just the built area, the forest, or both in your opinion?

I guess that if you are supposed to find your way you would have to walk on streets. You do not just walk into the forest if you want to go from one part of Årsta to the other. Unless you have the knowledge about the local situation. That makes it for people that do not live there unlikely to travel by foot through this area. A large part of Årsta are still buildings from the original plans, but a lot of recent additions were made after 1989. There are also a lot of fenced off areas of different sorts. There is the sports field, the allotment gardens and also the preschool area. If you are in Årsta it is also difficult to find your way into the forest. We have marked all the entrances there are very few passages that lead from the public space into the forest. Close to Bränningevägen is the best entrance into Årstaskogen. There is also this way from Årsta Gård. But our point was that if all the forested area would become naturreservat, it would conserve a situation where it would be very difficult to access Årstaskogen from the south. From the other side there are two points where people can enter (Skanstullsbron and Liljeholmskajen) along the water, a lot of people included it in their runs. Also if you look at how the buildings relate to the forest, it is usually the backsides of the houses that face the forest. On that side there is often not even an entrance to the stairwell. So basically you cannot get out into the forest from these houses. Even the new houses have very little access to the forest. If Årstaskogen is going to be a nature reserve it is important that the public can have access to it. So that is why we proposed the street running along the edge of the forest from east to west. Along the whole length you would have access to Årstaskogen and you could walk along the edge. Between the old parts of Årsta and this street there would
be space for new developments.

**So the starting point would be the infrastructure, and from there on fill in the parts in between the new roads and the current built area of Årsta?**

Yes, exactly. And the northern part would then be the nature reserve. What we understood from the inventories that have been made is that the important thing ecologically was to keep a connections from the east to the west. So we did not want to interfere with that, and as far as we could tell the upper (southern) parts of the forest were not that interesting from an ecological point of view. We also have some references from Snoilskyvägen at Fredhäll on Kungsholmen which is a street that goes along the upper part and is simultaneously a lookout point, and we were also inspired by Mälarblick at Nockebyhov. Then we made a very simple exploration to see how much housing we could fit between the old Årsta and this new road. We tested mostly single family houses with two or three stories, and there was space for around one thousand housing units according to that plan.

**Was this explorative proposal commissioned by the city or someone else?**

No, in fact this was our own initiative. That is, initially. Then we contacted a developer, Wallin, and they were interested in letting us work further on Årsta. There was at the same time a preliminary proposal from the exploateringskontorets for the border of the nature reserve, in 2014. Back then there were also parts of the forest spared from the reserve. So we proposed a plan for that as well, but exploateringskontorets was not interested in that. We were not crazy about their plans because it did not have any streets connecting different parts or a clear border. Then they revised their proposal so now the border is different which enables something that is closer to the original plan.

**Would you say that the edge of the nature is reserve is not really considering the quality of a possible newly built area there?**

I think the process is divided in two parts. One part is the nature reserve which is concerned with conservation. Then comes the question about what to do with the area that are left out of the reserve.

**Would you say that the other way around is better?**

No, but obviously I would prefer an integrated proposal, with both the nature reserve and new housing. But I do not think the political reality is like that. In that sense it is much better to take the decision to protect an area, and then look at what you could build.

**So what is the role of your proposed road in that?**

The important thing is to ensure public access to the nature reserve. It is not just supposed to be a backyard for the people who live there. To take such a central part of Stockholm and turn it into a nature reserve, means that you have to guarantee public accessibility to everyone in Stockholm.

**From the references it looks like the main point is to have a view over the forest onto the water.**

It is not really the same thing because the references are more narrow, the distance from the street to the water is much shorter and
it is also more steep. But the principle is the same. You look over the forest, but also you improve the contact between the different parts of Årsta. The visual aspect is one thing, but it is also about physical access to the forest that can be arranged along the entire stretch. The important thing is also to keep the parts that are good access points of the forest today further south, and to maybe improve them.

**Does the road then become a new edge? What happens to the current access points and the ‘fingers’ which lie on the southern side of the proposed road?**

I think those parts would become a separate entity. Some parts are also very cultivated and are already part of an existing park, with lawns and such.

**Taking the infrastructural element like the road in combination with the height, it seems to me like a very hard edge. Would you also say that?**

The important thing is to ensure the public access. And to have public access you need to have a public road where everyone feels welcome to. That is not the case now. You cannot walk along Årstaskogen. You have to move around the streets and really look for the access spots, which are just entrances that just happen to have been left between the housing. That brings us back to the original plan. With that plan you have guaranteed access to the forest.

**Now we are talking about the original plan, it looks like it was designed without a very hard edge, but rather with a very considerate stance towards the forest. How do you see the relationship to the forest in the original plans?**

I think the original idea was to have freestanding blocks in a green landscape at that point in time. I think that is a very visual idea, it does not have very much to do with the physical access to the green area. There are a few houses that are on the ‘forest’ side of the street, so you would not have access on those parts of the road.

**Is the idea for new housing in the area to also face Årstaskogen?**

New housing could be facing the forest across the road. But then again we have not studied it in that much detail, the proposal is just to see how much housing would fit in the area. Since the city owns the area it is for the city to decide. The important thing would be to take the larger view into consideration and start from there, instead of piecemeal development of bits and pieces of new housing. There needs to be an idea for the whole front. The biggest risk concerning this when the city starts to work on proposals for building that it will become fragmented.

**Considering big plans and your proposal, you would lose quite a large part of the forest area, don’t you think so?**

The important thing is to get both housing and the nature reserve, I do not think there has been any neutral assessment of the ecological qualities of Årstaskogen which has pointed out any great ecological value in those areas. From a recreational standpoint, the important thing is that people can walk around Årstaviken, that people from Södermalm can come there as well. So I think it is a good idea to keep the forest front towards Södermalm. We came to the conclusion that is was not important to see the new buildings from Södermalm. Therefore
we kept a very low scale in the proposal with mostly single family houses.

**What would you say the primary qualities of the forest are?**

As of now there are very little qualities. There are some beautiful views on some places but the forest itself is very badly kept, with fallen trees and undergrowth. It is not like a ancient forest that has been completely untouched. There are too many people for it to be really pristine nature. If you want that kind of forest, you should go somewhere else. The thing is that it is inaccessible but it is still used so much that it is not in a good shape right now. I think in a place as this, only two kilometers away from the absolute centre of the largest city in Sweden, the idea to have a sort of virgin territory is absurd. I think the title of naturreservat is misleading, because I am very sceptical about the ecological value of this forest. It is obvious that the important thing is recreational value, which you can maintain because you can maintain the part that is most heavily used along the water. There are some spots which are not used at all. There is nothing special about that kind of nature, it just looks like any other forest. If you look at the county of Stockholm, we have hundreds of square kilometers of forest like this. So if you have pristine nature, you have to go outside of the city. We tried to preserve these areas like pristine nature which would be untouched by humans, but it is impossible because it is in the middle of the city.

**What was your main motivation for choosing single family houses?**

I am not saying that it is a bad idea to have a larger scale along the front, but that is not the main object of this proposal, the main idea is to make it possible for the public to walk along the edge of the forest and access it easily. In order to do that it does not matter if the housing is high or low. The interesting thing about this proposal is that even with single family houses you can still fit in a thousand dwellings. We tried to keep the proposal short and to the point. We simply wanted to communicate the idea that if you want to turn it into a nature reserve to keep it accessible, and connect it to Liljeholmen and Gullmarsplan from a bigger perspective like shown in comprehensive plan.
Appendix 4

Interview transcript Åsa Sahlström
4-6-2018

My name is Åsa Sahlström, I am a resident of Årsta and also work here as a teacher of secondary education of Värmdö Gymnasium. And I feel like one of the most privileged people in the world living here, having an apartment which is 10 minutes from my colony garden and work near here as well. For a Stockholmer that is quite unique. I am also involved in this network that tries to preserve this whole forest (Bevara Årstaskogen). Because if the politicians get what they want, large parts of the forest will disappear. But the opposition from the people from Årsta, but also Södermalm and Liljeholmen against this development is very intense. I have some friends who are journalists that say that this is almost the biggest issue of exploiting land in Stockholm. After Slussen this is the most discussed project. People who are living in Årsta happen to be very dangerous enemies for the city, who have professions like ecologists, journalists and lawyers. Everybody knows that this land is very expensive so the city could get a lot of money out of this. And it is much easier to get rid of the trees than to take a grey area like an industrial area that has to be cleaned up. And what makes me most angry is that they still want to build here while one of the most crucial issues right now is the physical and mental wellbeing of the people in Stockholm. And everybody knows that spending time in a real forest has a very positive impact on our health. And this forest is so close and easy to get to. Of course there are many forest in Sweden, but we do not get there because we do not have the time. So this forest deserves to be preserved. But this issue is not easy because I am also a local politician and a member of the green party, and it is actually the green party who has decided to look into development of the forest. Not all members want to preserve the green areas. There are two different discourses among green party members. There are those who think that the city should be more dense, who think many people should live in the inner city to consume less space and resources. So I fight with other members of the green party to preserve green areas.

What would say are the big qualities of Årsta?

The quality of this neighbourhood is quite different from the other areas in Stockholm. I lived in other suburbs where there was a completely other way of interacting. It is hard to say why exactly, but in Årsta the contact between neighbours is very warm. For example, my colony garden is very collective, which you take care of with everyone. In Årsta you feel an obligation to actually say hello to your neighbour and help each other out a little.

How do you feel about the forest and how it relates to the neighbourhood?

This forest is a magical place for me, and I know it is for many people. It is a piece of magic in the city. It is something wild, and the forest like it is now in size takes care of you. In some parts of the forest you cannot even see a building in the distance. You can almost pretend like you are in a big, wild forest. I know many people who moved here because of this forest, so that there children can get
And the forest is full of kids all the time, both from preschool but also teenagers from Värmdö Gymnasium. And I think it is difficult to put a value on what it exactly is about forest. I think Sweden is kind of behind when talking about the forest like therapy. Doctors here would never write a prescription to get into the forest, even though I hear they do it in Finland and Japan. In Stockholm there is only one therapist who is into this forest bathing, which is called Shinrin-yoku in Japanese. When we discuss with the architects who want to build in this forest, they use a type of language like they hate the forest. They would say that the forest is frightening, they would make up stories that people from Årsta are scared of the forest. They have the perception that it should be more like a park, and less wild. They want Årsta to be like the inner city, which is their ideal. They do not see the point in preserving Årsta this way, since they do not see the point. There is a known architect who looks at this forest like his little private project and he is really keen on building here. I thinks there would fit around a thousand dwellings here, but we actually had students that studied if it would be possible if it would be possible to keep the ecological integrity of the forest while building homes, and they found out that only around 150 homes could be built, max. This architect loves the inner city and thinks a city block with an inner courtyard is an ideal building form with a closed community. Årsta is more open socially. On Årstafeltet they want to build a lot of these closed blocks because that is the way that people want to live apparently. There is a big political discussion about these building types. The green party things blocks should be open to the whole neighbourhood, like the Swedish punkthus. The Centerpartiet wants to build a few high rises to save the forest. That sounds positive but it is very expensive and can also be somewhat negative for insect species. But if I had to choose, I would go for that because it saves a lot of forest.

Would you then also think there are some suitable places to build, maybe those high rises?

The thing is that all these places that they want to build on are currently forest, with very old trees, so those are very valuable. But these areas are also the flat areas, where it is easy to go. The places that are left are places that are unsuitable for building, like the slope and the shore because of the Strandskydd, the coastal protection law. To keep the water clean there you need green areas. The archipelago is also unique of course. Those are other reasons to keep this forest. Otherwise you would have to compensate for this forest, which is very hard. So in the long run it is definitely not a good idea to build in the forest. But if I had to choose an area to develop, the area close to Gullmarsplan, because that area is of little value already. Gullmarsplan is also a very criminal and unpleasant area. If you build there you can make the area safer. Or perhaps the football field, because I do not find it that important.

So with the establishment of the nature reserve there has been talk about accessibility of the forest. What is your view on that?

Accessibility seems to be their favorite word. But they use it in a way like they almost hate nature, with wanting to use asphalt and such. The forest is good as it is now, because that just is what a forest is. The status of the nature reserve can make it a bit better, with more benches and better lighting, just small changes. But you also have to keep a unique
forest. Because if you want it to function as a healing therapy for people, it needs to stay a real forest. You have to feel like it is a forest. So I do not really understand what they are talking about. A lot of other Årsta residents dislike this notion of the current forest being inaccessible. And the politicians are making up lies, like that no one wants to visit the forest.

How would you place the meaning of forests in Swedish culture?

The Swedish people have a very deep and old cultural affection to forests, it is like a religion. There has been a lot of research also about kids who live near the forest and grow up in it can concentrate better and such. There are a lot of kids in the world that have no direct or cultural attachment to it. But if you grow up in the forest you definitely become attached to it, and it is something you seek, that when you are tired you would go to the forest, or to breathe, or as therapy. But people all over the world seek nature, whether it is forest or something else.

What is your opinion on densification, and do you think it opposes green areas too much?

I think the city is moving in a wrong direction. The first reason is climate change, this month was very warm and dry. And the trees and the green areas really lower the temperature for example. There is a lack of vision, where politicians do not look beyond the growth of the already biggest cities. It does not make sense because it gets really crowded and such. They should make smaller cities more attractive for living by railways and such. The current direction is just very easy and without long term visions. Like Årsta had no schools when a lot of families moved here. There is no overview, and they are building apartments with incredibly high prices. Youngsters in Stockholm live with their parents until they are thirty, while luxury apartments in Liljeholmen are empty. Who are they building for? Also this forest is going to be really expensive. There is no demand for those kind of dwellings anymore.

What do you think about the proposals that have been made before, with a path from east to west with buildings along it?

I would be afraid that the forest would become very enclosed by roads and buildings, that it is almost fenced of.

There has been talk in some documents and plans of a new urban front for Årsta, what do you think about that?

I think that is a typical expression of those who want to make it more like the inner city. This architect was saying that Årsta is more of a front from Södermalm, but they are not going to see a forest but a city in that case. So it is really coming from a subjective aesthetic that you do not like nature and want to make it more urban. The way Årsta is built is amazing when you have kids. For kids to grow up here is great, you can actually take better care of your kids then if you live in a suburb, where you have to commute from and to everyday. I know that it is not a lifestyle that is working, even if you have a big house. But the parents just don’t have the time. In Årsta people live in small apartments, but you have the time to spend with the kids. It is just more qualitative. In the inner city you cannot send your child out to play on the street, because here you can. There is everything you need here. Living small, buying second hand,
having a colony garden is the best way of city life in my opinion. I think I am speaking for a lot people in Årsta. It really is paradise.
Appendix 5

Interview transcript  Sara Almèn
18-6-2018

My name is Sara Almèn, I work as an områdestrategist in Södermalm and Mellersta Södra. I work inbetween the oversiktsplan and detaljplan phases, so in the early stages before something reaches the detaljplan. I work a lot with other offices and subdivisions of the city, but also a lot of builders. We meet with ideas and discuss to look into what could be a project further on.

I heard that the project was now on hold?

There was an objective to make the reserve happen, before the elections. The current majority [in the city council] wants to make sure it happens before the election happens. In doing so the reserve has a strong legal standing, and in order to make sure we do not unknowingly make boundaries for ourselves for the future, they wanted us to look into the zone between Årsta and the forest. Is there a possibility for a new interface or connection?

So we looked into that and what could be the interesting areas for development. So that is more or less what set the boundary for the reserve. But we have not gotten to the goal to continue to look into the housing, or the construction of what that could be. The reserve is now done, and there are these zones in between that could become something. We can start doing something there in autumn, or in five years.

So you are in a way already making a plan in a very early stage. Considering the delineation of the nature reserve, what were the things you considered in making that delineation?

We had the theme or the idea to make a pathway or a street, that would sort of be the public border in between the forest and the built environment. So it would be very clear where you can enter the forest. If you look at the interface today, some of these areas are a bit of a backside to the residential buildings. You don’t really know if you are allowed to be here, or if you are stepping into someone private area. It is a bit unclear sometimes, about what is private and what is public. So we had this idea of a clear line of what is public and what is private, using a built interface. We looked very much into heights, as to in some way make it available, and we had this idea of this pathway or street. It had to be partially accessible by car but not necessarily everything. We were talking a lot about inspiration from Norway, where you can find these spots along the road where you can rest and have a nice view. That would be the extreme though, but having this pathway as something accessible and to elevate the idea of this stretch. And then to line up with buildings and housing. Those would of course have a very clear front. The ground floor should be in connection with this pathway, with some public function other than housing. Perhaps not along the entire stretch, but at least with some conscious relation the local features.

What would be the most important factor for this preliminary design?

The objective was to make a sort of continuous, connective interface.

There has been some protest from the local community, how do you view their
arguments?

I definitely respect their point of view. We have the objective of the oversiktsplan and we have the notion we have to build a certain number of housing units and the notion to densify inwards, we are not expanding Stockholm outwards. And that also has the inherent idea of living public space that we are trying to activate. We have different different strategies that we work with. But that may not of course be the way the residents see it. The person living next to the forest may be quite happy with the way things are. And that is a very valid point of view. But that is not the only point of view, we know that there are a lot of people in Årsta looking forward to this development.

If you say that the accessibility is a main motive for creating a new interface, do you see a problem with it with the situation nowadays, in terms of points of access?

I think there are different aspects of accessibility and we wanted to clarify and improve the connectivity both from Årsta and into the woods. Parts of the forest go inwards into the forest, but sometimes there is housing in front of the forest or you don’t really know where to access. The point is to see if we can make clearer entrances and work with orientation, in order to make people see a sense of direction. Then there is also the aspect of physical accessibility of the stretch, so that people with difficulties can move easily. We tend to connect the stretch to the pathways within the forest so it is easy to understand how to reach and how to access the forest. The accessibility also lies in the connectivity of the ground floors and the outdoors, where the built environment meets up with the nature. But there is of course a path nowadays within the forest which you can use to move around, but it also depends on what you define as accessibility.

Adding to that, the definition of accessibility also depends on who it is for. The residents seem to know their way into the forest, is it an aim to make it accessible for others as well?

If you live in Årsta and if you live close to the reserve you know very well where to find it and how to move about, and probably have your favorite spot as well. But as a visitor you may not know this. And if you are in a wheelchair for instance you may not be able to reach some areas.

But eventually you end up with less forest that you want to make accessible for more people, is that not a contradiction which puts stress on the forest?

It could! And that is something to look into. With how the project is looking now, we have not proposed any building, we have just said that we are not making a reserve of these areas in order to have the freedom to do something there in the future. But if we start to look into housing, all the other issues like impact into the environment, the green space and its benefits have to be examined in the detaljplan process, but we are not there yet. So there are a lot of issues of which you can ask, ‘have you not thought about this and this and this’. There has been a lot of confusion into this process, even for us, because we have these parallel processes. There is the reserve, and the potential for housing, which are impacting each other, but in the end these are two different processes. The reserve is now done, but these impacts have caused some confusion.
Do you think the reserve can successfully compensate for the lost forest area which may be developed as housing in the future? What is the actual objective of the reserve?

The objectives of the reserve are based on ecology, cultural history, and recreation. The forest is what it is. You can call it the reserve or not. There is a manual of how to handle maintenance and regulation of reserves, but we are not planning to do a lot of things within the reserve. We are not sort of elevating the forest, but it is what it is.

So maybe it is a political move, to make the reserve be there before the elections?

I think that in itself is not connected to what we now said, about waiting a little bit with these areas closest to the front of Årsta. We have not looked into these areas enough yet to make a reserve. We may look into these areas to see if we could maybe have a new sort of interface. Who knows, in the future when we look into it we could also expand the reserve. We do not really know yet at this point.

But these locations now seem very profitable for housing developments. Central Stockholm, close to the forest, a view over Södermalm. So that would make it a good motive in an economic sense.

It is an attractive area to build in of course. But that is not a driving force here. Our goal is to make a functional and attractive city, and whether that is a built environment or a forest, there is not a clear answer to that in advance.

In the documents I looked into there is talk of an ‘urban front’. Do you see the current situation as ‘back to back’?

I think it there are many different ways in which they interact, it is not one solution. It definitely has those areas. These areas are also a bit secluded from the forest, which have a different vibe to them. Which could also be an access, I suppose. Then there are also other areas, like the allotment gardens, that have another interface. So it is very varied.

Is a continuous pathway along the interface better than what you described?

I would say that it is clearer. This pathway could have different kinds of constructions. It could be a bridge even at some points.

And for less mobile people, how would they get in the forest from those places?

But then those parts are not access points. Maybe the access points are a bit further from where you can move about. I mean, it is still nature, it is still a forest; it is not made so that every pathway is perfectly accessible.