Public space - a meeting place?

Understanding the spatial prerequisites for spontaneous interaction, and the importance of such for a socially integrated society.

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Abstract.

Public space is where we encounter others. It is part of our day-to-day life, and essential to our daily routine, whether we appreciate it or not. A space can also be of great emotional value to us. What is it that makes us relate to a space? How are we invited to use it? Some reasons for emotional attachment to a space may be social, but what physical attributes is it that make us appreciate it; what is it that make us stop and enjoy being in a public space, and interact with other people? This paper investigates the spatial characteristics and mechanisms behind successful public spaces, that promote lingering and interaction. It then tests these hypotheses in the context of Umeå, Sweden, examining usage of three urban public spaces outside the city centre.
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Introduction.

In a democratic and sustainable society, public space plays a key role. Many of us take its existence for granted, and may not think too much about the condition and maintenance as long as it is kept at a decent standard. Nevertheless, public space plays a significant part in the urban life. It is a place for meeting and socialising; it is where you happen upon friends and acquaintances, but also – and perhaps more importantly – it is the primary setting for encounters between social groups of opposing ideas and different backgrounds. Public space is where conflicting opinions meet and can be expressed and possibly resolved (Parkinson 2012). Ultimately, public space is both an expression of and a prerequisite for our individual freedom (Mensch 2007). It is widely regarded that societies in which residents feel a strong sense of togetherness and community are more sustainable than societies that lack this social cohesion. Interaction between residents, and collective community activities may help build a social cohesion (Bramley and Power 2008, Madanipour 2004), and the public space sets
the stage for this. But for people to meet and socialise, conditions must be favourable. If the physical environment is unpleasant, activities in the public sphere will be kept at a minimum, as people would prefer to spend their time in the home (Gehl 2011). The only social activities will be accidental crossing of paths on the way to or from work, or in the store or during similar errands. Gehl (2011) calls these social activities “resultant activities”, i.e. they result from other types of activities, which may be necessary or optional. If conditions are bad – e.g. there’s a thunderstorm and/or you risk being stabbed or run over if you go out in the street – chances are people will only leave their home when truly necessary. If conditions are favourable, however – e.g. there is a wide sidewalk or pedestrian street, and a nice park nearby, and pleasant weather – the probability is higher that people will go outside just for the fun of it: for a stroll and a bit of fresh air. With more people moving about in public space, spontaneous meetings will occur more frequently (Gehl 2011).

A lot of attention is indeed paid to the importance of quality public spaces, and renewal and regeneration projects receive much attention and plenty of funding in many cities, but the priorities usually lie with the central and more representative spaces, which can improve the image of the city and attract businesses and tourists (Madanipour 2004). As such, they are not integrated parts of the cities’ social life, but rather isolated oases in an increasingly fragmented urbanity (Madanipour 2010), and in some cases viewed as if they were provided by the city as a “gift” to its inhabitants (Jacob and Hellström 2010). The Umeå municipality planning office state in its planning document for public spaces that these spaces should “increase attractiveness” and help towards becoming “one of the most dynamic growing municipalities in Europe” (my translation), but it also sets a goal to achieve long-term sustainability in the urban milieu, with focus on equality, diversity and accessibility for all in the municipality (Samhällsbyggnadskontoret Umeå Kultur 2007). Regarding the city of Umeå, there is an ongoing redevelopment project in the central city working to achieve these goals. This project seems to be very much in line with Madanipour’s idea of cities paying attention to their central representative spaces in order to market themselves, and different parts of the project are aimed at different target groups in order to satisfy everybody’s interests (Umeå municipality 2016), although not all in one single space but spread out in a number of them. However, if we look at
these central spaces as mainly fulfilling the goals of increasing attractiveness and help promoting growth, then what about the public spaces situated in the margins of the city? Marginal public spaces are more private than central public spaces, in the sense that they address a smaller group of people – mainly the local residents. This makes them in a way more important in the community-building and interpersonal contact (Madanipour 2004). What signifies a public space as a successful meeting place and unifying element? First of all, it needs to be accessible to all groups of people (Mehta 2014; Gehl 2011; Pasaogullari and Doratli 2004, e.g.). It also has to facilitate encounters, planned or spontaneous (Mehta 2014). In the observation of and interaction with people different from ourselves, we have the opportunity to learn social codes and widen our scope of attitudes (Mensch 2007; Mehta 2014). There needs to be something that attracts people to the space – functions, such as shops and other services, transportation hubs, access to different activities. Furthermore, the space has to be pleasant and safe (Madanipour 2004; Mehta 2014; Gehl 2011; Pasaogullari and Doratli 2004, e.g.). Some of these values are found in the purely physical environment: poor maintenance in neglected areas may lead to the perception of them being unsafe, while public art can serve as a collective symbol that creates a sense of unity. Other values are built through social engagement: involvement in the design and maintenance of a space creates a sense of ownership and responsibility, an attachment, which make residents take care of their local environment (Madanipour 2004 e.g.). This study focuses on the impact of the built environment on residents’ and other users’ responses to and feelings of attachment to a space. Many good intentions go into planning public spaces, and they are obligatory ingredients when planning a new area or neighbourhood, embellished with artwork, flowerbeds and greenery. But what do people really think about these spaces – do they have a strong opinion or are they ultimately indifferent to them?
Aim.

The aim of this study is to investigate and analyse people’s perception of public space, how they use it, or why they do not use it. The potential of public space to link people together and strengthen the social network depends on its ability to promote usage. What are the mechanisms and attributes behind such usability? Adding to previous empirical studies, it is the ambition of this paper to test these theories in the context of Umeå, northern Sweden. A case study of three public spaces is performed, examining whether these public spaces serve as the social spaces they have the potential to be, or if they are merely buffer zones in the urban topography? By using a set of key values, and recording usage, I intend to review the functionality of these spaces. I address the following research questions:

- Do these spaces facilitate social interaction?
- Do the residents feel emotionally attached to their local public spaces?
- Are the spaces with the “best” physical or functional attributes also the ones that attract the most visitors and generate place attachment?
Literature review.

Social sustainability

The ‘Bristol Accord’ – the EU’s 2005 attempt to agree on a framework for creating sustainable communities in Europe – states that:

“Sustainable communities are places where people want to live and work, now and in the future. They meet the diverse needs of existing and future residents, are sensitive to their environment, and contribute to a high quality of life. They are safe and inclusive, well planned, built and run, and offer equality of opportunity and good services for all” (ODPM 2005, p.6).
The social aspect of sustainability covers many dimensions and often comes across as somewhat fluffy, but is essentially about every individual being able to lead a decent life, as well as participating in public affairs, in a well-functioning and stable society (e.g. Omann and Spangenberg 2002). Equity is thus a central concept for building socially sustainable communities: equal access to resources, education, employment, to political power, justice, infrastructure etc. These work to give each and everyone equal opportunities in life, and equal chances of influencing the society around them. Among additional factors generally identified in the literature are: social cohesion, interaction, inclusion; sense of community; safety; attractive public realm; environmental quality; accessibility to facilities; walkability (e.g. Bramley and Power 2008; Dempsey et al. 2011; Omann and Spangenberg 2002; Vallance, Perkins, Dixon 2011). Some of these are, as we can see, on a political policy level; some are social; while others are strictly physical, and could therefore be impacted on by the built environment. On a local community level, aspects associated with social sustainability are, for instance, inclusion, interaction between residents, and the existence of social networks and collective activities: factors that strengthen social cohesion. This does not mean that everybody in the neighbourhood should be close friends, but even weaker social bonds such as recognizing each other by sight as a result of seeing each other around can make up part of the local network, and these weaker bonds can be as important for the local social activity (Dempsey et al. 2011). What Jacobs (1961) calls “sidewalk life” provides a social contact which is somewhere between a friendship and no contact at all, and enables a social network that serves community-building, safety and positive surveillance, while it does not require sharing private matters. If there is none of that in-between sidewalk life, it becomes much more important who your neighbours are – as you are required either to share your private life with them, or not know them – and this tends to result in very homogenous neighbourhoods, and segregation between different social groups. Furthermore; if you cannot choose your neighbours, most opt for a lack of contact before close contact, resulting in a weakened social network. Pride or sense of place, as well as feeling secure, create further bonds between a place and its residents, and these are also dependent on the physical space (Bramley and Power 2008; Dempsey et al. 2011). Too strong a social cohesion could also turn into a negative aspect, if it leads to outsiders being excluded, but in
general, social networks and a sense of community within a neighbourhood is considered to be beneficial from a sustainability point of view (Dempsey et al. 2011).

**The importance of public space as a social space and a learning space.**

Social interaction happens when we meet. Some might argue that there are so many alternative platforms for meeting these days, with social media being used by a majority of citizens, that the need for meeting in physical spaces is of ever minor importance. And in many ways, virtual platforms have replaced physical ones; revolutions have started online, enabling a gathering of forces before moving into the streets; people with common interests are able to connect across borders, thus establishing transnational communities, etc. Virtual platforms and social media indeed support social and political movements and enable people to meet. But while some borders are being traversed, others are being reinforced; as it is increasingly possible to only interact with people you choose, only read the news you choose, only hear the opinions you agree with. The segregation in Sweden has increased in recent years: the residential segregation as well as regarding financial situation, education etc. (Örstadius 2015; Andö 2013; Nyman & Sköld 2012; Larheden 2012 e.g.). This means we are increasingly disconnected to people not part of “our own” social group, which in extension may result in a reduced understanding for each other’s situation.

Hanna Arendt (1958) writes of the human environment: “…this environment, the world into which we are born, would not exist without the human activity which produced it (…); which takes care of it (…); or which established it through organisation”. She argues that with the foundation of the city-state in ancient Greece, man received a “second life”, the political life, and there appeared a sharp distinction between the private and the communal. The public realm relates us and separates us at the same time; it “gathers us together and yet prevents our falling over each other”. It is in the public realm where we can be seen and heard by others, without which our actions cannot appear before fellow citizens, and therefore might as well not “exist”. While the public realm – the common world – is a common meeting ground (in that we are
simultaneously present in the same space, the same world) each and every individual arrives at it from a unique position: we all look at it from a multitude of perspectives. The perspectives collected in the private sphere cannot by any means replace the objective reality resulting from the diversity of perspectives and aspects experienced by the public. If perspectives become so far from each other that it is no longer possible to see that they describe the same thing, this is the “end of the common world” – we have come too far apart. Arendt’s thoughts serve as the point of departure from which Mensch (2007) starts his reasoning on public space and freedom. Mensch maintains that the content of human freedom is the choices of action we are inspired with. The variety of choices expands as we encounter different behaviours and actions in the surrounding world. Every individual thing we see another human being do is a behaviour added to our perception of human capacity, and thus becomes a possible behaviour to mimic. Jacobs (1961) also touches on this in her chapter on the streets’ importance on the assimilation of children into society – that the public life, and public responsibilities and behaviours of fellow citizens help implementing a sense of responsibility for others in children, which could not be achieved by parents being the sole role models. To illustrate: if a stranger in the street prevents you from running out in the traffic, or tells you not to bully someone else, it is more likely that you will take that same responsibility for strangers than if your parents – who are responsible for you anyway – would do the same. In the same way that others’ behaviours are implemented in me, the way I appear or behave before others has the potential of adding to their perception of possible behaviours – extending their content of freedom. My freedom of action is not only conditioned by the surrounding world, but I am also able to change the circumstances of the surrounding world by changing my behaviour. Thus, the individual freedom depends on the alternatives of action and situations that are displayed by others, which are in their turn dependent on the free activity of the individual. Each case requires the opportunity to see and be seen by each other. If the extent of our freedom depends on the plurality of impressions given to us by others – the image of the world becomes closer to reality the more perspectives are added – then the number and variety of contexts in which we can connect – whether it be briefly or intensely – with others, are crucial to the individual freedom; as well as the understanding of the
world. In this sense, the existence, or absence, of public space profoundly affects the individual freedom (Mensch 2007).

What makes a space a “good” public space?

Jane Jacobs (1961) talks in her urban theory classic of the pleasant bustle of a Boston “slum”, where residents share a good social life despite authorities’ view of the area as being “too crowded” for acceptable standard living. Her findings are that this community, deprived of any type of planned development, thrived in its organically grown neighbourhood. While I am not looking to belittle problems of over-crowding, it was not the typical qualities by which we measure welfare that made this community so pleasant and well-functioning – it was the quality of its social life. If we focus on public space as a social space in which we are able to meet and interact, the first and foremost issue is what makes people go to and stay in a certain place. Bramley and Power (2009) mention a number of measurable aspects of a sustainable community, of which a few are applicable to public space, such as social interaction, pride and sense of place, and safety and security. If a space works to promote these, it could also be argued to contribute to a social cohesion and a stable community. Let us start with social interaction, which in its most minimal and abstract way can be described as bringing people to a space in order to be physically present together. There are many theories on what makes a public space successful in this sense. We are generally attracted to other people, and to activities taking place (Gehl and Svarre 2013), but the presence of others in the space may also discourage us from using it, especially if these others are engaged in an activity in which we are not, or do not consider ourselves, able to participate (e.g. Mehta 2014; Madanipour 2004; Parkinson 2012, ch.2). A very specified use of a space may in this sense cause it to be less public, although everyone has access in theory. Nevertheless, we are more likely to talk to strangers if something is happening before us, especially some sort of event that is not part of our regular day, which is why the possibility to participate in and conduct activities in public space is crucial to social interaction (e.g. Gehl and Svarre 2013, Mehta 2014).
More people moving about in the space will in itself promote inter-personal contact, but people usually need a reason for coming to a space. This is why the functions and supported activities in a space are important for how well the space performs as a social space. If the included functions are serving a limited scope of needs, the variety of users will be limited as well. A space that houses, say, a health centre and a pharmacy can be expected to attract a larger proportion of the sick and the elderly; a place filled with fancy restaurants and shops will primarily serve those financially well off; and a playground attracts mainly children and possibly their parents. If uses are separated and filtered in this sense, the users will be separated as well (Mehta 2014), and the potential of the space to bring citizens together will be significantly hampered. The greater variety of uses a space can support, the more inclusive it becomes.

A space that satisfies basic needs in everyday life encourages users to frequent that space on a daily or at least regular basis (Mehta 2014, Jacobs 1961). Dempsey et al. (2011) list a number of facilities that typically are frequently used when provided locally, and therefore should be easily accessible for all. These are: primary health care; post office; pharmacy; grocery store; bank; corner shop; primary school; café, restaurant or takeaway; pub; library; sports or recreation facility; community centre; facility for children; and green space. This is partially based upon a study conducted in England, and some cultural differences may apply – for instance, England has a renowned pub culture that Sweden might not quite live up to, even if it has gained popularity – but these are generally agreed to be essential services in a fully facilitated neighbourhood. Places for eating and drinking are believed to support sociability (Mehta 2014).

The facilities mentioned above, in addition to being essential services, may also function as signs of identification to the local community. Identification, sense of belonging and emotional attachment are important for the social function, in order to create a sense of community in a neighbourhood (Dovey 2001, Mehta 2014). Place attachment is a multidimensional concept, and relates both to personal context - connected to experiences associated with the place, and its role in building personal identity - as well as social bonds, and bonds to the physical
environment. These dimensions are interconnected, and place attachment is generated out of a mix of personal bonds to community, physical surroundings and experiences (Raymond et al. 2010). Symbols that remind of shared experiences and possibility to influence can strengthen this sense of belonging and community. These symbols may be informal gathering places or local businesses: “third places”, which might be either public or privately owned (but publicly used) spaces such as “streets, sidewalks, storefronts, alleys, parks and so on” (Mehta 2014). When a place is useful, and therefore used, it also becomes a familiar place for its users, which in turn creates place-attachment. Especially if it’s useful in terms of optional activities, and supports lingering, it becomes important for the social aspect of public space (Mehta 2014, Jacobs 1961). But there are several other aspects that give a space meaning. In addition to it being familiar, it could be meaningful thanks to its historical value or cultural or political importance (Mehta 2014). It is also a matter of time: social bonds and community cohesion cannot be designed and built physically into a society – it needs to grow organically and develop gradually (Sennett 2006).

Feeling safe is frequently mentioned as one of the most important factors in a successful public space. Jacobs (1961) stresses the importance of streets being safe, and used, because these are handling the “strangers”, who might possibly pose a threat (real or perceived) to a neighbourhood. If a street is not safe and used, this cannot be made up for by making courtyards and playgrounds safe. A sense of safety can be achieved by having a certain control of the place; a place where people are always present usually feels safer. Presence of non-residential properties, such as stores, can help make a public space appear more secure, and even more so if opening hours range across the major part of the day. Businesses with varying hours make sure there are eyes on the street continuously, and a constant stream of people give other people something to watch, making activity an attraction in itself (Jacobs 1961, Mehta 2014). “Third places”, i.e. social spaces where people gather, help providing a positive surveillance that provides safety (Mehta 2014). In a residence-only neighbourhood, outsiders become very much outsiders. If there are public meeting places, non-residents also “have a right” to enter the area (Jacobs 1961), and as already mentioned, more eyes on the street means safer streets means more people means more social contact means better understanding for each other means
greater freedom. Too much control, however, in the way of surveillance cameras and guards, may work in the opposite direction: over-securitization can make the place feel even less safe (Mehta 2014).

Obviously, safety from crime is not the only kind of safety that matters in public space. Traffic also makes up a possible threat to a safe environment, and the human activity in a street or a square is heavily affected by the presence or absence of traffic (Mehta 2014).

Perhaps primarily associated with more superficial values as looks and beauty, architectural variety is beneficial also when it comes to safety, as opposed to every building looking the same. Just like streetlights, decorations and plantings all have been found to help making a space feel safer (Mehta 2014). This is also related to the sense of place and place attachment – a place that residents care for is to a greater extent also being looked after: the community establishes common norms for the shared environment (Dempsey et al. 2011). Poor maintenance tends to make a space feel unsafe: a high degree of vandalism; trash; graffiti; and broken things are attributes known to have a negative effect on the perception of safety (Mehta 2014). However, environmental flaws may not only be of harm, but could in some cases spur an increase in social cohesion, if communities gather to improve the common milieu (Dempsey et al. 2011).

Comfort matters, and physical conditions, convenience, protection from natural elements – shelter and shade, make the space comfortable (Mehta 2014). Especially in harsh climates, such as in Nordic regions, the weather - and thus shelter from it - matters a great deal to the usage of space: sunny spots are popular, in particular in the spring. In late summer or in warmer climates the shade may be more appreciated (Gehl and Svarre 2013). From a design perspective, human beings seem to find comfort in a “high degree of articulation”: corners, nooks, ledges; but also seating, planters and other street furniture and physical artefacts; as well as wide sidewalks, trees (Mehta 2014). Seemingly simple things such as something to sit on and something to look at can make all the difference when it comes to lingering in a space (Gehl and Svarre 2013). Different shapes of space promote or facilitate different actions: a wall separates; a road
promotes movement; an elevated position improves sight and chances of being seen; proximity encourages interaction – blank squares do not (Parkinson 2012, ch.4).

A place also needs to be pleasant. If a place has high “imageability” – the “quality in a physical object which gives it a high probability of evoking a strong image in any given observer” (Lynch 1960, p.9) – it gives a strong impression. Obviously, a place that gives a strong impression for being chaotic or run-down might not feel pleasant, but a high positive imageability can be associated with a high pleasurability (Mehta 2014). Physical forms become anchor points for memories, which increase feelings of identity and belonging, and shared story lines (Parkinson 2012, ch.4). In the same way, a certain variety in architectural features, as well as in colours, textures and shapes, has been proved to be generally preferred by people to spaces of less sensory stimuli (Mehta 2014).

Pleasurability also depends on human scale and the sense of enclosure. An environment is of human scale if the sizes of building elements, as well as patterns and textures, edges and corners are relatable to the human body or body parts. Sense of enclosure can be achieved by walls defining the space, roofs jutting out above the space, or hedges or trees creating a room-like quality (Mehta 2014).
**Case study.**

**Umeå.**

Umeå is the most populous municipality in northern Sweden. It is a university town, and has a young population; the average age is 38 years. Since the implementation of the university in 1965, the municipality has doubled its population, and it continues to grow. Since 2010, the population has increased by approximately 1100 people each year. The goal is to reach a population of 200 000 by year 2050 – today it is 120 777. Umeå also takes pride in its cultural life, and in 2014, it was appointed European Capital of Culture alongside Riga, Latvia. The town of Umeå is characterized by its nearness to nature – the Ume River running through it and a number of recreational areas including both forests, lakes and ski slopes (Umeå Municipality 2016 (2, 3, 4)).
The sites.

Three sites were selected among open public spaces in the town of Umeå. They all share some of the characteristics of a traditional square or plaza, in that they consist of an open space surrounded by at least a couple of commercial businesses. All three have mixed functions in the sense that they also incorporate housing units alongside commercial units. There is some vegetation but they are not landscaped in the way of a park. In the cases of Mariehems Centrum and Tegsplan, these are referred to in planning documents as being the commercial centres in the respective neighbourhoods. This is however not the case in Tomtebo, whose commercial centre is still being under construction, which is why Nornaplatsen is the closest thing to a local square to be found in the area at the time being, and to an extent designed as such.

Tegsplan.

Tegsplan (which I will refer to as Teg Square) is the commercial centre of the Teg neighbourhood, south of the Ume river in Umeå. It is located just next to the Teg bridge crossing the river, which carries a busy thoroughfare, and serves also as the divider of Teg into East and West. There is a mix of villas, linked houses and – mainly smaller – apartment blocks throughout the neighbourhood of Teg. Teg Square was planned in its current design in 1976, with the intention of creating a local centre and marketplace as an extension to pre-existing commercial activity (Umeå Municipality 1976). It thus replaced a previous square or car park that earlier had had to yield to the remodelling of the topography due to the building and expansion of the new thoroughfare connecting Teg to the city of Umeå (Umeå Municipality 2006, Kulturmiljöbild, eniro.se). The northern corner of the square is the oldest part, built in 1946 (Umeå Municipality 2006) when the city plan looked quite different, and is now in some measure turned away from the present square. The space today consists of a square, surrounded by a church, a grocery store, a bank, health clinic, pharmacy, florist, hair dresser, a kebab joint, and an IT company. One of the older buildings houses a café, Nybro Konditori, which has been in this location since 1949 (Finas hembageri).
The population of the greater neighbourhood of Teg was 12,475 in 2015, but this includes Röbäck and rural areas; if limiting the selection to urban and suburban areas the population is a little less than 10,000 (Umeå Municipality 2016 (5)). Within this area there are two more supermarkets, so the number of people the centre serves on a daily basis is likely a bit smaller. Also, it is quite close to the city centre with all its commercial activities. Within the selected area, the dominating age group is 20-29-year-olds. However, there are quite high shares of elderly as well, resulting in a mean age of 41.2 (Umeå Municipality 2016 (5)). The share of population born outside of Sweden is about average, as is the share of population with higher education. Some areas are slightly below average regarding education (Övergripande planering 2016).

**Mariehems Centrum.**

Mariehem was built during the 1960’s, to support the increased need for housing following the establishment of the university in Umeå. Its design was influenced by the idea of the Garden city, and it was the first neighbourhood in Umeå where motor traffic was separated from cyclists and pedestrians. The area was developed starting with a fairly small residential area north of Mariehemsvägen, and the commercial centre was located in the south end, as this was where the neighbourhood was entered from the central town, via Berghem (Byggnadsnämnden Umeå 2014). Mariehemsvägen is also the connecting link to the university campus area and Berghem. North of the square continues the residential area of Mariehem, holding mainly apartment blocks - some for students - but also areas of linked houses and detached single unit houses. South of Mariehemsvägen are Olofsdal and Nydalahöjd, which hold apartment blocks, many of which are student housing. The planning document was updated in 1987 to open for further development of residential buildings and extension of the grocery stores. In 2006, the then empty Konsum (grocery store) building was demolished and turned into a car park (SR 2006). Current plans include the development of a commercial centre opposite Mariehems Centrum, south of Mariehemsvägen, and Ica will move to open a larger store there. The move will likely affect the frequency of visitors to Mariehems Centrum, which is also stated in the municipality’s
assessment of the plans (Kjellander et al.). The space is currently fairly well served by a variety of functions, including a grocery store, an oriental grocery store, two restaurants/pizzerias, two hairdressers, a public youth centre, and a podiatrist.

The greater neighbourhood of Marieområdet had a population of 8,590 in 2015 (Umeå Municipality 2016 (5)). The municipality’s assessment of the development plans state that almost 14,400 people use the services of the supermarket today, including both Nydalahöjd and Berghem (Kjellander et al.). Berghem has its own supermarket and small commercial centre, but residents of Nydalahöjd is likely to use Mariehem as primary local centre. Adding Nydalahöjd to Marieområdet gives us a population of 10,254, and lowers the mean age of 40.1 to 37.9 years, (Umeå Municipality 2016 (5); Övergripande Planering 2016). It should be noted that just north of Marieområdet is a hypermarket and greater commercial centre.

Several sub-sectors of the greater neighbourhood have a higher share of foreign-born residents than the Umeå average. Parts of the neighbourhood have an average share of population with higher education, others have higher shares. The age distribution also differs distinctly between different sub-sectors, with some having high shares of elderly, and others being dominated by young adults. Overall, there are great differences between sub-sectors within the neighbourhood (Övergripande planering 2016).

**Tomtebo Nornaplatsen.**

Nornaplatsen is located in the northernmost section of Tomtebo, the first instance of the development of a new residential area that was initiated in the 1990’s, with the intention of reusing the old Umeå concept of low housing (2-4 floors), and wide streets lined with trees (Byggnadsnämnden Umeå 2014 (2)). The space is served by a bus line along the north-south axis, as well as by bicycle and pedestrian lanes in four directions. Car traffic is very limited in the area in general, and prohibited around Nornaplatsen. The residential area holds both apartment in the immediate vicinity, as well as attached single-unit housing in close proximity. A pre-
school and primary school is situated just beyond the northeast corner building of the place, and the recreational area of the Nydala lake is only a few hundred metres to the east. The space resembles a local square, although not such a bustling one – the only functions are a small shop and a pizzeria, and a bus stop. The population of the greater Tomtebo neighbourhood was 5 275 in 2015 (Umeå Municipality 2016 (5)). Many of these likely pass through the space regularly, especially considering the adjacent school and preschool serving many of the children in the neighbourhood. The Tomtebo neighbourhood has high shares of children. The two dominating age groups are 0-9-year-olds and 30-39-year-olds. Residents over 65 years of age are very few, resulting in a mean age of 29,9. In the oldest sector, where Nornaplatsen is located, the mean age is slightly higher: 31,8. In this area the share of foreign-born residents also is slightly higher than the Umeå average. Throughout the entire Tomtebo neighbourhood, the share of population with higher education is higher than the Umeå average (Övergripande planering 2016; Umeå Municipality 2016 (5)).
Method.

The study was carried out in time of late winter and early spring, when the climate is fairly harsh – or at least doesn’t promote much sunbathing. The period of warm and pleasant weather is fairly short in Umeå, so if outdoor public spaces are to be useful, they need to be useful also in less pleasant climates. The study can be said to consist of two parts: one that focuses on the spatial qualities, services and functions; and a second part that aims to measure usage and attachment, in order to link this to the qualities mentioned above. The data was collected through observations and surveys, and the method used departures from an evaluation scheme developed by professor Vikas Mehta, see section “Mehta’s index for evaluating public space” below.

The first part, dealing with spatial qualities and functions, was evaluated by the researcher mainly through visual observations and based on previous research on human responses to space and spatial features. I will give a more thorough description on what attributes were measured and how in the section “Public space in theory” below.
The second part, dealing with usage, was performed through counting users in the space, tracing where they moved and where they tended to stop and linger. This information was recorded in a plan. For further information on how these mappings were carried out, see section “Public space in practice” below.

Some of the evaluation was done by users via surveys. These were carried out in the space. Respondents were selected with a degree of stratification regarding sex and age, so as to get a representative sample. The ambition was set at 30 respondents in each space, but the number of completed surveys differ slightly between the spaces, with 36 in Mariehem Square; 30 in Teg Square; and 27 at Nornaplatser. The great majority of the approached accepted the request, while only a few declined to participate; stating bad weather, shortage of time, or little knowledge of the space as reasons.

**Mehta’s index for evaluating public space.**

While there are many studies and theories on public space and the human response to it, it is hard to pin down what characteristics and attributes contribute to making the space successful and appreciated. Vikas Mehta, professor of urbanism, has developed an index meant for evaluating public spaces in a structured way, and I have used this as a starting point for my study. Mehta (2014) uses five basic concepts which he finds important for a successful public space, and then breaks them down into measurable units. In his study, Mehta also assigns different weights to different variables according to what previous studies have found to be of more or less impact, and according to how people in the street rate the importance of certain criteria. I will not be quite as meticulous in my study, for two reasons: 1) many of the variables demand a certain degree of interpretation and subjective evaluation (how do you measure the degree of sensory complexion in a space? Or the architectural diversity? Or memorable architectural features?), and 2) I am not primarily interested in the evaluation per se, but rather in investigating the connection between the different variables and how they affect the usage of the space. The
different variables nevertheless provide a systematic method for how to understand the space and the spatial features that make up the overall impression.

Mehta’s five concepts are: inclusion; safety; comfort; pleasurability; and useful activities. They are measured partly through recordings of the space and its physical attributes, partly through observations and counting of the people in the space, and partly through surveys asking people to rate the space according to a number of variables. See appendix for a detailed description of the index of measurable qualities that Mehta uses in his study.

Public space in theory.

This part of the study is modelled upon Mehta’s contribution “Evaluating public space” (2014), and uses much of his criteria. There are five basic concepts that are considered to be of importance in promoting usage of a public space, namely: inclusion, safety, comfort, pleasurability, and activity. The different concepts are divided into measurable values and to a large extent follow Mehta’s study; bar some slight adjustments due to difficulties in measuring, or because the criterion for one reason or the other is irrelevant to the spaces studied.

Inclusion.

Measuring inclusion basically boils down to examining to what extent the space is accessible for every single individual: regardless of social group, physical abilities, age, gender, etc. Is this space welcoming everyone? This aspect was examined mainly through surveys, where respondents gave information on year of birth, place of birth, sex, and level of education. They were also asked to give a grade to how accessible and inviting they thought the place was. It was also examined through observations, where the number of people in the space using equipment such as rollators or wheelchairs was noted. This aspect was also checked by observing the physical attributes of the space: are there any sharp edges, steps, or obstacles that make it harder for people with physical disabilities to move in the space. In addition, age groups of the users
of the space were estimated through simply guessing from appearance and then dividing users into different age groups during headcounts.

Mehta uses opening hours to measure a space’s accessibility, but none of the spaces examined in this study had any opening hours limiting time of use.

Accessibility can be measured both as in if the space is easy to get to as well as if it is easy to enter. I will in this study not focus on the distribution of public spaces throughout the city but rather focus on existing spaces and their function, which means I will deal only with accessibility from the aspect of the ability to enter and use the space (although all of the spaces studied are also easily accessed by bus). The accessibility – physical and perceived – here becomes a measure of inclusiveness. Are only specific groups welcome in the space? Only certain activities?

Safety.

The level of safety, or sense of safety, was evaluated through a number of measures. First, the visibility – how good an overview you have over the space when in it. If you can see who or what is in the space, it feels safer (Mehta 2014). If the space is properly lit, it helps for the same reason. A run-down space feels less safe, which is why a certain degree of cleanliness and maintenance is important. These physical aspects were evaluated by the researcher through visual observations. The physical condition of the space was then complemented with survey questions regarding users’ perceived safety in the space.

Comfort.

The level of comfort matters to the usability of a space, and might be especially important for users lingering. Here the number of furniture was counted, both free seating and conditional seating, as well as the number of “objects to sit on” in the space – such as low walls, edges
of planters, bases of statues, etc. Although shade tends not to be frequently sought after in wintertime, structures providing shade often also provides shelter from rain or snow, which might be more appreciated during this time of year. For this reason, roofs and similar structures were counted as adding to the comfort. Elements designed to add discomfort or prohibit usage, if any, were counted as decreasing the level of comfort. These criteria were all measured through observation. Users’ input was added through a survey question: how well do you think this space serves its purpose? Mehta uses a second question for this measure, regarding nuisance noise from traffic, but I removed this question for the same reason I removed the question of safety from traffic, thinking I could evaluate noise levels myself.

Pleasurability.

Whether a space is pleasant or not is obviously highly subjective, but there are still a few characteristics that seem to be fairly generic. The aspect of pleasurability was measured through observations of the physical surroundings: the architectural variety; the sense of enclosure; the presence of artwork, greenery, and other elements providing sensory complexity; and visual connection to adjacent spaces. The pleasurability was also measured by a survey question asking the respondents to evaluate the attractiveness of the space.

Activity.

As Gehl and Svarre (2013) point out: a person may linger in a space if it is pleasant, but most need a reason for coming there in the first place, and the greater the variety of activities offered, the greater the number of reasons to go there. To evaluate this aspect, the activities taking place in the space were observed. The physical functions, such as shops, banks, and other services, were noted, as was the variety of use of these different functions – a space with five grocery stores, although specialised in different produce, really only supports the activity of shopping. The spontaneous activities taking place were also noted, to illustrate the flexibility of the space.
In addition to these observations, users were asked to rate how well they thought the space served its purpose, as well as how useful they found the functions, businesses and activities supported in the space to be.

Public space in practice.

The second part of the study was measured mainly through head counts and tracing. The spaces were studied over the course of the day to examine whether there were any differences in usage depending on the time of day. The temperature and weather was also noted, as these are conditions that may impact the usage of space. In addition to simply counting them, users were also divided into groups (sex, age), as far as was possible, in order to find if there were differences in who was using the space at different times. The specific use of the space was also found to be of interest, and this was mapped out by tracing on a plan users’ movement in the space, and specifically where they tended to stop and stand or sit down. The counts were executed over ten-minute intervals every 90 minutes, and performed over two weekdays (Monday through Thursday) and one Saturday or Sunday, for each space. This frequency is a bit sparser than Gehl and Svarre’s (2013) advice of once per hour, but more frequent than Mehta’s (2014) instruction of six times throughout the day. The mappings spanned over 12 hours (8 a.m. – 8 p.m.) for weekdays and 7,5 hours (8 a.m. – 3.30 p.m.) for weekends. Fridays were excluded from the study, as they tend to have a rhythm that is different from weekdays and weekends alike (Gehl and Svarre 2013), and therefore would not be comparable to mappings in these categories. For the weekend mappings, Mariehems Centrum and Tegsplan were observed during two Saturdays, while Nornaplatser was observed on a Sunday. This was done in order to complete the study in a relatively short time span, as the changes in weather and duration of day (caused by the approaching spring) also may have an impact on the results. At Nornaplatser, opening hours of the businesses were the same regardless of day of the week, thus the difference in activity between Saturday and Sunday was expected to be of minor proportions. Ideally mappings should have been carried out around the clock, but due to a shortage of time as well as the researcher’s wish to also maintain a social life to some degree, the hours were thus limited.
The information was gathered during the ten-minute intervals, but could however not be collected simultaneously, which is why tracing was done during one weekday and one Saturday or Sunday, while during the second weekday of mapping, users were divided into age groups while counted. At all times, users were divided into male/female/child. People lingering in the space were also mapped at all times. It should be noted that this dividing of users by age and gender was done strictly by judging from appearance, and therefore is by no means exact, but may still give an idea of the distribution of age and sex at different times of day.

In between bouts of counting, surveys were executed in the space. These provided the users’ input on quality of space, and place attachment.
Results.

The results are partly presented in diagrams: these visualise the intensity and changes in the activity of the three sites, as well as spatial characteristics of the activity - showing routes of transfer and places for lingering. Complementing the visual information is a written record describing the spatial and physical attributes of the spaces, connections to the surrounding built environment, as well as users contributing comments and opinions. A more complete record of the survey results and observations can be found in the appendix.

The intensity of the activity differ between the three sites, with Mariehem Square being the most frequented, and Nornaplatsen the least (see fig 4). Typical attributes for users of Teg Square is that most visitors travel by car, while in Nornaplatsen the great majority of visitors are residents of the vicinity, and many are dog-owners. Mariehem has the greatest number of students as well as the greatest proportion of people born outside of Sweden. The age distribution of users was noted and compared to that of the neighbourhood at large, according to Umeå Municipality’s official figures, as this comparison can help determining the spaces’ inclusiveness (see fig. 2-3).
Summary of the three sites. Age distribution of the entire neighbourhoods compared to the estimated age distribution of the sites help determining the sites’ inclusiveness. Comparison of intensity of activity between the three sites also shows differences in activity at different times of the day.

Fig. 2

Fig. 3

Fig. 4
Fig. 5
**Tegsplan.**

The square is located at the edge of East Teg. The city centre is just across the river, and on the opposite side of the thoroughfare is a pizzeria. A bit further south - also on the opposite side - is another, slightly larger supermarket, as well as a petrol station with a convenience store. Housing units within the space are apartment buildings, but in the close vicinity both single-family houses and other apartment blocks can be found. The space itself consists of a rectangular square, surrounded by a number of businesses, shops and stores – including a supermarket, a pharmacy, and a florist, a bank, an ATM, a hairdresser, a health care centre, a kebab joint, a café, an IT company, and a couple of car parks. The café is strictly not facing the square, but is rather located around the corner. It has been included as it is part of the commercial centre, but its visitors do not necessarily visit the square that is being investigated, which is why its impact on the results of this study is limited – despite it being highly frequented. The square is framed by the local church in the south-east end, and by mentioned thoroughfare in the north-west. It is decorated with a few trees, and four large square raised flowerbeds.

**Inclusion and accessibility.**

The square itself is a tiled, flat surface, without any physical obstacles except for the flowerbeds mentioned above. On my first visit to the space, there is still snow on the ground, albeit only about three inches thick. It does not appear to have been cleared intentionally, but has been flattened in the areas where people move. After Easter most of it has melted. Located within a network of roads and bike- and pedestrian lanes, the square can be accessed from many directions, including the bridge leading across the river to the central town; connected to West Teg via both a viaduct over the thoroughfare as well as through a tunnel going under it; it has several access points from Borgvägen passing slightly below on the north-east side; and predominantly car access from Obbolavägen/Bölevägen. Given the embracing character of the car parks, the square is easily accessible by car from almost every position. However, these are not to any
great degree blocking out pedestrians or cyclists trying to enter the space: these users have been
provided with access routes adjacent to car parks or crossing between them. Leading up from
the tunnel under the thoroughfare, there is a set of stairs climbing up a slope to the café, which
might be an obstacle for a physically disabled person, but next to it is a paved path offering a
ramp – albeit fairly steep. The detour around the health care centre provides a less steep option.
At Obbolavägen, there is a bus stop for visitors travelling by bus. Survey respondents give the
space a score of 3,4 out of 5 on the question: do you find the space accessible and that you can
conduct and participate in activities taking place? A commonly added comment was: “yes,
it is accessible, but what activities…?” Of the respondents, almost 2 out of 3 are employed,
while almost a third are retired. Nearly a third have a university degree, while a little more
than 1 in 8 have only finished primary and secondary school, or equivalent. Nearly all of the
users questioned were born in Sweden, more than half of which here in Västerbotten. Only one
was born in another country. Respondents typically arrive by car: only 1 out of 3 had chosen
a different means of transport. Just over half of the people questioned were residents of the
surrounding area (see table 1). The estimated age structure of users corresponds fairly well with
the over-all age structure of the neighbourhood of Teg, although it is clear that children up to 15
are underrepresented in the space (see fig. 2-3 above).

Safety.

One gets a good overlook over the space from almost every possible position in it. Although
you might not be able to see exactly every part of it at the same time, the sub-spaces open up
gradually as you approach them: no bushes to hide in and no corners in which you could get
trapped. The space is very open and visually connected to adjacent spaces well before arriving
upon these. However, it is a bit dark when I visit the space at night. Then it also becomes clear
that several lights are out of function. Users rate the safety in the daytime as 5 out of 5. Sense
of safety after dark receives a score of 4,4 (see table 1).
Comfort.

At least in the wintertime, the seating is scarce. There is one bench to sit on outside the health care centre, and this is frequently used, even on my first visit to the space in March there is someone sitting there. It is a fairly sheltered spot, as it is underneath the jutted-out roof, and facing south. At the other end of the square, there are some picnic tables placed next to the kebab joint. During the time for my observations, I never did see anybody sit down by those. All the benches appear to be unconditional seating. Apart from the benches, there are the large square flowerbeds, whose edges are good sitting height. I observe a few people using those for seating; one sunny day there is even a couple sitting down here for ice cream. The openness of the space, while adding to the sense of safety, is not an advantage for the comfort: it is quite windy in the square. The thoroughfare with its heavy traffic makes quite a good deal of noise – while it is not loud enough to disturb a conversation, it might be considered a nuisance if you are trying to enjoy the space. The row of birch trees planted towards it provides somewhat a visual barrier, but does not block the noise out. There are no other sheltering structures in the space apart from the roof protruding above the entrance to the health care centre. The space appears to be clean and well maintained. Perceived suitability of the space by users receives 3.6 points out of five.

Pleasurability.

The church of Teg, which is clearly visible from the square, is quite a memorable architectural feature. It has a clear modernistic design, and is made from yellow concrete. Whether or not it is beautiful may be debatable – one of the survey respondents tells me straight away that it is the ugliest building in Umeå – but it indisputably has a high imageability. Apart from this, there is not tremendous architectural variety in the space: it is all yellow brick buildings. Nevertheless, it is yellow brick buildings from different decades, so there are slight variations in nuances and structures of the facades, as well as height, and size and placement of windows. They are also positioned at different angles, and it could be argued that the yellow brick brings cohesion to the space. There are no works of art in the space, but there is some greenery – albeit not green
in the winter – for instance the trees, and low bushes lining the wall of the building housing the health care centre, the IT company and the bank. The trees are planted somewhat randomly, which brings the space some degree of sensory complexity to its otherwise rather sterile design. The flowerbeds, also slightly diversely positioned, add to this perception. The openness of the space creates connections to adjacent spaces, both visually and physically, as mentioned above. There is not, however, much sense of enclosure. Openness and enclosure sounds like qualities naturally in opposition to each other, but they need not be mutually exclusive. In this case, however, they are. In summertime, when the trees wear their foliage, there might be more of a room-like quality to the space. As it is, the most frequented services – the supermarket, the pharmacy, the health care centre, and the café – are all positioned in such a way that they are facing away from, rather than into the square. The entrances of the supermarket and pharmacy are right at the opposite corners of one building, and the café is facing the thoroughfare, while the health care centre opens to the car park at the southeast end. Users’ rating of attractiveness adds up to a score of 2,8 out of five (see table 1).

Activity.

Teg Square offers quite many different services. As mentioned above, there are two places serving food and drinks, and being a café and a kebab joint, they complement each other rather than being competitors. There are three shops – a supermarket, a pharmacy, and a florist. The remaining services – bank, ATM, hairdresser, health care centre, IT company, church, and car parks – add to the range of activities and services in the space. To conclude, the space houses 12 unique services and activities. The survey respondents name 11 things they use the space for – although “passing by” is included in this number. Top activity is shopping: mainly for food, followed by items sold at the pharmacy. The health care centre is frequently mentioned, although often with the added “sometimes”. The users questioned rated the usefulness of activities and functions quite high: they received a score of 3,9 out of 5. Typically, users come here once or several times a week. Few of them, however, used the space for social activities: “Never” was the typical response. 4 out of 30 “sometimes” come here to socialize (see appendix).
In the planning documents, the square is referred to as being a “walking square”. This definition was mirrored by one survey respondent, who remarked that: “It doesn’t seem like they wanted people to hang out here.” Nevertheless, being a large, open area with few obstacles in it, the space must be considered flexible and open for a great variety of temporary activities.

The café – one of the city’s most renowned – really deserves its own mapping, but there is no room for that in this study. However, I feel it necessary to mention its impact, or lack of impact, on the study. This is an old café, established in the same year the bridge across the river was opened, and it is well frequented, with many regular guests. Since its main entrance faces away from the square, it is not possible for me during counting sessions to note the number of people entering or leaving the café. Also, regular guests tend to use the back door, towards the car park, which means I would have to keep track of two entrances in order to map the visitors. I sit here and type in between mapping sessions, and note that it is never empty, and often quite crowded, which means I most likely miss a few people using the space by not being able to map these visitors.

*Observations.*

Teg Square is frequented by men and women alike. During the time for my observations, about 6 out of 11 visitors are female. There are not so many children in the space, especially not unaccompanied by parents. There seems to be two peaks of activity during the weekdays: the first being in the morning between 9.30 and 11, and the second between 2 p.m. and 5 p.m. (see fig. 11-12). Curiously, there is a dip around lunch time (12.30) both weekdays I do my mappings. In the weekend, it is quiet in the morning then slowly increasing until I end my observations in the afternoon (see fig. 13). The age of the visitors vary throughout the day: people over the age of 65 tend go about their business before 2 p.m., while people up to ca 40 years of age prefer the afternoon, after 2 p.m. (see fig. 10). Stopping seems to occur less frequently in the early
April 7 (left) was a generally fine day with both sun and clouds. April 16 (right) there was mainly overcast and a little bit wet, although the sun came out as well.
morning and in late afternoon and evening. People move over basically the entire square (see fig. 6 and 7), although movement is intensified between the car park south of the square and the entrance of the supermarket, which appears to be the square’s main attraction. People tend to stop outside the supermarket, sometimes to exchange a few words with the woman begging; at the ATM; and outside the entrance to the health care centre (see fig. 8 and 9). The square itself is mainly for passing, although I occasionally observe two people stopping to chat for a minute, and on a sunny day, several people stop and use the edges of the planters to sit down a little while. Two people were at one point sitting down to eat ice cream. Two girls were hanging out in front of the supermarket once, and one young man was playing with his dog while waiting for his company to do some shopping. Apart from this, there is no sign of anyone engaging in any activity in the square. But users rate their feelings for the space fairly high: 2,8 on average, with residents giving it a slightly higher average score of 3,1 (see table 1 and appendix).

### Summary Teg Square

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</tr>
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<td>Top 5 activities</td>
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### Researcher's evaluations:

- Physical accessibility: good
- Visibility: good
- Lighting: OK
- Seating/objects to sit on: good
- Climatic comfort: poor
- Maintenance: good
- Architectural variety: OK
- Sensory complexity/greenery: OK
- Sense of enclosure: no
- Unique services/functions: 12

Table 1
Fig. 10. Age distribution over the course of day. Teg Square April 11, 2016.

Fig. 11. Activity in Teg Square Thursday April 7.

Fig. 12. Activity in Teg Square Monday April 11, 2016.

Fig. 13. Activity in Teg Square Saturday April 16, 2016.
Mariehems Centrum.

Mariehems Centrum (Mariehem Square) is located in the south end of Mariehem, towards Nydalahöjd. It is connected to the university campus area and Berghem via Mariehemsvägen, which was originally the main entrance route from the city. North of the square continues the residential area of Mariehem, holding both apartment blocks as well as linked houses and
detached single unit houses. The space consists of a small square, surrounded by buildings housing both commercial and social institutions as well as housing units. It is quite well served, with several restaurants and grocery stores, as well as other services. Between Mariehemsvägen and the square, there is a large car park offering 3-hour free parking.

Inclusion and accessibility.

The square is accessed by car from Mariehemsvägen, along which there are also bike- and pedestrian lanes, as well as a bus stop. From the opposite direction, leading from the residential area, there are bike- and pedestrian lanes. The square itself is flat, with a tiled floor providing a smooth surface for walking or driving equipment such as wheelchairs. However, an elderly lady complains that the bike lane leading north from the square is quite bumpy and should be repaired. In the centre of the square there is a raised flowerbed, and a few trees. This small park-like area is framed by broken-up wall segments, which create a sense of enclosure while not fencing in. The openings in the wall are quite wide, making access easy for everybody. However, this space seems not to be intended for use in the wintertime – the snow has only been cleared from the area outside the park space: the routes intended for movement. Alternatively, leaving the snow creates a possibility for children to play here, but it also excludes people with physical disabilities. Users are quite diverse: half of the respondents are employed; a third are students; 1 out of 8 are retired. All of the respondents of adult age have at least finished high school; a little over a third have studied at the university for a minimum of 3 years. 5 out of 6 are born in Sweden; over a third of these in Västerbotten. 1 out of 6 are born outside of Europe. Users rate accessibility and ability to participate in activities as 3.5 out of 5. It should be noted that more than one respondent stressed that they think the space is accessible, but that they can’t think of any activities they would participate in or conduct there. Approximately 5 out of 7 survey respondents live nearby; 5 out of 9 have walked to the space (see table 2). Comparing the age structure to that of the neighbourhood at large, we can see that the whole section between 16 and 64 years of age is greatly overrepresented. The groups 0-15 and 65+ are quite representative in relation to each other (see fig.2-3 above).
Safety.

It is generally easy to get a thorough view over the space. However, in the northwest corner, users enter the space via a short passage through the building, interrupting the visual connection. Also in the northeast corner, the entrance route is quite narrow. The south end opens up towards the car park and Mariehemsvägen, where visibility is good. The maintenance of the space appears to be good; it looks nice and clean, although in wintertime not much seems to be done towards appearance, apart from keeping transport routes clear. The lighting is very good and you see things as clearly in the night as in the light of day. Perceived safety during the day scores a 4,9 average, while users perceive it as a tiny bit less safe after dark: 4,7 out of 5 (see table 2).

Comfort.

There are at this time of year no benches to sit on in this space. However, there are quite many other objects that could be used as seating: the wall segments, for instance, are fairly high but not too high for a person of average physique to sit on. The edges of the flowerbeds and planters offer seating at lower heights. In front of the youth centre in the north end of the square, there is another low wall at suitable sitting height. For shelter from the wind and the rain, as well as shade from the sun, the structures surrounding the square offer several options. Along the building at the east edge of the square, the second floor protrudes over the ground floor, thus creating a roofed space underneath, somewhat like an arcade. Also in front of the youth centre there is a roof jutting out above a little space in the front, which creates a sheltered subspace. The passageway in the northwest corner also provides climatic shelter. There are no design elements in any sense discouraging certain uses of the space. As mentioned above, the maintenance of the space seems to be focused on the transport routes – getting to and from certain points of interest. There is no apparent intention of promoting lingering in the space at this time of year. Despite Mariehemsvägen being in close proximity to the space, and the new
E4 not much further away, the noise from the traffic does not come across as being a nuisance. Users rate suitability of space for its activities as an average 3.7 (see table 2).

Pleasurability.

The surrounding facades are mainly white or of light color close to white. Three out of four facades are made from different types of light-colored brick, while the building on the eastern edge has white and black panels. The ground floor of this building is black, in contrast to the dominating light color scheme. Apart from the colour, the four buildings have quite diverse looks when it comes to height, shape, windows and materials. None of the buildings can be said to have very memorable architectural features. The space really does have a room-like quality. The sense of enclosure does not only serve as protection from the wind, but creates a focal point in the centre that makes the space into something more than just an area for transfer. The “park” in the centre adds to this aspect, while it also provides some greenery, and contributes to the sensory complexity. The arcade of the east-side building adds to this aspect, too, as does the roofed space in front of the youth centre. The space offers quite many nooks and corners, without breaking the visual reach profoundly. Even the little corner next to the pizzeria is quite visible, since the façade of the adjacent extension of the restaurant is made of glass. However, the visual connection to adjacent spaces is relatively limited. Users rate the attractiveness as an average 2.8 out of 5 (see table 2). Several do however remark that when the space is filled with flowers in summertime, it is quite lovely.

Activity.

The number of activities and services in the space is quite large. There is a supermarket, two pizzerias/restaurants, a podiatrist, two hairdressers, a youth centre, a grocery store specialised in oriental foods, a post box, and a car park. Just next to the square, past the youth centre, is a primary- and secondary school with a Christian profile. This makes for 9 unique services and
April 4 (left) was a cloudy and drizzly day. April 9 (right) on the other hand, was sunny and bright.
activities, as the two restaurants specialize in fairly similar cuisine (pizza, pasta, salad etc.), and the two hairdressers provide the same type of service. However, the fact that some of these functions are social rather than commercial – the youth centre and the school – adds to the variety of activities. Survey respondents list 10 unique reasons for coming to the space: shop, eat, hang out, posting letters, eat ice cream (in summer), meet up friends, have a haircut, visit the podiatrist, work, or just pass by. Almost all of them come here to shop for groceries; eating is the second most popular. When asked, users typically “never” go here for social occasions, but almost 1 out of 7 responded that they “often” do. Users typically come here at least once a week. Suitability of the space for its activities receives a score of 3,7; usefulness of activities scores 3,8 (see table 2). Being a fairly small space, the flexibility of use of the square is probably quite limited.

Summary Mariehem Square

Respondents:

<table>
<thead>
<tr>
<th>Total number</th>
<th>36</th>
</tr>
</thead>
<tbody>
<tr>
<td>of which residents</td>
<td>26</td>
</tr>
<tr>
<td>male/female</td>
<td>24 / 12</td>
</tr>
<tr>
<td>mean age</td>
<td>38</td>
</tr>
<tr>
<td>Born in Västerbotten</td>
<td>12</td>
</tr>
<tr>
<td>outside Sweden</td>
<td>6</td>
</tr>
<tr>
<td>Arrived by</td>
<td></td>
</tr>
<tr>
<td>car</td>
<td>4</td>
</tr>
<tr>
<td>bus</td>
<td>1</td>
</tr>
<tr>
<td>bike</td>
<td>9</td>
</tr>
<tr>
<td>foot</td>
<td>21</td>
</tr>
<tr>
<td>other</td>
<td>1</td>
</tr>
<tr>
<td>Average scores</td>
<td></td>
</tr>
<tr>
<td>Safety (day)</td>
<td>4,9</td>
</tr>
<tr>
<td>Safety (night)</td>
<td>4,7</td>
</tr>
<tr>
<td>Suitability</td>
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<td>Useful activities</td>
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</tr>
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<td>Attachment</td>
<td>1,5</td>
</tr>
<tr>
<td>Accessibility</td>
<td>3,5</td>
</tr>
<tr>
<td>Top 5 activities</td>
<td></td>
</tr>
<tr>
<td>Grocery shopping, eating, hang out, pass by, hairdresser</td>
<td></td>
</tr>
<tr>
<td>Researcher's evaluations:</td>
<td></td>
</tr>
<tr>
<td>Physical accessibility</td>
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</tr>
<tr>
<td>Visibility</td>
<td>OK</td>
</tr>
<tr>
<td>Lighting</td>
<td>good</td>
</tr>
<tr>
<td>Seating/objects to sit on</td>
<td>good</td>
</tr>
<tr>
<td>Climatic comfort</td>
<td>good</td>
</tr>
<tr>
<td>Maintenance</td>
<td>good</td>
</tr>
<tr>
<td>Architectural variety</td>
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</tr>
<tr>
<td>Sensory complexity/greenery</td>
<td>good</td>
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<tr>
<td>Sense of enclosure</td>
<td>good</td>
</tr>
<tr>
<td>Unique services/functions</td>
<td>9</td>
</tr>
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</table>

Table 2
Fig. 19. Age distribution over the course of day. Mariehem Square April 13, 2016.

Fig. 20. Activity in Mariehem Square Monday April 4.

Fig. 21. Activity in Mariehem Square Wednesday April 13, 2016.

Fig. 22. Activity in Mariehem Square Saturday April 9, 2016.
Observations.

Mariehem Square is the busiest one of the spaces I study. During weekdays, it is typically peaking around 5 in the afternoon, although lunch hours – 11-12.30 – are quite busy as well. Mornings are quiet and there is a dip around 2 p.m. There are as many women as there are men coming to the space; however, the distribution in time differs a bit. Men tend to be more frequent around 11 a.m. while women more commonly visit between 12.30 and 2 p.m. 5 p.m. is peak hour for both sexes (see fig. 20-21). During the weekend – in this case a Saturday – mornings start out quiet, to increase in visitors throughout the day (see fig. 22), reaching its maximum as I leave for the day at 3.30 p.m., which makes it hard to tell if it continues to rise after that as well. Children are more frequently in the space on weekends too, following the curve of the total. According to these observations, age groups are quite evenly spread throughout the day, only the youngest age group are more common in the afternoon, while the 65-and-above group are more present before noon (see fig. 19) The most frequented part of the square is the supermarket, and the great majority of people move from the car park or coming from Mariehemsvägen and go to the supermarket. The most common route for passers-by is from the northeast corner to the south end and vice versa (see fig. 15 and 16). The most popular spots for stopping are the open area just outside the supermarket, and the south part of the central circle, but this varies slightly between different days (see fig. 17 and 18). On the first day of recording, which is a fairly cloudy and wet Monday with temperatures between 1-3°C, several people stop along the eastern wall. On day two and three, there are no records of people lingering along this stretch. On the second day, which is a Saturday with both sunshine and clouds, stopping is more centred on the circle, particularly the southern section, and the low wall at the right corner of the youth centre, in addition to the space just south of the circle. Six children also make use of the little park as a playground while waiting for their parents, and run around, balancing on the edges and walls. They are not the only ones who employ the space for something more than just passing: other activities observed in the space are riding kickbike; walking around while engaged in phone conversation; and enjoying a family quick meal. People also quite frequently just stand around and chat. While the space is clearly being used, users do not consider themselves very attached
to it. While the sample of respondents contributing to this question is quite small (13 people), they seem to concur: the space receives a score of 1.5 (see table 2). Leaving out non-residents raises the score slightly, landing at 1.8 (see appendix).

Nornaplatser.

Nornaplatser (Norn Place) is located along Vättarnas Allé, in what is the first and northernmost section of the neighbourhood of Tomtebo by the south end of the Nydala lake. It is a circular, open space along a tree-lined boulevard, frequently served by a bus line (see fig. 23). Two of the apartment buildings framing the space house a pizzeria and a corner shop on the ground floor, and these are the only two commercial units in the space. The space is embraced by residential buildings in every “corner”, behind which the residential blocks extend. Behind the building in the northeast corner, an elementary- and preschool is located. Following the bike lane to the east you come upon Nydala Lake only a block away.

Inclusion and accessibility.

Car traffic is fairly restricted in Tomtebo, and along this boulevard cars are prohibited. Bicycles and pedestrians, however, are provided with lanes on each side of the boulevard along the north-south axis, as well as a single bike- and pedestrian lane along the east-west axis. These lanes are directed in a circular course following the edges of the space when passing the place, while the bus lane cuts right through it. In the very centre is a bus stop. Although cars are not allowed in the space itself, there are several car parks within the surrounding residential blocks. These areas are accessed via passages through the residential buildings framing the place. The circular space in the centre is tiled, while the bike lanes and the bus lane are paved. There are no steps or such obstacles limiting the access to the space; however, there is a low railing encircling the centre circle, separating it from the bike lanes. Survey respondents typically arrive at the space by foot (8 out of 9). Many do also cycle, but they seem to be in such a hurry that I find them
hard to wave down for an interview. Out of the respondents, 2 out of 5 are employed; 1 out of 9 studying; a third retired; and almost 1 in 5 “other”. Almost 3 in 5 have a university education, and the rest have at least finished high school. Nearly all of them are born in Sweden; half of which here in Västerbotten. 1 in 27 is born outside Europe. Users rate accessibility and ability to conduct and participate in activities as 2.7 out of 5 (see table 3). Several remark that they think it is very accessible, but there is never any activity going on here in which they could participate. The different age groups are all quite accurately represented – only the group of elderly are slightly overrepresented.

Safety.

The space is very open and easy to get an overlook of. The passages through the surrounding buildings limit the visual connection slightly, but apart from those, the view stretches far in every direction. The place is nice and clean and appears to be well maintained, apart from the piles of snow left in the areas less frequently used – that is, snow has been cleared from bike lanes and bus stop. One survey respondent also stresses how well the place is looked after. Users rate the safety as an average 5 out of 5, regardless of time of day (see table 3), and the space is so well lit that the visibility is almost as good during the night as it is in the daytime. A couple of respondents do add that there has been a couple of robberies in the store, but that they still feel safe in the space.

Comfort.

There is a bench in the bus shelter. This has been designed in order to prohibit people from sleeping on it. Except for this, there is only one bench in the space during the winter. By the end of April, however, several more have been added. In the space is also a sculpture depicting one of the Norns in Norse mythology, with the squirrel Ratatosk. At one point, I see a couple of children playing by this sculpture and resting on its base. Being a very open space, not
much shelter is provided apart from the bus shelter. The passageways through the residential buildings are the only unconditional protection from the weather. With the only motor traffic being the bus passing every once in a while, the place is very quiet. Users rate the suitability of the place to the functions and activities at an average of 3.2 (see table 3).

Pleasurability.

The architectural variety in the space is not great: the buildings surrounding the space come across as being almost identical, although they are indeed slight variations on a design theme. Materials include red or yellow brick, some plastered. They are all of matching heights, three of them embracing the place in three corners. The most memorable features of the space are the trees lining the boulevard, and its circular shape. The sculpture and the little railing adds some complexity and focal points, as do the trees planted around the central circle, but there is not much going on in the space; neither regarding design elements nor activity. The connections are nevertheless good, both visually and physically. Although I am using words such as “embracing” to describe the design of the space, it doesn’t quite achieve a strong sense of enclosure – it is too open and occupied with motion for that quality. By the survey respondents, the place receives an average attractiveness score of 2.9 (see table 3).

Activity.

Nornaplatsen is the one offering the fewest services and activities of the three chosen sites: there is only a pizzeria, a corner shop, and a bus stop. Just next to the place is a primary school and a pre-school. However, being a fairly unoccupied and vacant space, it also offers flexibility of use. Users typically visit the space every day, or almost every day. They list 7 unique activities they usually engage in, of which “passing by” is the most common: more than half of them usually do this. Surprisingly many come here for the store – almost half – but several claim they only do “sometimes”. Other popular activities are “catch the bus” and “walk the dog”. Users
perceive the suitability of the space according to its uses as being on average 3,2, while the usefulness of the activities score 3,1.

**Observations.**

Nornaplatsten is the least frequented space in the study, with typically 2-4 individuals per minute passing through the place (see fig. 29-31). There are about as many men as women using the space, although women are slightly overrepresented in my observations. There is no clear pattern of men and women using the space at different times of day. The greatest difference from the other two spaces is the number of children. Although the result is slightly skewed by school classes passing through the space on two occasions, the number of children is outstandingly higher than in both Teg Square and Mariehem Square, and especially the extent to which children are

<table>
<thead>
<tr>
<th><strong>Summary Nornaplatsten</strong></th>
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<tbody>
<tr>
<td><strong>Respondents:</strong></td>
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<tr>
<td>Total number</td>
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<td>of which residents</td>
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<tr>
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<tr>
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<td><strong>Top 5 activities</strong></td>
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<th><strong>Researcher's evaluations:</strong></th>
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<tr>
<td>Physical accessibility</td>
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<td>Unique services/functions</td>
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</table>

Table 3
Fig. 28. Age distribution over the course of day. Nornaplatsen April 14, 2016

Fig. 29. Activity in Nornaplatsen Tuesday April 5.

Fig. 30. Activity in Nornaplatsen Thursday April 14/Monday April 20, 2016.

Fig. 31. Activity in Nornaplatsen Sunday April 17, 2016.
unaccompanied by parents or other adults. Only children walking more or less on their own are included in the “children” category, while infants and toddlers being pushed around in prams and buggies make up a separate group, which is also greater in Nornaplotsen than in the other two spaces. There is a noticeable peak in the morning at 8 a.m. – the time children go to school and parents and other adults go to work – and a slight dip at 11 both weekdays recorded, while activity is quite evenly distributed throughout the rest of the day. On the weekend (Sunday in this case) activity is slowly increasing from a very quiet morning to a relatively busy afternoon, following the same pattern as for the other two spaces. On the second day of observations, activity is slightly higher. This is also a sunny day, compared to the other two, which are quite wet and drizzly. When it comes to movement, it is fairly evenly distributed along the assigned routes (see fig. 24-25. Most people use the paths following the outer circles; a few cut right through. The people going to and from the bus stops obviously enter the central circle. Stops almost exclusively occur by the bus stop going towards the central town. Occasionally, a person walking their dog would stop and linger, as you do when walking a dog. At one point, a woman and her grandchild stop and take pictures by the Norn sculpture. A man I interview also point out that his children when they were younger would like to play by that same sculpture. But mainly, this is a place you pass by. Apart from in the busy mornings when the place is suddenly bustling with activity for a short period of time, I do not observe one single instant of people meeting in the space and stopping to chat, or even exchange a few words while on the run. It is also quite difficult to approach people passing through, if they are travelling along the opposite side of the circle – something I am made well aware of while gathering survey respondents. Of the few (10) people responding to the question about attachment, an average of 1,5 out of 5 is given.
Discussion.

I have in this study been looking for connections between the physical space – what is in it and how it is designed – and people’s tendency to use it, and stay in it. The first one of my questions was: *Do these spaces facilitate social interaction?* To answer this, we must first look at how well the spaces perform at bringing people to them. One link, and perhaps the most obvious one, is that of activities, services and functions offered: the greater number of needs that a space can attend to and the more services it can offer, the greater the number of people in the space. Or at least the other way around: if the space has no activities or services to offer, it will not generate many visitors. This is also what is expressed in survey respondents’ comments (‘Why would I hang out here? There is nothing to do here!’). The space with the greatest number of unique activities and functions is Teg Square, but this is not the most frequented place – Mariehem Square is, by far. Part of the explanation to this might be Teg’s proximity to the city centre, which possibly offers competition, and perhaps even more the fact that there is another supermarket just across the thoroughfare, in West Teg, which is also a bit larger. Teg Square is nevertheless fairly highly
frequented, although not immensely used as a space. It could be due to the design itself: the long stretched surface rather promotes movement than induces staying – it has a direction. The way that few of the businesses face towards the square amplifies this sensation of the direction being outwards, pointing towards the edges – the south-western wall is basically a blind wall except for the ATM, and on the opposite side are the IT company and the bank, which attract a very small number of visitors. When you compare the layout with that of Mariehem Square, for instance, the difference is striking. The shape and sense of enclosure makes the centre space the uncontested focal point, the eye of the storm that movement is directed around, if you will. The size of the square probably helps: “proximity encourages interaction” (Parkinson 2012, ch.4), and even without interaction, sitting alone in an enclosed or furnished space like this may feel less vulnerable than sitting in a large, blank square. It may also have to do with comfort: while there are as many artefacts to sit on in Teg Square as in Mariehem, the lack of shelter in Teg is obvious, in comparison to Mariehem. This is made quite clear in the records of people stopping in the two spaces – Mariehem is quite sheltered from the wind at all times, and offer several positions where a sheltering roof saves you from wet weather. While the central, unsheltered, circle is popular, these sheltered spaces are also where people tend to stop, especially in “bad” weather. And perhaps most importantly; in Mariehem Square, more people seem to stop in places where they do not have an errand. When comparing the results of Teg, the stops appear to be more frequent just outside the supermarket, or just by the ATM. A pattern they share is nevertheless the tendency towards the south end of the space. This could possibly be argued to be a sign of climatic influences on the human behaviour – the south side is the sunny side – but it is also in both cases the end in which the supermarket, as well as the car park – or at least the major car park – is situated. I would argue that it is a combination, considering the fact that this pattern of lingering in in-between spaces is intensified in sunny weather, in the case of Teg as well as in Mariehem. The weather is obviously a factor that matters: pleasant weather draws people out in the open space, while wet or cold weather makes them keep to the edges. This is also visible in Nornaplatsen, where activity is greater when the sun is out. Here it does however not affect people’s tendency to stay in the space – it is still mainly for passing by. Considering the importance of weather, an adaption of spaces - specifically the activities the spaces support -
to the changes of seasons could help making spaces useful over a greater time-span. These need not be costly projects like the snow sculpture park in Luleå or snow structures in central Umeå (Luleå Municipality 2016; Insidan), but taking this climatic flexibility into consideration when planning a space could possibly improve usability of smaller, more locally used public spaces.

Mariehem Square is the one of the studied spaces where the most social contact occur. Much of it appears to be spontaneous running-into-friends type of interaction, but this is also the only one of these spaces where “meeting up with friends” is mentioned by survey respondents – and more than one of them – as something they often use the space for. Users of Mariehem Square also come to their local public space for social reasons to a greater extent than in Teg Square and Nornaplatsen – although the typical response here is still that they “never” do. Why does Mariehem appear to be more successful as a social space? I am inclined to believe it has something to do with the physical comfort of the space; the enclosure and climatic shelter it offers. It is not perceived to be safer than the other two spaces – each of them receives a very high score regarding safety. Opening hours of businesses is one of the things Jacobs (1961) stresses as important, and these vary slightly, with the supermarket opening earlier in the morning in Mariehem, and both the supermarket and the restaurants in Mariehem Square being open a bit later in the night than the respective businesses are in Teg, meaning the time span of activities and services provided are more extensive, and there is a natural flow of people in the space even at later hours. On the other hand the café in Teg Square opens earlier in the morning, providing a social space much earlier in the day than what Mariehem has to offer. However, the daily rhythm in our society means many people are on the move in the mornings anyway, so the opening hours of a public third place may not have as strong effects in the morning as it would in the night.

Another difference between the spaces is the presence of different age groups. Mariehem square is used by a much younger population, both judging from the age distribution of the users responding to the survey – whose exact age was determined in the interview – as well as from what the age estimations done from observations indicate. The largest group by far is here adolescents and adults under the age of 30, to compare with Teg where the largest age group –
while being fairly evenly distributed over the five defined age spans – is the one over 65 years of age. Children under the age of 16 make up about 7% in Mariehem, which is significantly less than its 16% share in the entire neighbourhood. Still, they make up only 4% of visitors in Teg Square (where they make up almost 18% of the entire population), and the way I see them play in the Mariehem Square (climbing, running, kickboarding) testifies to the inclusiveness of the space and its ability to attract different age groups. A tendency in city planning is often to zone uses, planning for children in one spot, and for shopping in another. This is a testimony to the possibility of combining the two, also along the line of Jacobs (1961) promoting sidewalk play, the sidewalk being the natural place to hang out for people of all ages. A designed playground does not naturally attract adults other than the parents of the children there playing, and if we want to promote mixing and mingling of groups of people in different life phases and situations, spaces need to attend to a greater variety of needs and interests. Mariehem Square shows us that this can be done without requiring complex solutions or special adaptations. The same tendency could be seen in Nornaplatsen, where the only instant of anyone showing any interest in staying in the space for the sake of what the space itself had to offer, was the child playing by the Norn sculpture with their grandmother. The proportion of students is also much greater here than in the other two sites studied, a fact that is visible in the age structure as well. Mariehem is also the most mixed neighbourhood if we look at ethnicity – 1 out of 6 of the survey respondents is born outside of Europe, compared to 1 in 30 and 1 in 27, respectively, in Teg Square and Nornaplatsen. It is difficult to somehow connect this fact to the space itself, and especially to the design of it, but it is possible that some people of non-Swedish origin are drawn here thanks to the oriental grocery store offering food items that may be hard to find in regular supermarkets. It could also be that Mariehem simply is a more ethnically mixed neighbourhood and this is mirrored in the activity in the square. Whichever way, the presence of different groups – whether it be age groups, ethnic groups or groups of different occupations – suggest that it is an inclusive space, and that in this space there is given an opportunity to meet others who are in a different life situation or carry with them experiences different from mine, thus providing a different perspective.
I have not mentioned Nornaplatsen much in this discussion on social interaction, due to the fact that it does not quite fulfil the primary requirement of bringing people to the space. While many pass by, they do so oftentimes without even encountering another person. It appears that the layout of the space functions much as a separator instead: the way a roundabout is supposed to keep traffic from colliding in an intersection, this circuit keeps people from running into each other. Moreover, the space does not invite passers-by to stop and linger, since there is nothing really going on here. Nor is there any natural place to hang out – even after the benches have been installed for the summer, these are placed along the bike lane where cyclists pass at sometimes quite high speed. It may be that these were planned to be people-watching spots, but I would argue that they are too close to the passers-by for being very comfortable for either of the involved. While not being ideal for lingering, it is not quite designed for being a transport route either, as the layout forces you to take a detour around the circle instead of going straight ahead. A similar contradiction presents itself in the way cars are prohibited. When motor traffic is limited, it is usually done in order to frame pedestrian activity. Here, cars are taken off the street, then car parks are located within the adjacent blocks, and side by side with the car parks, playgrounds are built. In the car-free street, no leisurely activities are promoted. The lack of activities provided is reflected in the users: 8 out of 9 respondents are residents, plausibly since there is nothing here that would attract visitors from other parts of town. Nydala lake is nearby, but for most there is no need to go through Nornaplatsen on the way there, unless coming from Älidhem by bike or foot. It is possibly also the most homogenous neighbourhood: the high share of children and people pushing prams and buggies suggest that there are many families here; people are well-educated – more than half of the survey respondents have a university degree; most work or are retired; and close to everybody are Swedish by birth. Given this demography in combination with the lack of “outsiders” coming to the space, we will likely not find great social diversity here, even if the space were to promote social interaction between individuals.

Do the residents feel attached to their local public spaces? This question was unfortunately not properly taken care of when carrying out the study. It was originally intended to be read out of several of the other survey questions, but after a number of interviews, it became clear that the respondents’ answers did not quite cover it as I had expected. The plain question Do you feel
attached to this space” was thus added. The result is that in only one of the spaces was this question included in all of the surveys, and that is in Teg Square. In Nornaplatsen and Mariehem Square, 10 and 13 respondents answered this question, respectively. However, I still consider it worth mentioning in the discussion. Of the three sites, Teg Square got the highest average score regarding attachment: 2,6. When counting only residents’ sense of attachment, it was slightly higher: 2,9. Both Mariehem and Nornaplatsen received a score of 1,5. The first impression here might be that citizens do not feel particularly strongly for their public spaces. Nevertheless, the affection – if weak – clearly differs a fair bit between the three spaces. The great difference here could obviously be due to the very small samples, but it is also possible that it has something to do with time. Teg was a community long before Mariehem and Tomtebo was, and it was separate from the city of Umeå for quite some time, giving it opportunity to form its own identity. As Sennett argues: “the bonds of community cannot be conjured up in an instant, with a stroke of the planner’s pen; they too require time to develop” (Sennett 2006, p.2). The significance of time – its passing, and historical events – in giving a place meaning is reflected in the comment of one survey respondent saying that of course this space means something, because “it has history; the café and that…”, and in that of another, claiming that “they ruined Teg” when they led the E4 (now redirected into a bypass, yet the road through Teg remains) through it, splitting it in two. One survey respondent expresses tender feelings towards Mariehem Square too, or at least the surrounding neighbourhood, based on his growing up there; pointing towards the impact of memory and nostalgia in developing feelings of attachment. Where does this lead us? We cannot design time, or build it. But memories and nostalgia are attached to life events, happenings, things we have done and experienced. When we have experienced things in a particular place, that place becomes significant because it is part of the memory. If many people have memories from the same particular place, it becomes a common symbol of the community. Thus: designing spaces for activities, where people enjoy hanging out, is what creates attachment in the long run.
Which leads us on to the third and final of my research questions: *Are the spaces with the “best” physical or functional attributes also the ones that attract the most visitors and generate place attachment?* – No. And yes. If spaces offer services and functions we find useful and give us reason to go there, and if they are physically accessible so that anyone can use them, they will attract visitors. If the space is comfortable enough and there is something to sit or lean on; something to protect from harsh weather; preferably something that embraces visitors a little or objects or furniture that keep them from feeling like a solitaire in the space; and ideally something to watch: people are more likely to hang out in the space for a while. If people hang out in a space – do something, spend time with friends, engage in activities, experience things: then they are likely to – in time – develop feelings of attachment towards the space. I cannot draw any conclusions regarding the importance of the beauty of a space. While I am certain that a beautiful space can be an attraction in itself, it is plausible that the degree of beauty or pleasurability of these primarily functional spaces has been of smaller priority from a planning perspective, and might be also be of smaller significance for users. Either way, the three of the spaces studied received almost the exact same score, so there is no way to compare popularity in relation to attractiveness. The design and layout is indeed part of creating a successful public space – and an important part at that – but the activities, services and businesses that make up the pull factors are crucial in order to complete the first and essential step of making people come to the space, and these can only be provided for, not planned. For the space to become a meeting place of social diversity, however, is dependent on the structure and the demography of the surroundings. In a very homogenous neighbourhood perhaps a very specific attraction could work as a pull factor bringing outsiders in.
Concluding remarks.

I have in this study been investigating what attributes and characteristics make a public space successful in gathering people in physical space, departing from the assumption that public space is an important learning ground in which diverse experiences, opinions and perspectives can meet and rub off on others, and where we can increase our understanding of each other by simply being together in space. My findings are that in order to facilitate such encounters and interaction, a space needs to both be exciting or useful enough – with a range of diverse services and activities offered – to attract visitors; and comfortable and/or interesting enough to make them stay. The layout of the space is important in terms of how it’s promoting movement or lingering, and while leading routes of transfer through a space may help bringing people to it, these routes for movement need to be balanced with elements that promote lingering.

Umeå is located in the north of Sweden and characterised by a fairly harsh climate. In such places, the weather becomes increasingly important for people’s willingness to spend time outdoors. For this reason, adapting spaces and layouts to varying conditions over the seasons may help increasing usage at all times of the year.
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APPENDIX:

The survey included the following questions:

*How often do you use this space?*
- Rarely
- Monthly
- Weekly
- Daily

*What do you usually do here?*  
- Eat
- Shop
- Socialize
- Other

*Do you go here for social events?*  
- Never
- Rarely
- Sometimes
- Often

*Do you feel safe in this space…*  
*… in the daytime?*  
- No
- Somewhat
- Don’t know
- Quite
- Yes

*… after dark?*  
- No
- Somewhat
- Don’t know
- Quite
- Yes

*… from traffic?*  
- No
- Somewhat
- Don’t know
- Quite
- Yes

*(this question was originally included but removed after respondents frequently answered it with: “There is no traffic here?” Which was a perfectly valid point)*

*How well do you think this space serves its purpose?*  
- Not at all
- Somewhat
- Don’t know/neither
- Well
- Very well

*How useful do you find the functions/businesses/activities found in the space?*  
- Not at all
- Somewhat
- Don’t know/neither
- Useful
- Serves every need

*How pleasant do you find this space?*  
- Not at all
- Somewhat
- Don’t know/neither
- Pleasant
- Very pleasant
Do you feel emotionally attached to this space? (On a range of 1-5, where 1 is not at all and 5 is very much)

Do you find this space accessible and that you are free to conduct and participate in activities taking place here?

<table>
<thead>
<tr>
<th></th>
<th>No</th>
<th>somewhat</th>
<th>don’t know/neither</th>
<th>quite</th>
<th>yes</th>
</tr>
</thead>
</table>

Do you live or work nearby?

<table>
<thead>
<tr>
<th></th>
<th>Live</th>
<th>work</th>
<th>no</th>
</tr>
</thead>
</table>

How did you get here today?

<table>
<thead>
<tr>
<th></th>
<th>Car</th>
<th>bus</th>
<th>bike</th>
<th>by foot</th>
</tr>
</thead>
</table>

Year of birth:

Sex:

Occupation:

Education level:

Place of birth:
Summary of Mehta’s Public Space Index.

Mehta’s criteria for an inclusive space:

- Presence of different age groups
- Presence of different genders
- Presence of diverse classes
- Diverse ethnicities
- Diverse physical abilities
- Physical accessibility (fences, steps etc.)
- Range of activities and behaviours
- Opening hours
- Signs excluding certain behaviours
- Perceived openness and accessibility
- Perceived ability to conduct and participate in activities and events in space

Mehta’s criteria for a safe space:

- Visual and physical connection and openness to adjacent spaces
- Physical condition and maintenance appropriate for the space
- Lighting
- Surveillance (that provide safety) cameras, security guards etc.
- Perceived safety from crime (daytime)
- Perceived safety from crime (nighttime)
- Perceived safety from traffic

Mehta’s criteria for comfort:
Free seating
Conditional seating
Other furniture and artefacts
Climatic comfort – shade and shelter
Design elements discouraging use of space
Perceived physical condition and maintenance appropriate for the space
Perceived nuisance noise from traffic or other

Mehta’s criteria for pleurability:

Memorable architectural or landscape features
Sense of enclosure
Variety of sub-spaces
Permeability of surrounding facades
Architectural articulation and variety in surrounding facades
Density of elements providing sensory complexity
Variety of elements providing sensory complexity
Design elements providing focal points
Visual and physical connection and openness to adjacent spaces
Perceived attractiveness of space
Perceived interestingness of space

Mehta’s criteria for useful activities:

Community-gathering third places
Range of activities and behaviours
Space flexibility
Availability of food in close proximity to space
Variety of businesses in close proximity to space
Perceived suitability of space layout to activities
Perceived usefulness of businesses and other uses