# Research Proposal

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Abstract

Introduction

Most large cities are located near water, either inland like rivers, lakes or harbours, or on

the coast like salt water. Water is important for the city. It serves as a life source, a

communication channel, a motor for industry and the economy, for recreation and exercise,

for cultural and spiritual practices, and for community forming and belonging.

With urbanisation, water in cities became polluted or transformed by industries (Kampa

et al. 2016). Waterfronts became unattractive and unsafe to swim, thereby disrupting

the relationship people had with water and its surrounding environment. Starting in the

20th century, post-industrial European cities started considering waterfronts as strategic

opportunities to revitalise the city (del Pulgar 2021). In the last few decades, the importance

of water in the city has entered public consciousness due in part to climate concerns. Most

recently, the COVID-19 pandemic made people acutely aware of the benefits of urban blue-

green spaces (Kohsaka and Uchiyama 2021). Through local, national and international

political pressure, public demand and (neoliberal) urban renewal, governments have invested

significant resources in revitalising waterfronts into attractive natural places for people.

TODO: explain the problem

Literature review

The benefits of blue spaces

Blue spaces have undeniable positive effects in cities, which Gascon et al. (2017) summarise

as "stress reduction, increased physical activity, promotion of positive social contacts, in-

creased place attachment and the reduction of extreme temperatures" (Gascon et al. 2017).

Climate adaptation and mitigation In the context of climate change, blue carbon

ecosystems can naturally alleviate pollution, heat stress, flooding or drought, and increase

the climate resiliency of cities (Lin et al. 2020, Manteghi et al. 2015, O'Donnell et al. 2021).

This is because blue spaces have a surface temperature lower than green space, high evapo-

2

ration and thermal capacity which creates a cooling effect, and a spillover mechanism which extends the cooling effect up to 200 meters (Lin et al. 2020). However, the potential of blue spaces for climate mitigation is not well known relative to green spaces. As a result, less urban planning recommendations exist, not to mention that they are more difficult to provide and maintain (Manteghi et al. 2015, Völker et al. 2013).

Health and well-being The best known way in which blue space has a positive impact is on people's physical and psychological health. Being exposed to water makes people feel better, happier, and be more active. There is an extensive repertoire of quantitative studies demonstrating these effects on people's health and well-being (Gascon et al. 2017, Britton et al. 2020). Qualitative studies also show that exposure to water improves mental health, regardless of how people interact with it (Garrett et al. 2019, van den Bogerd et al. 2021). In deprived neighbourhoods in particular, people tend to have poorer mental health and lower life satisfaction compared to wealthier areas. Projects that increase access to high quality blue spaces in socio-economically disadvantaged neighbourhoods have the potential to greatly influence the well-being of their residents (van den Bogerd et al. 2021).

Connection and community Lastly, waterfronts give people with the opportunity to connect with each other and with nature. People develop a sense of place attached to water, and even polluted or degraded waterfronts can play a central role in the community, providing refuge, connection, entertainment, and even food (Toomey et al. 2021). Furthermore, blue space revitalisation projects can be an opportunity to create community bonds by engaging residents in the design and building process. During the "urban acupuncture" intervention conducted by BlueHealth in a deprived area of Plymouth, UK, residents who participated in the project reported a greater sense of well-being and life satisfaction due to feelings of community belonging and safety (van den Bogerd et al. 2021).

#### Social and environmental repercussions of urban renewal

Despite the undeniable benefits of urban blue spaces, interventions that transform waterfronts into high-quality public spaces can have harmful consequences on people and the environment. Transforming waterfronts can cause environmental damage and loss of biodiversity, damage human and nature relationships, displace people by way of gentrification, and reinforce social inequalities by excluding individuals and communities on the basis of socio-economic differences and historically racist or sexist practices. **Disrupting community** In stark contrast to the social bonds that can be fostered when residents are involved in revitalisation projects, when the local community's perceptions and values are not understood by planners, changes can disrupt human-to-human or human-to-water connections (Toomey et al. 2021). - reformulate

Neoliberal urban renewal In perverse cases, cities prioritise growth over well-being and community. With "glitzy green" (Anguelovski and Connolly 2021) renewal projects like the Amsterdam Noord waterfront, cities try to attract a new creative class rather than addressing public blue spaces as a common good and prioritising the concerns of existing residents (Wessells 2014, Anguelovski, Brand, et al. 2020, del Pulgar 2021). Such projects privilege the values of new groups over that of existing residents, who risk displacement. Those who can afford to live near nature will move in and price out the lower classes, who will be forced to move to neighbourhoods with worse access to attractive natural spaces.

City officials are exploiting the undeniable benefits of nature-based solutions to brand their cities as green and liveable<sup>1</sup>, and to promote greening as a win-win strategy where "no one is left behind by the trickle-down of benefits from green infrastructure" (Anguelovski and Connolly 2021). This is false, because trickle-down effects will not reach marginalised groups, who live far from or are pushed out of neighbourhoods with attractive natural spaces, who feel excluded from them due to (explicit or implicit) discrimination, or whose needs and preferences aren't represented in the space.

**Perpetuating inequalities** Thus, by ignoring the social consequences of urban renewal projects, cities are increasing inequalities and marginalising socio-economically disadvantaged groups. The disproportionate access to nature that white, upper class residents have is an environmental privilege which exists because they can afford to live in close proximity to nature.

- unequal access to blue spaces historically racist, sexist, etc. context
- ... Marginalised or stigmatised communities may find it hard or impossible to communicate their experience to the mainstream because they lack the words to articulate their reality. And vice-versa: white, heteronormative societies may not be capable of understanding the experience of 'others'. This of course does not mean that minority communities do not attach

<sup>&</sup>lt;sup>1</sup>For example, Madrid promoting the Madrid Río project on the official tourism website (EsMadrid 2022), or Oslo advertising its new urban waterfront promenade along which "you find yourself surrounded by some of Oslo's world-renowned architectural gems" (VisitOslo n.d.).

meaning to place, but that two or more groups with distinct value systems need a common language to communicate. To this end, Toomey et al. (2021) propose using language like "place-disruption" and "place-protection" to promote mutual understanding and avoid privileging the values of mainstream groups over those of marginalised communities.

... individuals and communities are inextricably linked to place, and disrupting place/not providing it threatens their existence / belonging

#### Achieving equity and justice in urban blue spaces

These nefarious consequences of transforming waterfronts into attractive public spaces are a threat to

Thus, how do we make sure that everyone in the city benefits equally from high quality blue spaces?

If cities are to reduce inequalities associated with access to natural spaces, the social and environmental trade-offs must be understood, and greening (or blueing) projects must be accompanied by "bold, progressive social policies" (Anguelovski and Connolly 2021). Marginalised groups need to be actively including in planning, and natural spaces need to be designed specifically for vulnerable communities rather than the privileged few who already have the best access to natural environments.

To understand injustices suffered by those who do not fit in to the white, heteronormative, upper-class cateogy, Anguelovski et al. (2020) propose two goals to advance the concept of justice: 1, uncovering the material and immaterial power, and 2, advancing new principles for equity in urban greening. - TODO explain these concepts?

- Concluding sentence to literature review

### Problem statement and research question

Public space is a highly valued commodity in the city, and as such, reconverting blue spaces is a great way to take advantage of unused areas. As previously elaborated, it also has the potential to provide many benefits for people and the environment. Therefore, providing equal access to public, natural blue spaces in the city is a way to combat social inequalities.

In reality, although there is no direct economic barrier to public spaces since they do not have an entrance fee, public blue spaces are not fairly accessible to everyone. There are both physical and psychological barriers which can prevent individuals or whole communities from enjoying urban waterfronts.

With regards to physical accessibility, those who live or work in the vicinity of a blue space are more likely to visit it. The availability of public transport, bicycle infrastructure, the quality of the roads and footpaths around and in the space, also influence who visits.

Psychological barriers refer to how welcomed and safe people feel. Blue spaces, and public spaces in general, can be more or less welcoming to certain people. Gender, age, ethnicity, income, or preferences in aesthetics or activities, amongst other factors, all influence who feels comfortable, and who doesn't. Discriminatory practices, such as the pressure to consume in order to fit in, excludes people.

Therefore, even if a blue space is free and open to the public, this does not mean that people use and benefit from them fairly. Understanding this phenomenon is important because public spaces are places of community, identity and attachment, and everyone in the city should have equal rights to them. Ignoring the experience of individuals and communities increases social inequalities, discrimination, and displacement.

Given the above, my research aims to answer the following question: to what extent are the public, natural swimming spaces in Copenhagen (un)fairly accessible, and who benefits from them?

### Research design

#### Guiding frameworks

To answer my research question, I will use the following sub-questions:

- 1. Who are the users of the space, how do they perceive it and how do they feel in it?
- 2. What are the factors that make the space feel accessible to them?
- 3. How accessible is the space to a diversity of people?
- 4. How fairly accessible are the blue spaces, and why?

My research will be explanatory, because I aim to explain why the phenomenon of unequal access to blue space takes place (or not) based on principles of recognition justice. I will take an inductive approach, whereby my theory will emerge from data I will collect on people's experiences, perceptions and preferences of a blue space. This data is both subjective and spatial. My approach to collecting the data will be to visit the blue space(s) and interview users, for which I will need a set of interview questions as well as a way to record spatial data like their home, or the blue/green spaces they frequent. These requirements lend themselves well to public participatory GIS (PPGIS), a map-based survey method linking qualitative and GIS data. Using PPGIS to study people's relationship to green and blue space is recommended as research method which "might uncover local spatial knowledge and perceptions" (Anguelovski et al. 2020). It has been used to study people's interactions with and the distribution of blue spaces in Helsinki metropolitan area (Raymond et al. 2016), and also by BlueHealth to "uncover spatial aspects of people's relationships with blue spaces" (BlueHealth n.d.).

#### Case study

What type of case study? what unit of analysis? Every blue space, neighbour-hood and city will have a different set of conditions (social, political, economic, cultural, environmental, etc.) which explain who uses the space, how they feel in it, and why they use it. In order to uncover these conditions, the unit of analysis should be scoped to a specific location on the water where people linger and have the opportunity to swim; this

spot should have been rehabilitated by the city, and be public; and, it would be particularly interesting to study two rehabilitated blue spaces within one city, in order to compare the social consequences of investments in different neighbourhoods.

Specific context of copenhagen, similar to hongkong Given these considerations, Copenhagen makes for an interesting case for the following four reasons. First, Copenhagen is located on the Kattegat strait and has 92 km of coastline (Comertler 2017), therefore water features prominently in the urban landscape. Second, due to the amount of shoreline in Copenhagen and the city trying to position itself as a world leader in sustainability, there have been many blue space rehabilitation projects since 2002. Today there are four harbour baths (Island Brygge, Fisketorvet, Sandkaj and Sluseholmen) and various urban beaches (Amager Strandpark, Svanemølle) (VisitCopen- hagen n.d.). Third, Copenhagen today is experiencing an increase in poverty and ethnic segregation (Moller and Larsen 2015), as well as a growing racist discourse in the media and politics. For example, through the classification of some neighbourhoods as 'ghettos' (Simonsen 2008). This evolving socioeconomic landscape and its surrounding discourse make it important to understand who feels included in blue spaces, and might not. Finally, Copenhagen's reputation as "the most liveable city" (VisitDenmark 2021), due in part to the swimming spots in the harbour, begs the question - for whom is the city liveable?

#### TODO:decide on specific blue spaces in Copenhagen

Ultimately, unequal access to blue space is an environmental injustice and this framework will lead my research. Environmental justice is a multi-faceted concept which brings together social and environmental concerns. Amongst other things, it advocates for the equitable 1Note: I still need to decide which which specific harbour baths in Copenhagen I will study 2 access to environmental benefits. The dimension of justice that I will focus on is recognition. Recognition justice deals with people and groups' perceptions, values and preferences which may influence the ways in which they interact, or not, with a blue space (Anguelovski et al. 2020).

#### Theoretical framework

Environmental justice Environmental justice (EJ) provides a lens through which to understand these inequalities. By bringing together social and environmental concerns, the environmental justice paradigm advocates for the equal access to the benefits offered by

natural spaces; and, in turn, sharing environmental burdens. EJ is traditionally broken down into three dimensions: distributional justice, procedural justice, and recognition justice (todo:cite schlosberg).

Distributional justice focuses on where blue spaces are situated in the city and whether they address social, economic, racial or ethnic inequalities by striving to "avoid displacement and new negative green, ecological, climate and health effects" (Anguelovski, Brand, et al. 2020).

Procedural justice deals with questions of discrimination in public participation and decision making situations, even if ideal participation doesn't prevent spaces from being captured by gentrifiers<sup>2</sup> (Anguelovski, Brand, et al. 2020).

Finally, recognition justice addresses individuals' and communities' perceptions, values and preferences which may influence how they interact, or not, with public space (Anguelovski, Brand, et al. 2020). Marginalised or stigmatised communities may find it hard or impossible to communicate their experience to the mainstream because they lack the words to articulate their reality. And vice-versa: white, heteronormative societies may not be capable of understanding the experience of 'others'. This of course does not mean that minority communities do not attach meaning to place, but that two or more groups with distinct value systems need a common language to communicate. To this end, Toomey et al. (2021) propose using language like "place-disruption" and "place-protection" to promote mutual understanding and avoid privileging the values of mainstream groups over those of marginalised communities.

**Recognition** Recognising the experience of those who do not fit into the 'norm' also means acknowledging that some practices take place in the private and not public sphere, because of historical racial, sexist, ethnic discrimination. For example, women who disproportionally carry out domestic and care work have a different daily pattern which does not match that of the average 9-5 worker, and the spaces and mobility options should be adapted for them to reach blue spaces with ease. Or, they may feel more vulnerable and less safe in public, and prefer private spaces (Wessells 2014). How can blue spaces be inclusive of a diversity of people, carrying out a diversity of activities at all times of the day, week, or year?

<sup>&</sup>lt;sup>2</sup>urban community gardens

#### Conclusion

TODO

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