

Offentlige rom for mennesker eller for biler?

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Harpa Stefánsdóttir: Public spaces for people or cars?

This article examines how the characteristics of public space may reflect prioritization of different transportation modes, and how this could influence satisfaction about active transportation, such as walking and cycling. This is approached by applying urban design theories on the experience of place and the symbolic meaning expressed in the character of public spaces. People using vulnerable modes of travel may find negative symbolic meaning in overwhelmingly car-dominated landscapes. As a consequence these people will be discouraged from walking or cycling. A better balance should be ensured between different travel modes in the overall planning and design of public spaces, and more weight should be placed on the aesthetics of these spaces.

Keywords: symbolic aesthetics, public space, bicyclists, pedestrians, urban landscape.

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1. Introduction

Easy car access and emphasis on infrastructure for high speed driving, sometimes termed car-oriented landscapes, dominate the character of public spaces in many urban areas. This happens despite increased emphasis on promoting active transportation, mainly walking and cycling. The experience of public spaces by vulnerable street users does not appear to be getting enough attention in planning and urban design. In this article «public space» refers to the physical surroundings of a street or road where people travel, and in a larger context to the «urban landscape.» Cities worldwide are working on bicycle policies and strategies, emphasizing construction of bicycle infrastructure to increase the share of cycling. This topic is also routinely discussed in meetings and conferences in many cities. In September this year, the fifth conference of the Icelandic Cyclists' Federation was held in cooperation with «Bikability in Iceland.» In each previous year I have taken my bike and enjoyed my ride to the conference, held in an old theater in the city center of Reykjavík. This annual bicycle ride through a beautiful park and along the city lake has been an important part of the way I have enjoyed taking a part in this event, free from any experience of road driving, with congestion, noise or pollution.

This year, however, the conference was located in a big shopping mall in a suburban area (see Fig. 1). Because of the location, I, like many other participants, took my car and drove to the conference and parked in the huge parking lot in front of the mall. It seemed strange to drive a car to a bicycle conference having the overall goal of discussing how to promote cycling as a sustainable and healthy means of transport. One of the participants mentioned that he had decided to bicycle from home. He said that he, like many of us, reacted quite negatively to the location and was at first sceptical towards it, as it was so far away from the city center. After some deliberation he decided to ride his bike to the conference and used a map to figure out which route to choose. The ride took only 25 minutes, which he thought was acceptable. This was therefore a place you definitely could ride a bike to. He was able to find a continuous route designated for cycling (paths or lanes) almost all the way. He was therefore reflective about his reaction in the beginning.

I suspect that reactions like these that the participants in the bicycle conference had toward the suburban location and the characteristics of the surrounding urban landscape are quite typical. Many of us unreflectively choose the car to move around, even for



Fig. 1 The shopping mall area at Smáralind.

short distances. Perhaps this is what the urban landscape some places invites us to do. An awareness of this factor might be important for the design of public spaces aiming to attract people to walk or cycle.

2. Better places for people

Critique of modernist urban public space design, in which the car and the urban highway were symbols of the new age, became an important theme in several writings from the early 1960s. Jacobs (see e.g. , 1961), Lynch (1960), Cullen (1971), Alexander et al. (1977), Alexander (1979), Gehl (1987) and others, wrote about how better places for people could be created, for instance through mixed use, dense urban structures, streets with social qualities and architecture with an identity of place. Urban values of density, walkability and diversity have been a growing force, challenging the suburban car culture, towards redesign of urban public spaces that envisage the predominance of cyclists and pedestrians instead of cars. There is growing discussion about how design can

contribute to pleasant and joyful street life and outdoor activity (followed by e.g. Whyte, 1980, Appleyard et al., 1981, Gehl, 1987).

Urban renaissance policies became a defining feature of contemporary urban policy from the early 1990s (Carmona et al., 2010). A pleasing aesthetic character of public spaces has been seen as a positive factor that makes them attractive for human experiences and at the same time encourages outdoor activity (see e.g. Fleming, 2012, Gehl, 2010, Marling and Jespersen, 2013). Occupation of public space by different transport modes is also discussed in the perspective of democracy (see e.g. Montgomery, 2013, Mehta, 2014). Why should cars have more rights than pedestrians or cyclists to use or dominate public spaces in cities? Good measures are needed to define and evaluate the extent to which the qualities of public space allow a pattern of use that is responsive, democratic and meaningful (Mehta, 2014). Access and use are seen as good measures to define and evaluate the quality of public space which also is responsive, democratic and meaningful. As an example, bicycle and pedestrians

should have similar access to use public spaces in cities in a meaningful way.

Cities around the world have sought to change the character of urban roads, to re-discover them as streets, avenues and boulevards (Carmona et al., 2010), and to design streets as places. Janet Rowe (1996) writes about the street as the unit of urban sustainability where the space between buildings provides a sense of place and identity and is the forum for many activities. She notes that good street design includes function as well as aesthetics.

Urban spaces with low-density characteristics can be found around many workplaces within a short distance from central areas, however, they are still planned for and built. The automobile landscape has become what Urry (2007) calls «dead public spaces» in which transport by car takes place between private worlds.

3. The symbolic meaning of the urban landscape

The cyclist's experience of the urban landscape around the shopping mall in the introductory section may be related to the symbolic meaning of a place. Here the place has a negative symbolic meaning to a cyclist. Symbolic meaning is related to an aesthetic experience of place.

When developing criteria for design and planning in order to promote transportation modes such as cycling and walking, it is important to understand the aesthetic experience people have when biking or walking on the street. Aesthetic experience refers to a complex relationship between a person's sensuous perception, cognitive understanding and interpretation of the physical environment. It can be associated with enjoyment, but has nothing directly to do with function. Such experience can be induced by both pleasurable and unpleasurable features (Stefansdottir, 2014b, Markovic, 2012). It therefore also includes people's experience of ugliness in a city.

Aesthetic experience has been divided into three kinds of interactions between people and the environment; sensory, formal and symbolic (Lang, 1988). Sensory aesthetics

are concerned with the pleasing effect of the sensations received from the environment, while formal aesthetics are independent of experience and cover the tasks of urban design disciplines (ibid). The formal characteristics of the built environment are expressed, for example, by rhythms, complexities and sequences in the visual world (Norberg-Schulz, 1971). The symbolic meaning of the urban landscape, however, has an associational meaning and may be expressed with respect to, for instance, the shape and proportions of volumes or degree of enclosure (Lang, 1988). From this viewpoint, the symbolic meaning of entering a place or a square could be that one is entering a location where a cyclist, for example, should slow down. One could also see a place as a certain stage of the whole trip that is being reached by entering it. Lynch (1960) suggests that the urban landscape may be organized around a set of such focal points or places, or be broken up into named regions, or linked by «remembered» routes.

Motivational aspects for paying attention to an object and cognitive aspects (that is, semantic, symbolic or imaginative aspects) are defined as important parts of the characteristics of aesthetic experience (Markovic, 2012). The first characteristic refers to interestingness, which plays an important role in the way a person pays attention to an object, feature or event. The second characteristic refers to the way a person appraises aesthetic objects and events as parts of a symbolic or virtual reality, and transcends their everyday use and meanings (ibid). An understanding of symbolic aesthetics therefore involves an understanding of the positive and negative attitudes that people have about the symbolic meanings available in the environment (Lang, 1988). The physical elements that shape the public space, and might catch a pedestrian's and cyclist's attention or interest, depend on which elements meet their expectations of the route ahead, influenced by walking or cycling as a means of moving around and the purpose of the trip (Stefansdottir, 2014c). Experience, which is dependent on attitude, differs from one travel mode to another. For instance, a street is a different place to a pedestrian and

a car driver; they do not attend to the same objects and signs, and they certainly have quite different experiences and purposes.

The motivational aspects may also be dynamic; that is, they can change. Possible dynamic influences on cyclists' or pedestrians' experiences may involve such factors as attitudes towards the mode of travel, and expectations of the urban landscape. This may change with the increase or decrease, for example, with the number of cyclists or pedestrians, transformation of the urban landscape, time of day or season.

4. Needs and perceptions when in different travel modes

The needs and perceptions of pedestrians and cyclists towards a public space and the urban landscape may be divided into instrumental (or functional) aspects and aesthetic aspects. In this section, it is demonstrated that both aspects are important if those travellers are to be satisfied with the quality of the public space and the urban landscape. The instrumental or functional aspects are related to the functionality of the path or the bicycle route, whether it is capable of functioning or working in practice. Examples of important themes related to this issue are distance, segregated lanes and paths and continuity of the route (which can be improved by features such as priority traffic lights for cyclists at intersections, bridges or underpasses). For cycling, the presence of a segregated cycle infrastructure is highly valued (Hunt and Abraham, 2007, Abraham et al., 2002, Heinen et al., 2010, Larsen and El-Genaidy, 2010, Pucher and Buehler, 2009, Pucher et al., 2010, Tilahun et al., 2007) and the type of infrastructure matters (Heinen et al. 2010). Accordingly, many cities have focused on the design of cycle infrastructure and the functionality of cycling-oriented urban landscapes (Forsyth and Krizek, 2011).

People moving around by different travel modes perceive the urban landscape differently, mainly because of the difference in speed (Stefansdottir, 2014b, Gehl, 1987, Appleyard et al., 1966). This should be borne in mind when considering appropriate design for the different modes, for example in rela-

tion to scale or detail. Pedestrians experience details in the public space closely (Gehl, 1987), while cyclists organize them into components of general characteristics (Stefansdottir, 2014b). A car driver locates the moving objects and spaces in a total structure as a way of orienting himself, and organizes perceived structures as complex sequences. The elements of the urban landscape are experienced as a whole phenomenon (Appleyard et al., 1966). Cyclists will perceive a public space with a high degree of complexity, with many details and frequent turns, as more complex than pedestrians (Stefansdottir, 2014b), but will also perceive it in more detail than a car driver. The rhythm of change in the urban landscape scenery occurs faster as travelling speed becomes higher. The urban landscape is also experienced differently at different cycling speeds (Forsyth and Krizek 2011).

Gehl and colleagues (Gehl 1987, 2010, Gehl et al., 2006) have studied the effect of the scale of public spaces on pedestrians, based on the idea that the human sensory apparatus and systems for interpreting sensory impressions are adapted to walking speed. The physical implications of the pedestrian scale (often termed the human scale) may be exemplified by the effects of form and detail of buildings as they relate to the street (LeGates and Stout, 2007). An example of a building's contribution to street life is when activities on the ground level reflect openness and appeal to pedestrians (Gehl, 1987). Large scale and sprawled built-up areas, however, do not offer much experience for the senses when walking (Gehl 2010) or cycling.

According to the results of studies on the experience of commuting cyclists (Stefansdottir, 2014b, Stefansdottir, 2014a, Stefansdottir, 2014d), the construction of segregated bicycle infrastructure that fulfils cyclists' functional needs alone is not likely to make the experience of commuting cycling pleasurable. An aesthetically appreciated context is also important. Vegetation, proximity to the natural landscape and quietness were found to be the most important aesthetically pleasant features. Comments about the worst places, those interpreted as lacking aesthetic quality, included proximity to motorised traf-

fic, pollution and noise, and a car-dominated landscape (ibid).

Aesthetically favourable features were found to have value when they are close to the traveller. Variability in urban spaces is also important. Monotonous routes where cyclists can cycle continuously with little stimulation or need for attention may become boring (Stefansdóttir, 2014b, 2014d). The nearby landscape, which is experienced at a short range, is not exclusively visual, but evokes kinaesthetic responses of the various sensory qualities that influence travellers' experience of the urban space (Berleant 1988). Such nearby landscape changes frequently. This means that it may stimulate modes travelling at slow speed and arouse pedestrians' or cyclists' curiosity more often than the landscape at distance in a very large public space. Thus the traveller becomes occupied with what is to be experienced. The nearby landscape may therefore cause the sense of time to be experienced differently than the landscape at distance.

5. The expression of modal priority in public space

Characteristics of the physical elements that shape the public space may indicate how people are expected to behave, and this can influence sensory experience. To analyze a place means to understand what is happening there, what has happened or might happen, how one should behave there and how the place is connected to other places. There are, for instance, «slow» and «fast» places (Lynch 1984). The experienced speed of the urban landscape is often heavily influenced by the scale of the physical elements that shape it (Gehl et al., 2006). New urban buildings and landscape in modern cities are often shaped by the conditions of motorized transport, moving at over 60 km/h (ibid). The concept «sense of place» has often been used in relation to those characteristics that make a place special or unique, and a sense of place evokes belonging. Such locations have a distinctive atmosphere and meaning (Norberg-Schulz 1980). Placeless landscapes, on the contrary, have no special relationship to their location; they could be anywhere (Relph, 1976).

The urban landscape around the shopping mall where the fifth Icelandic bicycle conference was held (see the introduction and Fig. 1) exemplifies such a placeless landscape. It is a place that could be anywhere, a place that has no special atmosphere and no special relationship with its location. It is a car-oriented landscape which is designed for the speed of the car travelling between A and B, and it is characterized by asphalt landscapes and the priority given to motorized traffic. Infrastructure for pedestrians and cyclists is located along and going into the routes for motorized traffic, which may be crossed using walkways with lights. The infrastructure certainly fulfills somehow the instrumental needs of pedestrians and cyclists, while the importance of the aesthetic aspects seems to have been vastly underestimated.

Viewing the urban landscape as a whole, the dominating use of this landscape for private car traffic may have negative symbolic meaning for vulnerable transport modes, discouraging people from walking or cycling. This may be the case even though the functional needs of pedestrians and cyclists are solved in an acceptable way, with features such as separated and continuous paths and lanes. This has been verified in a comparative study of commuting cyclists' experiences in Reykjavik, Trondheim and Odense. The results showed that public spaces that could be characterized as lacking aesthetic quality were described in the appraisals as «boring» or «ugly» and tended to refer to human-made environments constructed of concrete and to overwhelmingly car-oriented landscapes (Stefansdóttir, 2014a, Stefansdóttir, 2014d, Stefansdóttir, 2014b). The priority given to the private car was reflected in the character of public spaces, in the amount of motorised traffic, in the size of the infrastructure reserved for cars, and in the grey constructed urban landscapes. These characteristics symbolized the way in which the needs of motorised transport are prioritized over those of cyclists. The landscape was found to be monotonous, with little to experience other than closeness to motorized traffic. This conveyed a story in which other transport modes than cars were demonstrably unwelcome to use the public spaces under study. Conversely,

vegetation-covered urban landscapes with continuous infrastructure and few forced stops supported goals related to fitness, lifestyle quality and environmental care. Vegetation was the element most participants in all three cities preferred to experience when cycling.

This agrees with results of earlier studies showing that vegetation and objects in nature produce a pleasant aesthetic experience (e.g. Gobster and Chenoweth, 1990, Kaplan and Kaplan, 1989) and that well designed green public spaces can contribute to a more attractive walking experience (Adkins et al., 2012). Appleyard (1980) pointed out that the characteristics of trees, with their soft-textured leaves filtering and reflecting light and producing an ever-changing pattern, provides a contrast to the grey, hard and statically-constructed urban landscape. Vegetation also can have symbolic meaning. For example, trees can be important symbols of nature in the city (Appleyard, 1980).

Creating a pedestrian- and bicycle-friendly city is not just about building infrastructure. It is most of all about developing active,

creative and liveable cities. In this context it is important to reclaim lanes from motorised traffic for cyclists and pedestrians and to develop greater equality in the space allocated to the different modes. An example of this is a recent transformation in Manhattan, New York (Gehl-architects, 2007) where a series of highly visible changes were made and lanes were reclaimed from traffic for people. This resulted in a significant increase in public life on the streets (see Fig. 2).

6. Conclusion

In the planning and design of public spaces where people travel, the tendency is to emphasize solutions related to the functional or instrumental needs of the different modes. At the same time, the importance of the surrounding character of public spaces, i.e. the context of the infrastructure and its aesthetic aspects, is often underestimated. In some suburban areas, for example, the shopping mall mentioned earlier, the aesthetic aspect is totally ignored, and this may discourage people from walking or cycling. Mainly be-



Fig. 2 Urban transformation in Manhattan, New York

cause of slower travel speed than by car, pedestrians and cyclists can perceive characteristics of the public spaces more closely and at a slower rhythm than people in a car. The rhythm of change in the urban landscape scenery occurs faster as travelling speed becomes higher. The urban landscape is also experienced differently at different cycling speeds. Earlier studies show that vegetation has high value for bicycle commuters and for wellbeing in general; urban landscapes with large-scale and sprawled built volumes and an oversized infrastructure for cars, on the other hand, may have adverse effects on experience. The latter kind of landscape may signal that motorised traffic is given preference over other modes of transport.

It is important for planners and designers to think of the overall characteristics of public space and urban landscapes, both from functional and aesthetic perspectives and to thus ensure equality between motorised traffic, pedestrians and cyclists. If people are supposed to feel invited to walk (and walking is also an important part of the travel chain by public transport) or cycle, public spaces have to express this over the entire urban landscape, including relevant destinations such as shopping mall areas. It is also important to create balance in the proportion of vegetation and constructed urban landscape, and in the space reserved for bicycle lanes, sidewalks and lanes for cars, so that people will feel that the public space is intended for several different modes.

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