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Young, Mobile, and Highly Educated Cyclists: How Urban Planning and Policy Dis/able Users

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The focus of this study is how intended users of the built environment are categorized in strategies, policies, and guidelines for the planning and building process. The image of the intended user reflects a disabling society that also is in conflict with established policies on a society for all. Patterns of inequality are found in the materials, both within and across groups of users. With youth, health, and mobility in the foreground, older persons and persons with disabilities are almost never evident. Disability is made visible only through its mirror: the ability norm.

In the review of planning documents from a medium-sized Swedish municipality, the study sought to identify if and how users are described and to analyse which users are included in or excluded from the urban environment during planning stages. The article argues that new ways of thinking, to include a diversity perspective in planning, are needed.

Keywords: categorization; urban planning; accessibility; universal design; dis/ability; policy

Introduction

This article is based on a study of how people are categorized in urban planning strategies, policies, and guidelines. The article seeks to shed light on inequalities in how people are described and on who is included in or excluded from the urban environment as early as in the planning stage. The study focuses specifically on categorization and inclusion/exclusion in relation to dis/ability.

Categorization is a fundamental behaviour that is essential to our ability to interpret and process information. Assigning different labels to the things that surround us helps us to reduce the volume of information and to communicate with one another so that all involved parties understand what is intended. Categorization is an essential element of the thought process, and something that small children learn at an early age, for example, in discovering that a lamp is a 'lamp' and that the sun is not a 'lamp'. In linguistic usage, categorization is strongly associated with values, not least when it comes to assigning labels to different people and groups of people. Categorization as an element of linguistic interaction can lead not only to encounters and inclusive forces, but also to dividing lines and contrasts and, ultimately, to discrimination. When categorization occurs based solely on certain interests or groups of people, some will belong and others will be excluded.

How people are categorized in planning documents may also affect the final design of the building or environment. Normative ideals have significance for the design of the physical environment (Bricout & Gray 2006). This can affect how people will be able to make use of the built environment and determine whether risks of exclusion are created. Design based on a 'normate template' (Hamraie, 2017) instead of human diversity preserves a norm-deviation way of thinking that hides the variety that exists in the population (Ericsson et al. 2020). Social categorisations not only of persons with disabilities but also of older people are sometimes intersected and put in contrast to youthfulness and able-bodiedness (Gibbons 2016). Both ageism and ableism, which often are interlinked, reflect a preference for certain values and norms (Goodley 2014; Wolbring 2008).

To access and use public space and buildings is widely seen as a citizen's right and a prerequisite for participation for all citizens (Government Offices of Sweden 2018; Swedish Government 2016). An analysis of how users of such spaces are categorized in planning documents can shed light on who or which users are at risk of being excluded.

The United Nations Convention on the rights of persons with disabilities (UN CRPD) manifests a shift from the medical and social models of disability to a human rights model and brings about a paradigm shift in disability policy, based on the understanding of persons with disabilities as right holders and human rights subjects (Degener 2016; UN 2006). It states that disability is a social product and raises the demands and responsibilities on both public and private sectors to guarantee equal access for all citizens (Fougeyrollas et al. 2019). In this article, the concept 'person with

disabilities' is used according to the definition made in the UN CRPD (UN 2006: article 1). In the analysis, dis/ability is used as a category code reflecting the interrelatedness of ability and disability. Based on the understanding that *disability* cannot exist without *ability*, the term is here used to make visible their co-construction and reliance upon one another (Goodley 2014). Dis/ability is further understood as an interaction and as being part of the relation between the individual and the environment (Lid 2020; Shakespeare 2014).

It is well known that persons with disabilities represent a marginalized group, often excluded from 'mainstream' society. From previous research it is known that the representation in media of persons with disabilities, and issues regarding the rights of persons with disabilities, are limited (Brune 2008). The media coverage of disability is often linked to stereotypes and prejudices and becomes a barrier for inclusion of persons with disabilities in the society (WHO 2011). Furthermore, visibility and an objective representation of disability in media is important for removal of stereotypes and stigma (Kolotouchkina et al. 2021). Disability has been described as socio-spatially constructed, where space reproduces and maintains the processes of exclusion (Kitchin 1998). The access to the built environment is a prerequisite for participation, and planning in urban areas is a social justice issue (Lid 2016).

Planners' access to knowledge about the needs of and solutions for persons with disabilities is one of several preconditions for making buildings and locations accessible and usable. Earlier studies indicate a disconnect between theory and practice in this regard, and the profession faces problems when it comes to understanding users' needs and translating them into design language (Goodman-Deane et al. 2008; Ielegems, Herrensens & Vanrie 2015). Researchers have identified the need for urban design tools that incorporate values such as accessibility and universal design (Borowczyk 2018). As defined in Article 2 of the UN Convention on Rights of Persons with Disabilities, 'universal design refers to the design of products, environments, programmes, and services usable by all people to the greatest extent possible, without the need for adaptation or specialized design' (UN CRPD 2006).

The municipalities have, with their planning monopolies, the power to decide for whom they are building. Current planning and building processes are complex, with many different actors and stakeholders directly influencing various parts of the process and its results. The documentary basis for the process includes a vast range of strategies, policies, and guidelines that signal the desired results, including comprehensive plans, detailed development plans, policy instruments, and, with increasing prevalence, entries in architectural competitions. Some of these documents are adopted politically, others are generated at the administrative level by civil servants or from private actors such as architectural agencies or consulting firms.

The conditions and assumptions surrounding municipal planning have changed dramatically in recent decades. The previous focus on set goals and clear methods has transitioned to more vision-based development work in the municipalities, with goals of increased attractiveness or competitiveness (Mukhtar-Landgren 2012). Initiatives for changes in physical planning are increasingly coming from private actors, many of whom are dependent on one another in this new situation, which demands greater knowledge and professionalism in the municipalities (Blücher & Graninger 2006). Growth and attractiveness are key concepts in the current urban design discourse. *Attractiveness* is often focused on competition between places, to attract companies and capital, and is prioritized before a citizen's perspective (Hidman 2018). The planning assumptions have also changed and been affected by progress-based practice consistent with the trickle-down theory (i.e., that the public sector must create favourable conditions for the market, which then leads to growth that automatically trickles down to other areas). The effects of this are increasingly being questioned and have not been adequately researched (Holgensen & Baeten 2016; Loftman & Nevin 1996).

The aim of the study is to identify which categorizations of users are made in strategies, policies, and guidelines for the built environment. The results are discussed in relation to possible consequences for users of the built environment, with a particular focus on persons with disabilities.

Method

The study is conducted as an inductive descriptive study, based on a qualitative content analysis of texts and images in urban planning and policy. These are analysed on the basis of a broader context, which also involves the practices and discourses that currently permeate social planning. The texts and images produced in the planning phase are assumed to have an impact on the completed built environment, as the materials are, to a varying degree, binding documents.

Discourse analysis is a useful tool when studying identity constructions and power, which categorize the expected users in this particular case (Bergström & Boréus 2005). In this matter, it can also reveal how categorizations contribute to the production and reproduction of inequalities and exclusion.

In analysing the categorization of users included in or excluded from the material, inspiration was drawn from a tripartite circular model of notions of the normal (Lind Palicki 2010). In the model, Lind Palicki describes how the *normal notions of normal* constitute the centre; they are denoted linguistically as something that simply is, not problematized but rather taken for granted. The model was useful in the study in determining who is included in or excluded from the materials, who the actual intended recipients of the documents are, and in finding patterns of who and what are actually intended to fit into the built environment being planned.

Sample

The analysis was based on 15 documents from different stages of the planning and building process: strategies/policies/guidelines, comprehensive plan, detailed development plans, design programmes, and entries in architectural competitions: documents that can affect the prevailing conditions and assumptions throughout the planning and building process.

The documents are 5–52 pages long. All the materials were obtained from a medium-sized Swedish municipality located in an urban region and with currently rapid population growth. The selected materials are produced by the municipality and, in some cases, in collaboration with the actors in the planning and building process (e.g., land developers, builders, and architectural agencies).

The purpose of the selection has been to study a wide range of planning documents with different status and senders, not a certain municipality as such. The categorization of intended users in the planning documents is not assumed to be a local phenomenon, but a part of the current urban design discourse.

The selection criteria required that the documents be current (not more than 10 years old) and official (i.e., politically adopted, published on a municipal website or otherwise officially disseminated) and that the planned development or facility be significant for many citizens.

The sampled material covers both projects on previously undeveloped land as well as historical environments with strong cultural protection in the city core. Different types of documents were chosen to broaden the sample in terms of sources (i.e., public/private, political/administrative) with a view to studying similarities/differences dependent on the statuses of the sources and documents. This also makes it possible to review patterns regardless of the project type or the development conditions and assumptions.

Table 1 shows the types of sources at issue: political (politically adopted documents), administrative, and private or private/public (a private actor working in collaboration with a municipal administration).

Table 1: Sample of materials.

Number	Name	Type of source	Use
M1	The target areas of the Comprehensive plan	Political	The direction of the long-term development of the physical environment
M2	Square strategy	Administrative	States the design orientation and offers guidance for future decisions and management
M3	Guidelines for design for pedestrians and cyclists	Political	State the design orientation and offer guidance for future decisions and management
M4	Traffic strategy	Administrative	Strategy
M5	Visions, strategies, and goals for a new district	Administrative	Strategy that states the design orientation; guidance for future decisions and management
M6	Design programme for Square 1	Private/public	Design programme for a city square
M7	Design programme for Square 2	Administrative	Design programme for a city square
M8	Framework programme for new construction and renovation of train station	Administrative	Detailed programme for stepwise planning and execution
M9	Laying of new tramline in an urban environment	Administrative	Informational materials for the public, based on guidelines created by architectural agency
M10	Detailed development plan 1: Expansion of residential area in less developed area in the municipality	Administrative	Consultation paper
M11	Detailed development plan 2: Shopping area, etc., in newly built district	Administrative	Review paper
M12	Architectural competition a, b, c, d	Private	Four independent entries pertaining to a visitors' centre

Analysis

In analysing the documents, we first noted all the various categorizations of people that were evident in the written texts. These include clear labels in terms of who is expected to use the built area, such as *residents*, *cyclists*, and *persons with visual impairments*, and also categorization with less specificity, such as *people in the area* and *unprotected road users*. The total number was calculated for each individual category identified.

The categorizations of people identified from the material were then grouped into thematic analysis categories. Phrases describing people's characteristics, such as *sun-seeking (city) inhabitants*, *teenagers with limited purchasing power*, and *engaged municipal inhabitants*, were sorted into these categories. Expressions such as *all*, *many*, and *one* that are used to refer to the user(s) or person(s) addressed were sorted into a group for generalizing categorizations. The thematic analysis categories were first formulated by the article's first author, whereupon the trial coding was tested by the research group, and certain adjustments were made. The textual material was analysed inductively, based on how categorizations appear in the documents, how the users are described, what demands are placed on the users of the environment in terms of their characteristics, what individuals/groups are not described at all, and the extent to which human diversity is evident (e.g., whether people's differing needs or terms such as accessibility, diversity, equality, inclusion, and social sustainability are employed, and how the disability perspective is handled).

The textual analyses were performed so that the categorizations found were analysed in context and reviewed based on their ideational structure (i.e., content) (Hellspong & Ledin 1997). The categorizations in the texts were analysed based on their quantitative prevalence.

The graphic materials were analysed qualitatively based on who and what are or are not depicted, what objects appear, what contexts are depicted, the values/messages signalled via the surroundings, the entirety/details, verbal processes evident in the images, activities and indexical links, facial expressions/poses, and so forth (Ledin & Machin 2018).

All citations have been translated from Swedish by the first author. The materials are available from the authors of the article.

Results

A total of 1,265 categorizations were recorded, including 331 generalizing categorizations such as *one*, *all*, and *many*. Of the others, most pertain to people's mobility (392 times), people's occupational roles, and so forth (225 times), people's affiliation with the city (158 times), and age (111 times).

Individual categories were grouped as follows (numbers in parentheses):

1. Mobility (387)
2. Occupation roles/actors/educational background (225)
3. Geographic affiliation (158)
4. Age (111)
5. Dis/ability (38)

Categorizations from all groups are evident in texts and images. The results point to consistency between categorizations in texts and images. The most prominent categorizations in the texts also dominate the graphic material. The groups are created based on types of categorizations that appear often.

Mobility

The category *mobility* includes categorizations describing how people are expected to move around in the city and in the public environment (see **Table 2**). It includes cyclists, pedestrians, motorists, and public transport passengers of various types, as well as wheelchair and rolling walker users wherever they have been identified as special road user groups (and are thus not included in the 'dis/ability' group).

Table 2: Categorizations based on mobility.

Mobility	Categorizations	Number
Cyclists	Bicycle commuters, cyclists, cyclists for health, cycling road users, the cyclist, cycling, the cycling	239
Pedestrians	Pedestrian, walking, strollers on pedestrian streets	90
Public transport passengers	Public transport passengers, passengers, train passengers, tram passengers	28
Mobility tied to disability	Users of rolling walkers, wheelchair users, motorists with disabilities	10
Motorists	Motorists, vehicle drivers	5
Other	Test traveller, regional travel, commuters, unprotected road users	15
<i>Total</i>		<i>387</i>

By far the most common categorization mentioned based on mobility is *cyclists*: 239 times (Table 2), which is also the most common of all the user categorizations in the documents. This includes specialized labels for cyclists, such as *cyclists for health*, *cycling road users*, and *bicycle commuters*.

Next comes *pedestrians* (90 times), including similar terms such as *walking road user*, *walking*, and *strollers*.

Public transport passengers occur 28 times in various expressions such as *train passengers*, and *bus passengers*. There are also several labels for which the assumed mode of travel is unclear, such as *test travellers* and *commuters*.

Motorists are mentioned rarely, only five times, and are also referred to as *vehicle drivers*, without distinguishing between, for example, motor vehicles and other vehicles, such as motorcycles (M2).

The demand for human mobility is clear in both texts and images in all the materials. The assumption that the main options are walking, cycling, or using public transport is evident in all studied materials addressing people's mobility. Mobility is described as something that is simple for everyone and that all people are expected to be able to do: 'You have to be able to walk, cycle, and take public transport easily' (M9, p. 3).

Of these three ways of moving about, cyclists are clearly prioritized over other road user groups. Examples of this appear in guidelines advancing arguments as to why the municipality chose not to use regulation in the form of 'living

streets' to a greater extent: the reason is that pedestrian traffic does not promote accessibility for cyclists, as a bicycle is by definition a vehicle, and one is not permitted to ride faster than walking speed in such areas.

Car use is presented as negative, regardless of the fuel type or whether the car in question is a personal car, taxi, delivery vehicle, or ambulance. When vehicle traffic is described, it is often when justifying the reduction of car vehicle traffic by making areas car free and closing off streets. In one context, motorists with disabilities are cited as justification for making parking space available for persons with reduced mobility, particularly those with special parking permits, within 25 metres of an accessible entry (M 11, p. 22). Both access and drop-offs by car are limited: '...proceed on the basis that vehicle traffic must not, in principle, be permitted on the square. Some drop-offs at care centres or shops may be permitted in exceptional cases' (M11, p. 14).

Highly normative elements appear regarding the theme of mobility, including descriptions of how to attempt to influence the behaviour of residents: 'The communication should begin even before one becomes established in the area, not least to enable successful efforts to influence the behaviour of residents ...' (M4).

Summary: Categorizations tied to mobility clearly focus on the cyclist. Modes of transport other than walking, cycling, or using public transport are deprioritized with respect to how one is to reach one's destination in urban space.

Occupational roles, actors, and educational background

The materials repeatedly refer to people based on their occupational identities and educational backgrounds, such as labels based on key roles in the social structure. Here we find *identity* as a common factor. This type of categorization has been divided into three groups: occupational roles, actors, and education.

The *occupational roles* mentioned in the materials vary. The single most common category is highly educated experts (16 times), with researchers figuring most prominently (**Table 3**). Other categories also pertain to qualified occupational roles that presume higher education. The occurring occupational roles have been divided into the following main groups: highly educated experts, municipal representatives, business people, other occupational roles, and general occupational categorizations.

Table 3: Categorizations based on occupational roles.

Occupational roles	Categorizations	Frequency
Highly education experts	Researchers, experts, engineers, economists, guest lecturers	16
Municipal representatives	Officials, people in positions of trust, planners	9
Business people	Entrepreneurs, consultants	5
Other occupational roles	Professional drivers, people involved in cultural activities	3
General occupational categorizations	Personnel, employees, co-workers, emergency services, those who work downtown, employed	11
<i>Total</i>		44

The *actors* group includes many different labels, most prominently actors involved in the planning and building process (38 times), although key actors are also found in the categories *industry and commerce* and *ownership* in the city (**Table 4**). There are also areas of overlap between these three groups, for example, a development actor may also be a landowner or an employer. Those who are affected by various building and construction projects (i.e., interested parties and stakeholders) constitute the least prominent group.

Table 4: Categorizations based on actor roles.

Actors	Categorizations	Frequency
Actors in planning and building processes	Actors in planning and development processes, planning actors, development actors, private actors, property developers, developers, building actors	38
Industry and commerce	Business people, local industry and commerce, hotel owners, restaurateurs	37
Ownership	Property owners, land owners, exploitative developers, their cooperative partners, employers	32
Public actors	Public actors	21
Affected	Interested parties, stakeholders, other affected people	5
Actors, unspecified	Actors	22
<i>Total</i>		155

When people's *education* is mentioned, it is primarily higher education that is referred to (**Table 5**). An academic background is described as a homogenizing glue in the population: 'factors contribute to a mixed population, although many share an academic background, which may be viewed as a homogenizing factor' (M2).

Students appear most frequently in this group.

Table 5: Categorization based on education/studies.

Education	Categorizations	Frequency
Students	Students, studying, full-time students	24
Educational background	Higher education background, academic background	2
<i>Total</i>		26

Summary: The patterns from the three groups coincide: both occupational and actor roles assume *higher education*, which is confirmed by categorizations in the area of education and vice versa. Actors who *own or exploitatively develop* areas appear in the material to a far greater extent than *interested parties* who are affected by changes, signalling that the materials are not directed primarily at the user of the environment.

Geographic affiliation

Yet another way to categorize the people who are expected to be users of the built environment is to refer to their place of residence, reason for being in the city, or place of origin. People with different degrees of affiliation with the city are described in different ways in the materials. They have been divided into four groups: see the left-hand column in **Table 6**.

Table 6: Categorizations based on affiliation with the city.

Affiliation/origin	Categorizations	Frequency
Those who already are or will be in the city	(City) resident(s, s'), (the municipality's) population, someone who is in the area, a number of the city's inhabitants, neighbours, engaged municipal inhabitants, residents, residents around the square, live in (the city), citizen(s, s') Sun-seeking (city) residents, the city's inhabitants Population, future population, someone who is in the area, daytime population	61
Those who come as guests/visitors	Visitors, guests, visitors from around the world International audience, international guests, regional audience, someone who is in the area, daytime population, the audience, visitors, new groups of visitors, new inhabitants and visitors	84
Those who come to the city and have diverse origins/ethnicities	Born abroad, ethnic groups, unaccompanied minors, new arrivals, diverse backgrounds, ethnicity, new immigrants, young international population	11
Other	We in the Western world	1
<i>Total</i>		157

Here we find that categorizations referring to guests/visitors are predominant, appearing 84 times. Categorizations associated with the municipality's current inhabitants are mentioned 61 times, ones based on origin/ethnicity 11 times, while the 'other' category appears twice. One specific label strongly associated with the city's university also occurs synonymously with inhabitants of the city. The material on traffic strategy uses the geographic label *we in the Western world* in stating that inhabitants in a certain part of the world have reached a ceiling in terms of car use (M4). Different properties are attributed to the city residents in different materials: one document describes them as *sun-seeking*, another as *engaged municipal inhabitants*. People from diverse ethnic backgrounds or who were born abroad are mentioned in 4 of 15 documents, while guests/visitors appear in 11.

Summary: Categorizations based on affiliation/origins largely concern whether people have come to the city as visitors for various reasons rather than already reside in the city. People of foreign background appear to a minor extent in the textual and graphic materials.

Age

Of all the categorizations concerning people's ages, *children* appears the most frequently (i.e., 83 of 111 times (**Table 7**)). In addition, terms such as *best for the children*, *children's furniture*, *children's playhouse*, *pram*, *child scale*, *child size*, and *small* also appear. *Children* appears most frequently in the comprehensive plan and detailed development plans, and to varying degrees in other types of documents.

In addition to these, the age-related categories include several labels, such as *youths* (*young*, *young international population*, *teenagers*, and *young adults*), *adults* (*adults* and *active middle-aged people*), *older persons* (*older* and *ageing population*), as well as general designations, such as *large* and *small* and *people of all ages*.

Table 7: Categorizations based on age.

Age	Categorizations	Number
Children	Children, small children, smaller children, younger children, older children, unaccompanied children	83
Youths	Young, youngster, teenagers, young adults	6
Adults	Adults, active middle-aged people	3
Older persons	Elderly, ageing population	13
Age in general	Age, large and small, people of all ages	6
<i>Total</i>		<i>111</i>

Children are usually presented positively in both text and images. In the images, children are seen playing, cycling, and laughing. Children are shown as bright and happy, sometimes playing together, sometimes with a parent.

The children's perspective is sometimes presented in the material as a norm for design. The design programme for a city square includes the idea of placing counters with water taps at various heights (i.e., at standing desk height for adults and lower for children). However, in the image caption, the children are replaced with dogs: 'one of the counters has a low water tap counter for dogs' (M6).

Older persons as a group are also cited in justification of a desired policy trend or a specific design. Examples of this include one document that cites the ageing population as possible justification for the contention 'that our previously increasing travel by car may be on the way towards its end' (M4, p. 17) or another where the placement of a fountain is described as motivated by older persons (and youngsters): 'On hot days the fountains cool off both young and old' (M7, p. 14).

Older persons as a group are strikingly absent from the materials. In some cases, older persons are mentioned in neither text nor images, while other age categories, such as children and youngsters, are evident. In other materials, older persons are rarely depicted in images, but when they are it is in connection with activity. The older persons depicted are healthy older people who are cycling, strolling (without canes), walking dogs, or smelling flowers. When the housing needs of older persons are addressed, the subject is the need to build adapted flats.

Other than *children* and *older persons*, categorizations based on age are rare. *Youngsters*, *youths*, *teenagers*, *young adults*, and *adults* do appear; *middle-aged people* appear in images but only once in text.

Summary: The pattern of categorizations based on age is clear, with children and youths being most prominent.

Dis/ability

Persons with disabilities are mentioned under a host of labels that can be divided into three groups: categorizations generally targeting individuals with disabilities, those referring to a specific type of disability, and vague labels that could relate to disability. Only certain types of disability are mentioned, such as impaired mobility or vision, while others are omitted altogether (**Table 8**).

Table 8: Categorizations based on dis/ability.

Disabilities	Categorizations	Number
Disability, general	Persons with a disability/disabilities, users with disabilities, functional variation, motorists with disabilities, specific user groups	14
Reduced mobility, impaired vision	Mobility impaired, persons with reduced mobility, persons in wheelchairs, wheelchair users, wheelchair users' requirements, wheelchair users with assistants, users of rolling walkers, visually impaired, persons with visual impairment	22
Indirect designations that could relate to disability	Those who cannot or do not have the means to move themselves far from home, those with diminished health	2
<i>Total</i>		<i>38</i>

There are no mentions of persons with disabilities whatsoever in 7 of 15 studied documents, while of the other documents, there is mainly one (M3) in which such terms appear. When persons with disabilities are described, many different terms are used.

Persons with visible impairments do not appear at all in the photos and only exceptionally in the other visual material. For example, in one source there is a drawing of someone in a wheelchair being placed on a stone-slab walkway to visualize the fact that the walkway is intended to be wheelchair accessible. An example of how persons with disabilities are absent can be seen in **Image 1**, of a tactile walking surface, illustrating that it is possible for someone ('the normal user') to cross the surface without being impeded despite wearing boots with high heels.



Image 1: The expected user of the tactile walking surface is absent in the photo, while the illustration shows that it is possible for the 'normal user' to cross (M6).

Persons with disabilities are mentioned most often in the context of accessibility. Persons in wheelchairs, with visual impairments with assistants, and wheelchair users with assistants are identified as separate road user groups, as opposed to, for example, pedestrians, pedestrians with prams, and cyclists (M3, p. 21). Only once does the combination of a disability label appear together with another type of categorization, namely, motorists with disabilities. Persons with disabilities are grouped together with the categories *children* and *older persons* as groups to receive special consideration when designing the pedestrian network. No additional potential needs for access for this group are addressed in the materials (e.g., drop-off areas for cars near entrances, drop-off areas for disability transportation services/taxis, space for vehicles adapted for persons with disabilities, and problems with electric scooters on sidewalks).

It appears that difficulties are encountered in weighing certain accessibility requirements against one another, for example regarding the design of pedestrian crossings:

The desires of persons with visual impairments for accessibility entail that the dropped curb must be as narrow as possible, while wheelchair users demands for accessibility entail that the it should be made sufficiently broad to enable the wheelchair to be manoeuvred over the ramp (M2, p. 28).

Here we also see an indication of different attitudes toward persons/groups with different types of disabilities, for example, persons with visual impairments *want* accessibility, while wheelchair users *require* it.

Persons with disabilities are presented in somewhat different ways depending on the type of material. In some planning documents the group is mentioned in connection with accounts of how the legal requirements regarding accessibility are to be fulfilled: 'The requirement regarding good accessibility and usability for persons with disabilities s has been taken into account' (M 11).

Only in the comprehensive plan are there texts that reflect the municipality's responsibility to build a society for everyone:

It is the responsibility of the municipality to work toward a society that is accessible and usable for everyone. In such a society, environments and services are designed based on knowledge of people's different circumstances, and that an individual's circumstances can change over time (M1, p. 55).

Summary: Categorizations tied to dis/ability appear most prominently in texts concerning accessibility, and then mainly regarding persons with wheelchairs, reduced mobility, and, to some extent, visual impairments. Disabilities such as blindness, deafness, and intellectual or mental impairments are not evident. Persons with disabilities are not shown in any images and are mentioned in texts in only a small portion of the material.

Discussion

The results show that clear user categorizations are present. A picture emerges of the user as a young, highly educated cyclist who is on a visit or resides in the city from the start. This is the person who lands in the innermost circle in Lind Palicki's (2010) circle model in our study. Large parts of the population (e.g., older persons, foreign-born, and persons with disabilities) are sparsely represented or absent in the materials, occupying more peripheral circles in the model.

These results will be discussed regarding, first, the disabling image of the user; second, the disabling gaps between policy and practice; and third, considerations of how to plan for human diversity,

The disabling image of the user

The materials reflect distinct norms, with youth, health, education, and success being the most salient characteristics in the description of the user, which confirms results from previous research (Gibbons 2016).

Norms and categorizations can maintain differences between people, with some people being taken for granted as users of the built environment, while it seems almost inconceivable that others might consider themselves part of the city and its urban life, with existing power structures. In line with Hamraie (2017) and Ericsson and colleagues (2020), the study highlights how the variety in population gets hidden behind an imaged user based on a 'normate template' design.

Many of the documents are highly normative, clearly expressing what the user *should* or *must* do. There is an assumption that everyone enjoys the same opportunities. This is most obvious within the *mobility* group. What constitutes 'right' and 'wrong' behaviour is clearly expressed here and how it is the task of the municipality to change the citizens' behaviour. The assumptions are based on the notion that all users can cycle or walk. This argument is rooted in the concept of *mobility management* for sustainable transport, which in the studied material emphasizes reduced car use. These are examples of visions that lead the thoughts away from human diversity and limit the image of the intended user during the process.

People with other characteristics than the described image of the user, such as advanced age, impairments, or poor health are wholly or partly absent in the materials. The absence of certain users is also expressed in indirect ways in the materials. The photo of the tactile walking surface showing the red boots stepping over the surface rather than using it, is a way to hide the intended user. The function of the tactile path is not connected to a person who may need it (e.g., persons who are blind, have visual impairments, or have diminished orientation capacity), but to a person for whom this design is irrelevant. An option here could instead be to use an illustration that depicts *what and for whom* the tactile surface is intended. Another example is found in the visualization of the higher and lower water tap counters on the square. In the image, the high counter is presented to be intended for adults and the low counter for children and dogs. The possibility to show other persons who would benefit from the low counter, such as wheelchair users or people with dwarfism, has been waived.

Older persons appear rarely in images, while persons with visual impairments do not appear at all. When older persons are depicted, it is as healthy and active citizens. When persons with disabilities are mentioned, it is almost exclusively in arguments regarding accessibility and that the group is associated with special needs, demands for special solutions, or demands for consultation and dialogue. Within the *actors* group, focus is on developers in the planning and building process, while those affected by the project are pushed into the background. This is also consistent with the use of *attractiveness* in the urban design discourse, where attractiveness is about a competition between places to attract companies and capital, while the citizen perspective is downplayed (Hidman 2018).

The results illustrate not only how categorizations can lead to exclusion of certain groups in the descriptions of the users, but also how a hierarchy exists within each group: cyclists are prioritized before pedestrians and motorists, and children and youths are prioritized before older persons. Also in categorizations based on disability, there is a clear hierarchy. The way persons with disabilities are represented in the materials also clearly indicates a hierarchy among different impairments. While persons with mobility or visual impairments are those being described, the needs of persons with difficulties to orientate are not present. How constructions of such hierarchies can limit the society's understanding of certain needs and how access to accessible spaces is influenced by such hierarchies has been described in previous research (Pritchard 2020). Limited understanding of human diversity and certain needs could accumulate the exclusion of certain users (e.g., accessibility connected to orientation and cognition run a high risk of being neglected in the building process).

The extent to which older persons and persons with disabilities are absent in the materials is particularly clear. This is most obvious in the graphic materials but also evident in the texts. The prominent roles that the cyclists, children, and youths have throughout the material strongly signal whom the public spaces are for. In this respect, the study confirms what has been found in other research areas (e.g., lack of representation of persons with disabilities in media) (Brune 2008; WHO 2011). Such narrow images of the intended users have disabling consequences (Lid 2020; Shakespeare 2014), because they limit who might be expected or even imagined as an inhabitant or city dweller, and contributes to a situation where significant portions of the population are rendered absent from the image of the city,

Common in some documents is how persons with disabilities mainly appear in connection with legal requirements on accessibility. As visibility and representation of disability is important in order to remove stereotypes and stigma (Kolotouchkina et al. 2021), this can even strengthen the exclusion of large user groups. Furthermore, design in conflict with both good accessibility and actual legal requirements are found in the material (e.g., as visualizations of city squares paved with cobble stones, descriptions of public places where passenger drop-offs are, in principle, not to be

allowed, or as absence of parking spaces for persons with reduced mobility). Accessibility per se is never described as an important aspect of attractiveness—quite the contrary.

Patterns of inequality permeate the material and are found in all category groups. The absence of certain users risks reproducing inequalities that in practice also work against the positive values communicated in the vision. A risk is also that qualities such as accessibility for older persons and persons with disabilities will get lost in the building phase, when they are absent in planning materials. The absence of those who, in various ways, do not correspond to applicable norms may also contribute, in the long run, to a society with less acceptance of differences and human diversity.

The disabling gaps between policy and practice

In national policies there are several binding provisions that shall ensure equal living conditions. One example is the Planning and Building Act, which states that the purpose of its provisions is to promote 'equal and good social living conditions for...people in today's society and for future generations' (SFS 2010:900). In the Policy for Designed Living Environment (Government Offices of Sweden 2018), it is stated that it must contribute to a sustainable, equal, and less segregated society with carefully designed living environments. The requirements for accessibility in the Swedish Planning and Building Act include a broad definition of impairments, for whom accessibility requirements are intended.

The study shows a clear gap between the legal requirements and policies on the one hand and urban planning in practice on the other. The realisation and implementation of the UN CRPD (UN 2006) and the paradigm shift in disability policy (Degener 2016) has not yet been translated into practical action by planners and architects. This confirms the disconnection between theory and practice (Goodman-Deane et al. 2008; Ielegems, Herrensens & Vanrie 2015) and draws attention to the importance of accessibility as a prerequisite for participation (Lid 2016).

The disabling gap between policy and practice is affecting all users that do not conform with the prevailing norm. The narrow image of persons with disabilities and older persons can be looked upon as forms of ableism and ageism (Goodley 2014; Wolbring 2008). The creation of a city as a place where users are mainly young, mobile, and highly educated bicyclists will, when put into practice, be a society that disables its citizens by prioritising the 'able-bodied' community (Kitchin 1998). In this context, a wider understanding of impairments as a human condition could bring about change.

It is previously emphasized that planning theoreticians focus more on process and actors rather than on what is being planned and that there is a risk that values, such as equality and fairness, are neglected (Mukhtar-Landgren 2012). This study illustrates the notion that the attractiveness of a place can take precedence over its existing citizens, which is reflected most clearly in the absence of people who do not fit the given picture, as they do not correspond to values such as youth, health, education, and success.

The study results indicate that the material is not consistent with current policies, for example, with respect to the designed living environment (Government Offices of Sweden 2018) or current disability policies (Swedish Government 2016/17:88). There seems to be a strong need for new ways of thinking to include a diversity perspective in planning. Universal design, which is emphasized as a main principle and cornerstone of both national policies and the UN Convention on the Rights of Persons with Disabilities, could be such a tool.

Planning for human diversity

As normative ideals influence the design of the physical environment (Bricout & Gray 2006) it matters which image of the user is communicated in early stages of the planning process. Both human, ecologic, and economic consequences of not including a diversity perspective in planning can be far-reaching. Exclusion and a lack of participation can have negative health effects, and a lack of accessibility can lead to a need for compensatory initiatives in the form of special services. Could a society that is hiding human diversity by excluding some people be regarded as a complete and cohesive society?

From a user perspective, several critical phenomena in current urban design can be discussed. Housing and traffic solutions based on a sustainability perspective offer areas where there is an urgent need to test new planning tools. As has come to light in this study, the area of *sustainability* is itself an important planning lodestar and is also the area where normativity is strongest, and where large population groups that do not exhibit the expected characteristics or meet the assumptions are left out. The vision of a sustainable society demands a great deal in terms of new thought and innovation, not least in the area of planning. It should be possible to take both human diversity and concern for the environment and climate into account simultaneously.

To realise an inclusive society, fundamental principles such as equality and flexibility need to be addressed all along a project, from early planning to completion of a building or space. Universal design can be the 'missing tool' that can contribute to solutions in this context (Borowczyk 2018). The challenge to develop know-how in this field is of particular importance seen in the perspective of changed planning conditions and increased influence by private actors (Blücher & Graninger 2006; Holgersen & Baeten 2016; Loftman & Nevin 1996).

The application of universal design in planning and building would also enable a more nuanced picture of the users to emerge, with the focus shifting from requirements concerning the functional capacity of the users to requirements concerning the flexibility and usability of the design. We argue that new ways of thinking, to include a diversity perspective in planning, are needed. Making human diversity more visible in planning documents and images would send important signals to the entire planning and building process and create a richer and, at the same time, more realistic image regarding the expected users of the built environment.

Funding Information

This research was funded by VINNOVA, the Swedish Governmental Agency for Innovation Systems, grant number 2018-05232.

Competing Interests

The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results.

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How to cite this article: Müller, Lilian, Stina Ericsson, Daniel Wojahn, and Per-Olof Hedvall. (2021). Young, Mobile, and Highly Educated Cyclists: How Urban Planning and Policy Dis/able Users. *Scandinavian Journal of Disability Research* 23(1), pp. 124–135. DOI: <https://doi.org/10.16993/sjdr.731>

Submitted: 20 April 2020 **Accepted:** 28 March 2021 **Published:** 16 April 2021

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