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WHERE DID THE BODY GO?

RE-FRAMING HUMAN SCALE

ANDREA VICTORIA HERNANDEZ BUENO
DEPT. OF ARCHITECTURE, DESIGN AND MEDIA TECHNOLOGY, AALBORG UNIVERSITY
AVHB@CREATE.AAU..DK

CECILIE BREINHOLM CHRISTENSEN
INDEPENDENT RESEARCHER
CEBREI@GMAIL.COM

SHELLEY SMITH
INDEPENDENT RESEARCHER
SHELLEY.SMITH.OUTANDABOUT@GMAIL.COM

ABSTRACT

Scale can be considered as both a cartographic tool for design that allows designers to work with large scale objects such as buildings and urban spaces. However, scale is equally a relational understanding of the sensorial and perceptive reactions of the human body to its surrounding environment. As designers it is important to not only consider the human body as a measuring stick for dimensioning space according to standardised solutions and building codes, but also in a sensorial capacity as a perceptual tool for embodied experiences. Especially in 'large scale' design, the human body is easily lost in the zooming out through scale as a design tool. Therefore, this paper suggests a re-framing of human scale that turns attention to the ambiguous invitations environments offer for human action. In this way, *we* extend an invitation to designers to remember the human body across scales of design.

INTRODUCTION

In their film *Powers of Ten* (Eames Office, 1977), architects Ray and Charles Eames show a succession of scales available from a particular situation (a picnic in a park in Chicago) that progressively increase and decrease by the power of ten. The Eames' note that this is 'A film dealing with the relative size of things in the universe and the effect of adding another zero' (ibid.), and in fact do not mention the word scale although their indication of 'relative size' can link to an idea of relationality. The film starts with human beings in this particular picnic situation and zooms out to galactic proportions and then back in, through the humans, into atomic levels within the body. Despite the fact that the film moves us mathematically, and in some part temporally and physically, through a dizzying array of relations and indicates as well the relational connection between different objects inside and outside of human beings, the role the human beings play in this film could be looked at more closely. The picnicking humans provide the point of departure for the film and in all of the films' actions the human body is used as a kind of relational measuring stick. But perhaps relative sizes can also be relative scales, and relate to other aspects of the human body, namely that of the sensorial capacity of the body to relate to its surroundings.

Creating and manifesting physical surroundings as products of design is encased in a blur of numbers. Design concepts are free from numbers as they are the essence of an idea, a diagram, a thought, but as soon as the reality of making comes into the equation, another language enters into the design process. That of scale. Relating 'one' to another numerical value. Scale is a tool for communication and representation via design drawings and models, but used in this way as a tool, it emphasises the place of the body as being outside of design. There are scales at which the body as a relational component is present and there are scales at which the body disappears entirely from view. Designing a city space or a building, the ability to have

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an overview is needed and the tool of scale can provide this e.g., with scales of 1:5000, 1:2000, 1:1000, 1:500. The outside view. At these scales we are not 'inside' in any way that the body is present. A scale figure of 1:500 resembles a snowflake and is easily lost. It is first at the scale of 1:200 that we enter a building, that a wall has thickness – but a door does not. From there we continue on a journey where elements of the built environment come into focus and their stories become more detailed. In a 1:50 plan, how environmentally correct, or not a window is, becomes apparent – the number of layers of glazing are visible, how the glass sits in a frame separate from the window casement can be seen. The scale of 1:20 is the standard constructional section scale showing the materials making up buildings, and through this how rain is kept out, how warmth is retained, how frost is kept from cracking concrete. And materials have their own codes at the scale of 1:10, 1:5, 1:2 – plywood, marble, poured concrete and concrete block are easily distinguished from each other. They each have their own abstract material representations. The body is invited in at the scale of 1:200. Here a physical presence in a physical spatiality enters the dialogue between numbers and stays there still at 1:100 where the body is 'distantly present' through physical elements representing physically inhabitable spatialities. But at 1:50 something else happen. The presence of material specificity occurs. The scale of 1:50 starts the dialogue of how things fit together, the details of their making and the variety of materials that constitutes them. And this story continues to the scale of 1:1. The scale of 'reality' – of the physical world the body actually inhabits. Scales though, in addition to being a tool, also hold the potential for experience.

THE NOTION OF SCALE – A DESIGN TOOL AND A RELATIONAL CONCEPT

The notion of scale is often confused with size. Scale is a relational concept rather than a dimensional one and when we refer to the scale of something, we are referring to it in relationship to something else. But what isn't often considered regarding scale is how different scales relate to one another, what experiential qualities different scales contain and what type of invitations they send out – regarding both perception and behaviour. We not only exist and notice at different scales we act and react at different scales. Implicit in the notion of scale is a relational and a reactional experience.

Working in the field of urban design and to a certain degree, the field of architecture, is considered working in large scale – working at the scale of the city, at the scale of a landscape, at the scale of the building, and its context. Working in this way requires a cartographic approach – using scale as a tool for accessing that which is enormously larger than the human body – and in the creating process - removed from it in order to 'design' it. However, it is the human body that inhabits the city, the landscape, the building - that sits on the bench, picnics on the grass, moves along the street, that enters the building, engaging, or not, with others – but always engaging with the physical environment. A distinction can be made here between scale as a tool, the use of scale drawings, of relational ratios of 1 to another number making overview, structure and organisation possible with a common language of communication between designers and the 'making trades', and scale understood as a situational, relational encounter requiring a perceptual design approach and an awareness of the human body present and experiencing within variously scaled contexts.

And as designers our considerations are not only in solving the technical parameters and dimensional challenges the design problem poses. The process of design that occurs in three dimensions combining technical and visual forms of expression, also contains the human component, a co-relational and experiential aspect in which the body responds to sensory input and via a multi-sensorial and haptic whole-body presence responds to its physical surroundings. However, the human body is often lost in numbers during the process of turning design ideas into hard reality.

Different scales can be found co-existing within one another and changing the relations between each other in a dynamic, non- hierarchical way as the philosopher and sociologist Henri Lefebvre suggests in his concept of 'nesting scales' (Lefebvre, [1974] 1991). Lefebvre's notion of nested scales revolves around two aspects. Firstly, focusing on scale and identifying a transitional scale as the mediator (M) between the private (P) and the global (G). And secondly, stating that each of these scales is found within the other two (Pollak 2006: 129-130). The integration of scales within each other provides for a transitioning and dynamic relationality that supersedes a hierarchy or dominance of one scale over another. It is often the human, as in 'human-scale' that becomes the mediator (M), however, the openness of the private (P) and the global (G) allow for a tremendous variation in dynamic relationships. *The private* evokes a notion of intimacy of sensorial presence through material, spatiality, memory while *the global* alludes to connection to issues, gestures, culture. The role of mediation is key in Lefebvre's nesting scale concept. In the field of architecture and urban design in which the large scale can represent policy, global issues, buildings, land- and cityscapes themselves on one side, and the human body on the other as related to material and detail, it is the experiential capacity that is of the utmost importance underlining the relational. As the Finnish architect Juhani Pallasmaa notes:

"Architecture is the art of reconciliation between ourselves and the world, and this mediation takes place through the senses." (Pallasmaa 2012:77).

HUMAN BODIES ACROSS SCALES – RELATIONS BETWEEN BODIES AND ENVIRONMENTS

The body is relationally connected to the world through the senses and bridges the gap between scales with these. However, in contemporary urbanity there has been a focus on increased size, increased speed, increased information. (Augé, 1995; Koolhaas, 1995; Ibelings, 1998; Smith, 2004). With a largely technological point of departure, the sensorial and experiential qualities of the physical environment have not been greatly considered. In many ways the body has been lost in large spaces, at great velocities and in massive amounts of information. Perhaps then, designing through the lens of scales could bring the experiential more into focus and activate scale as more than a practical tool to assist design, but as a design tool in its own right. In the following section we will introduce theoretical standpoints that illuminate relational aspects of scale, (by) pointing to the ambiguous character and in-betweenness of the human-environment relation.

Contemporary urban environments – and contemporary urban lives - are incredibly complex and multi-layered. In both the physical environment and the understanding of it, ambiguity has become a factor. With societal complexity, ambiguity offers choices for different and differing groups, allowing for autonomy and democracy. However, without the ability to detect meaning and to feel a sense of personal connection, ambiguity becomes a barrier for use and sensorial experience. Examples of some of the spaces of contemporary urbanism – that also fall into a large-scale category, are car parks, shopping malls, amusement parks, airports. Sociologist Maarten Hajer and urban planner Arnold Reijndorp consider these as "ambiguous in-between areas" (2001: 14) – areas, rather than spaces even. They advocate for awareness of the socio-cultural meaning of the urban realm for specific groups, how such meanings evolve, the dynamic and informal ways in which the urban realm is appropriated and the 'struggle' when an 'exchange' takes place:

"The essence of a cultural geography is precisely that analysis of the ambiguity or, in more political terms, the struggle between various meanings." (Hajer and Reijndorp: 37)

Hajer and Reijndorp argue for an understanding of the urban realm and its future design as a 'public domain': "those spaces where an exchange between different social groups is possible and also actually occurs." (ibid.:11). Exchange responds to a contemporary complexity – contra the traditional 'meeting' - and allows for a performative unfolding in the presences of others. Although Hajer and Reijndorp focus on exchange as that which is taking place between human beings, this idea of exchange could also be extrapolated as also happening between humans and their environments. Exchange is also a form of in-between and this can happen between humans, but also between objects in the physical environment and between human bodies and their environments.

When Pallasmaa says, 'The door handle is the handshake of the building.' (Pallasmaa, 2012:62), he is attributing the building itself with a humanness, 'a bodyness' and directing attention to the act of interaction – the exchange between building and body in this very human act of shaking hands. Bringing in Lefebvre's notion of nesting scales, the scale of the building is mediated through a gesture between it and the human being. By extending an invitation across scales, the body is granted experiential entrance. We are invited in. The gesture in this case, and the subsequent exchange, comprises the in-between here.

Another concept highlighting the 'in-betweenness' of humans and environment is the concept of 'affordances.' This concept, developed by the psychologist James J. Gibson (Gibson, 1986) is widely used in contemporary architecture and urban design fields to understand the co-existence between people and the built environment. It has the potential to guide solutions and encourage creative explorations of design and material interventions because it addresses the physical world and our psychological and physiological responses to it (Jensen, Lanng and Wind, 2017). The notion of affordance offers that objects in our environments are always available to be experienced and that this is an implicit character of their existence. This transforms the idea of physical environment to one of fields of existence, where the objects comprising these fields, whether they be material, space or scape, contain potential for encounter and in fact invite this.

The notion of affordance is related to experiencing that which surrounds us – our physical environment. This presupposes the presence of the physical body in a physical environment – a co-existence. The way in which we take in information about this environment – and interact with it - is through our senses. A key point of Gibson's theory is furthermore that such sensorial perception is *active*, that we – as humans – actively sense our environment as we move through it (Gibson, 1986). If 'affordance' denotes a potential experience between human beings (and humans being) and their environments, it seems to follow that the character of the affordance i.e., what is being offered by the environment would also change with changes in scale. Although the body would stay the same physically, different aspects of the sensorial apparatus meeting the world and making 'sense' of it, would be (potentially)

activated and make associations and experiences across scales. This would also denote the possibilities of 'different' bodies, i.e., that the human body – that which forms the basis for 'human- scale' is not necessarily a constant, but is in fact changing as it experiences at different scales, the experiences potentially being activated by the 'valence' of the objects in the physical environment. As the scale of the environment and the objects changes, shifts, transforms and zooms, so does the experiential apparatus of the body itself.

The concept of affordances implies that materials are understood as being imbued with abilities to 'reach out' and invite use. Delving into the potential affordances hold for experience could provide a window to reflect on existing understandings of scale and perhaps point to an expanded toolbox for designers in both their understanding and making as related to the human body in the material environment.

"The valence of an object was bestowed upon it in experience, and bestowed by the need of the observer… The concept of affordance is derived from these concepts of valence, invitation, and demand but with a crucial difference. The affordance of something does *not change* as the need of the observer changes. The observer may or may not perceive or attend to the affordance, according to his needs, but the affordance, being invariant, is always there to be perceived. An affordance is not bestowed upon an object by a need of an observer and his act of perceiving it. The object offers what it does because it is what it is." (Gibson, 1986:138-139)

In Gibson's description, objects have certain qualities that are constantly present but not always noticed. As such, affordances lie in the domain *between* the environment and the observer i.e., the human body, moving through it. And affordances can be multiple and happening on multiple levels. When noticed by an observer – or a subject - a certain exchange takes place. The concept of affordances in this way is akin to the concept of 'atmosphere' developed by the German philosopher, Gernot Böhme. Böhme redefined the classical art history/philosophical definitions of the subject object dichotomy. His concept of atmosphere addresses the perception of the physical environment through the notion that both the subject and the object are active. (Böhme 1993; 1998) For Böhme, objects in the field of the physical environment are not inanimate. They exude a kind of sense-able energy – that affects other objects, creates constellations of objects, and that enters into a kind of relationship with the subject. They are *in ecstase*. In addition, the subject is not 'just' a viewing subject, it is present and invested fully sensorially – it is a sensing body. Böhme calls atmosphere an 'in-between concept' (Böhme 1998). It is what happens between subject and objects, it is active and it is experiential.

Affordances also address what happens in-between the subject and the object, but while for Böhme the overarching concept of atmosphere exists as a kind of relational spatiality, for Gibson the concept of affordance is more about a kind of relational behaviour. It is what resides intrinsically in the object itself that elicits – potentially – a response from the observer, or subject, in the active perception of it. This has significance for design in the need for a heightened awareness of the perception of materiality - and perhaps a question of what constitutes materiality in a relational – scalar – context.

These theoretical points illustrate that the contemporary built environment and the human sensorial perception (their co-existence) are complex and multiple. John Sanders (1997) when analysing the concept of affordances from an ontological perspective explains this:

"The environment in which affordances present themselves to human beings is thus extraordinarily complex, and includes not only a physical component but symbolic components, even purely imaginative and conceptual components." (Sanders, 1997: 97).

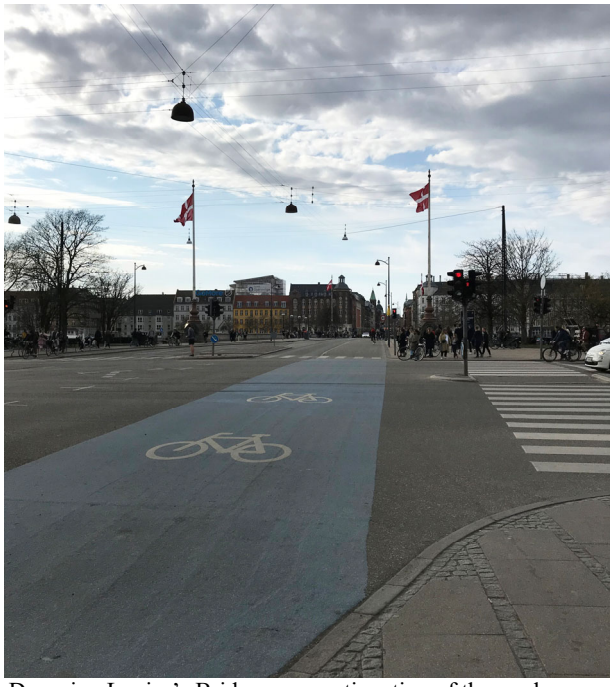
Linking to Hajer and Reijndorp, urban environments can be understood as not only complex, but also ambiguous, offering an 'exchange' of multiple socio-material, cultural and imaginative experiences. In designing urban spaces, then, the designer must take into account the 'struggle between various meanings' and the multiplicity of experiences that an urban exchange has the potential to offer. This requires an attentiveness to the 'in-betweenness' of the human-environment relation, allowing urban environments to be open for interpretation, active perception, multiplicity of use and 'exchange', and to the human body not only as a measuring stick for dimensioning space, but also as a perceptual tool for embodied experiences.

In this way, we contend that there is a need for re-introducing(/framing) the human body in design, particularly in urban design, as a relational tool, i.e. as a 'human scale'.

RE-FRAMING HUMAN SCALE

Re-framing human scale is then about bringing the human body back into design from a multi-sensorial and relational perspective. This is not an easy task. The sensorial invitations and perceptual qualities of urban spaces are usually difficult to explain, grasp and design. Our intention is to offer suggestions as to how we can attune ourselves as designers to the struggles and multiplicities of experiences that arise between humans and their environments, rather than to provide a checklist for design.

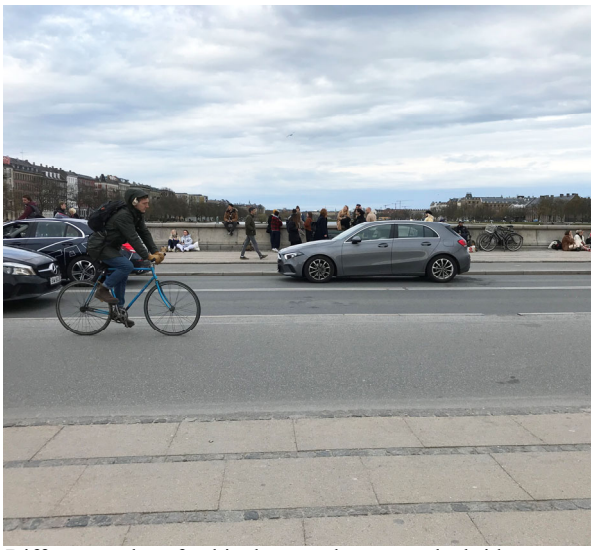
As a way of entering various scales of experiences, this section will weave themed stories that highlight ambiguous affordances, atmospheres and multiplicities of use across scales and through theoretical musings that link to the previous section. Dronning Louise's Bridge in Copenhagen provides the scene for the unfolding of those stories in each of the themes. The stories are conveyed in written text (highlighted in italics) that attempt to elicit a perceptual experience of the spaces, objects, materials and environments described, rather than giving a cartographical view. The stories will be unfolded using the selected themes of: movement and stasis, materiality and surface, and perception and intimacy. These themes highlight different aspects of relational co-existing as various entrances to re-frame the human scale. The stories are accompanied by selected photographs to illustrate their points and bring the reader closer to the material reality and tactile environment of the stories. As will be shown, Dronning Louise's Bridge is an example of exactly such an urban space that 'works' in various scales, inviting use through various speeds, materials, levels of intimacy and activities, and eliciting autonomous behaviours.



Dronning Louise's Bridge as a continuation of the road across 'the lakes' in Copenhagen.

MOVEMENT AND STASIS

Contemporary urbanism is to a large degree characterised by movement. Factors such as globalisation, information technologies, increased mobility of both goods and people describe not only movement but seamless movement – and seamlessness can be understood as flow – a constant movement with a specific destination, a stopping point, ahead. So, focus is not on the place where the body is located, it is ahead, elsewhere. In addition, much of the movement that characterises contemporary urbanism is vehicular. In his book *Zoomscape* (2004), Mitchell Schwarzer identifies modes of transportation – cars, trains and planes – as being significant factors in a change in sensorial connection to the environment. Navigating in movement relies almost exclusively on the sense of sight. The faster the movement, the less reliance there is the other senses.

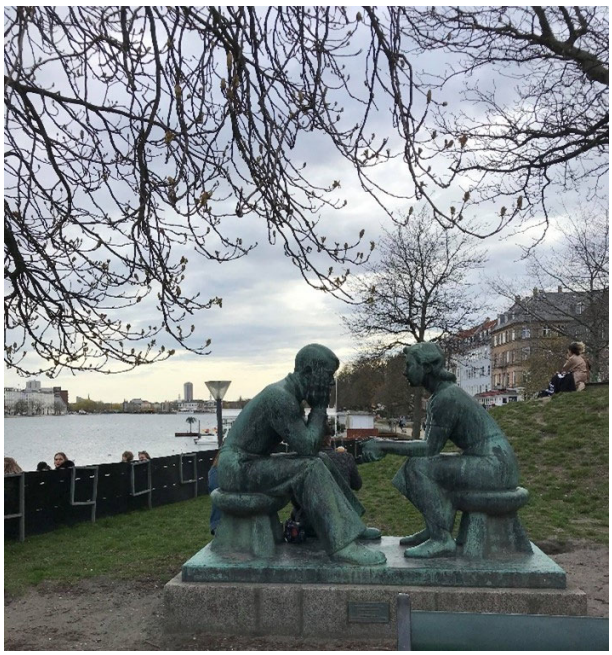


Different scales of vehicular speed meet on the bridge.

But on closer examination, movement is comprised, to a large degree of pause – of waiting. Movement is not constant. Even on regular journeys with e.g. the metro, passengers' bodies will come to a halt along the way, such as in the transition between reaching the platform and waiting to board the train (Christensen, 2020). This highlights how 'movement' is not uniform, but has varying speeds, intensities and is punctuated by stillness. Pauses are not just 'pauses' or a sacrilege of desired seamless travel, they are in fact events of social and sensorial interaction between the human body (their intentions and motivations to move), other human bodies, and space. As Phillip Vannini points out in his ethnography of ferry travel on the Canadian West Coast, waiting time also provides an opportunity of 'stealing time back' (Vannini, 2012). As bodies are still, they are dwelling or inhabiting space, giving waiting spaces a 'place-like' character, however, as places under constant construction and without boundaries (ibid.: 203-204). The rhythms of people's coming and going, their passing by and staying put for a while before eventually moving on, leaves ephemeral traces of movement (ibid.: 210).

Through time Dronning Louises's Bridge has been a connector and a separator. Already known at its current location from the 1500's – though then called Peblinge Bridge - it connected Nørrebro, once an area outside of Copenhagen to Inner Copenhagen. In the process of connecting land, it separates water - Peblinge Lake from Sortedam Lake – giving them each an identity. The current bridge, dating from 1867, is heavy, stable,

steady. An embankment as much as it is a bridge. It enters Copenhagen between the Nile and the Tiber, between 2 bronze statues personifying 2 of the great rivers of the world. Bronze cast from marble. Marble from Antiquity. Lounging gods surrounded by symbolism. One telling the story of Rome's founding, the other telling of Egypt's fertility. Connections made outwards from the bridge in time and in space. While the bridge enters Copenhagen through history, myth and geography, it enters Nørrebro through Conversation – a bronze sculpture of a young man and a young woman facing each other in intimate dialogue with each other. Oblivious to the passing of cars, of bikes, of shoes on the bridge and of the gods on the other side.



The bronze statue *Conversation*.

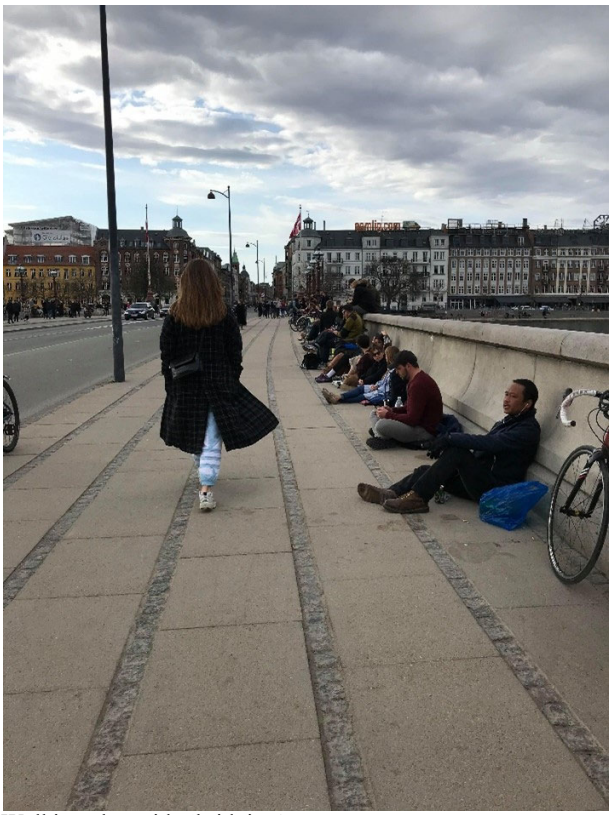
MATERIALITY AND SURFACE

In the large scale of city space, there is a danger of losing connection – to both physical surroundings and to each other. The sensing apparatus of the human body can be challenged by an excess of space and speed. We move on surfaces and the materiality, the cladding of our surroundings, is the place at which we make contact (Smith, 2019). In contemporary urbanism there seems to have been a focus on a large scale with priority given to mobility and speed.

However, the sensorial experience of the urban environment whether by car, metro, bike or foot is sensed and perceived through its materials and surfaces. The human body navigates across spaces that are differentiated by their aesthetical character of overlapping materials and surfaces. They speak to and communicate with us. They reveal invitations and uncover stories and history. They get old, worn out, look and react differently in different weather and cultural conditions. Materiality and surfaces create and augment contrast, relations and juxtapositions of spatiality and perception of scales, the differences of being here or there, of feeling outside or inside a place (Cullen, [1961] 1971: 29).

The interplay of materiality and surface has the potential to connect with human sensorial scale and people's minds and emotions, they provide a human sense of position and of identity with urban space, which is termed 'enclosure' and a sense of 'hereness' by Gordon Cullen (ibid.: 29). The drama of everyday urban life and the spatiality experienced by human bodies in urban spaces are created and mediated by the interplay of materials and surfaces with sunlight and shadows, people and flows, appropriation and identity, culture and tradition.

"Surfaces could activate verbal capacities such as 'continuous, syncopated, choppy, smooth' and so on, going beyond the notion of 'surface treatment' and into a spatial understanding that taps into bodies moving and experiencing. Addressing much more than the wallpaper covering, surface is the 'definer' of space (the 'wall' itself) that has a role in the actual making of space and space in conjunction with other elements. An element that can itself be entered and sensed. Surface is the link between the spatial and the material – and contains both." (Smith, 2015: 5)



Walking alongside 'bridging'.

On the surface Dronning Louise's Bridge is a road continuing – through city, over water, and through city again. But the spatiality of the bridge – it's very heaviness and solidity enclose a space and offers a sheltering. And the road changes character because of its surrounding materials. On either side of the bridge's 2-lane road is a 6-lane sidewalk separated from the road by enormously broad bike lanes. The sidewalks are comprised of lines of concrete tiles, their bridging lengths separated by granite pavers. There is room for everyone – for people walking side-by-side, for stilettos and stroller wheels, for running shoes and for people sitting. In the summer the bridge invites you to take a seat and watch the passing spectacle it presents you with. Its solidity changes directions of focus by giving you a backrest. Materials collect the sun's warmth and radiate it into you. Pausing here you are 'bridging' – a concept coined, responding to the primacy of the pedestrian, on the bridge, in the sun.

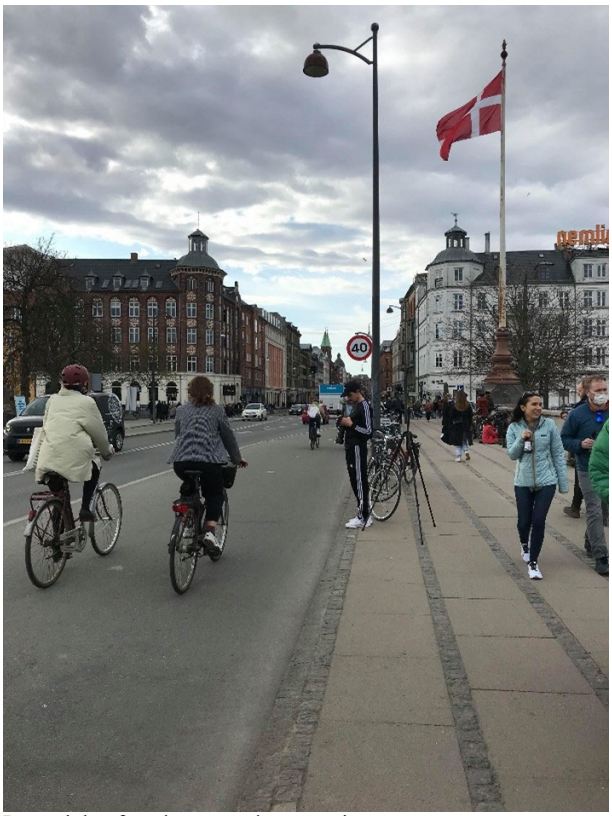
PERCEPTION AND INTIMACY

Perception is relational to movement and emotional state. People move in different ways and in different modalities. When they walk, bike or ride in a car they perceive the environment differently and different affordances emerge. These affordances are not just mechanical and practical responses to what the environment intends to do or to offer (e.g. avoiding an obstacle, slowing down when a bump is about to be crossed, leaning against a fence); they are relational to people's personal intentions and motivations as well.

Working with perception in urban spaces is usually related to feelings of safety, comfort and delight, and the ideas of giving opportunities to stay, move and interact with others (Gehl, 2010: 239). These qualities of good, liveable, and human urban spaces should provide opportunities and invitations for interaction and co-habitation between strangers and choices of urban dwelling (Whyte, 2001; Lofland, [1998] 2009; Gehl, 2010) as well as the exchange and intersection of multiple socio-material and imaginative experiences across diverse groups (Hajer and Reijndorp, 2001). These invitations for interactions and communication with other people are based on the understandings of people's senses and perception of distance. For example, Edward T. Hall defines different types of human communication based on the human perception of distance, which is embedded in people's cultural background, such as the intimate, personal, social and public distances (Hall, 1966 cited by Gehl, 2010: 47).

The intimate scale comprises an emotional engagement to others, mostly people that are close to us (e.g. family and friends), but not always. At this scale, feelings and emotions are activated since facial expressions and smells are augmented due to the close proximity to others (Gehl, 2010). The feeling and perception of intimacy are rarely activated and even overlooked in urban public spaces. Providing opportunities to connect with the most intimate human scale in urban spaces is a way to re- define human scale and activate spontaneous and playful human affordances and interactions across scales.

Crossing Dronning Louises's Bridge daily becomes both natural and monotonous. By foot, views of the lakes and the city areas around them seduce. Stopping or slowing happens without concern. Here, the concrete slab and the cobbled stones are felt, the position of benches located safely along the embankment are sensed, the width of the path holds activities, gestures and verbal expressions. Safety in numbers, safety in light. Speeds are regulated with time for a quick smile to strangers approaching in the opposite direction. By bike, smoothness, slope and space to pass other cyclists take precedence. The bridge is peopled daily – on foot, on bike. But at night, the peopling is reduced, other things are sensed and other events take place. The spaciousness of the bike path seems exaggerated, as does sound in dark quiet. Voices are louder, gestures are larger and approaching these creates a mixture of anxiety and curiosity. Now the speed the bike on the asphalt affords gives safety. But an extended arm into the bike lane is an extended invitation, an unexpected gesture calling for a high five. One cyclist, two cyclists, three cyclists in succession clap – a string of high fives each eliciting euphoric cries. Connection is made between strangers on foot and on bike. At night.



Potentials of exchange and connection.

CONCLUSIONS

As we have argued above, a huge range of scales are available to us constantly and simultaneously as we pass through them – zooming in and zooming out – as a result of an endless supply of situations and velocities in our physical environments. But we are also affected emotionally, and words such as connection, memory, intimacy come into play.

This points back to our point of departure with this paper, namely the importance of the human body across scales of design and particularly for 'large scale' design, where the human body is easily lost in the zooming through scales utilised as a design tool for communication and representation. As designers it is important to be aware of the limitations the cartographic usage of scale results in, and to not only consider the human body as a measuring stick for dimensioning space according to standardized solutions and building codes, but also as a sensorial presence evoking embodied experience.

There is no doubt that our lives are shaped by the built environment and our interactions with people and things. Historically places have shaped societies in the same way societies shape places. How can we then re-frame the notion of human scale in a way that re-introduces the human body in (urban) design? Firstly, is conscious attention towards the body and the nature of human beings. Many scholars argue for recovering the plasticity of the built environment by considering the bodily senses (Pallasmaa, 1997; 2012; Malnar and Vodvarka, 2004; MacKeith, 2005), which means going beyond functionality and efficiency, standardisation and ornament. Then looking at the body in our designs is a way to also recover attention towards materialities and the scale of environments and objects (Jensen and Lanng, 2017). Attention to the ambiguity and in-betweenness of the human-environment relationship can then aid the designer in taking responsibility for attuning environments to the sensorial and perceptive potentials of how these are experienced. This begins with awareness of the multiplicity of experiences and exchanges that take place between humans and their environments, as well as an awareness of the intended invitations we want our designs to offer, and, finally, how such intended invitations can be materialised into the designs we conceive.

As a way to attune our awareness to human scale as designers, we suggest highlighting the multiplicity of experiences and uses of urban space as an opportunity for bringing the body into play. As in the example of Dronning Louise's Bridge, its design, materials and use allow for a multiplicity of experiences that further allows for creativity, connectivity, ownership, the unexpected, and for activation of the affordances that are already there, but perhaps hidden in layers of everyday routines.

And now that we have 're-framed human scale' through the stories that highlight the human body across various scales of experience, we wish to extend an invitation to designers, particularly those working with 'large scale', to re-introduce human scale into urban space(s). Not only as a tool for maintaining overview and dimensioning environments, but also as a relational understanding of the sensorial and perceptive human body reacting to and experiencing its surrounding environment.

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