



NORDHAVN

THE VIBRANT CITY?

Theories of Urban Design 2024

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INTRODUCTION

In Copenhagen – Denmark's capital city which is recognised globally for its human-centred, sustainable approach to urban design, an opportunity has been presented to undertake a major transformation of an industrial-era harbourside port to a vibrant new city district. Nordhavn is the largest ongoing urban development project in Scandinavia (State of Green, n.d.), promising to provide housing for 40,000 residents and workplaces for a further 40,000 people over the next 40 years (Copenhagen City & Port Development, & COBE, 2009). The development is taking place on a section of reclaimed land to the northeast of Copenhagen city centre (figure 1), built out into Øresund to facilitate easier access for trade during the industrial revolution. Throughout the first half of the 20th century, the land functioned as a vibrant port, but a national shift to a post-industrial economy prompted the need to identify a land use that could respond to the current and future challenges facing Copenhagen.

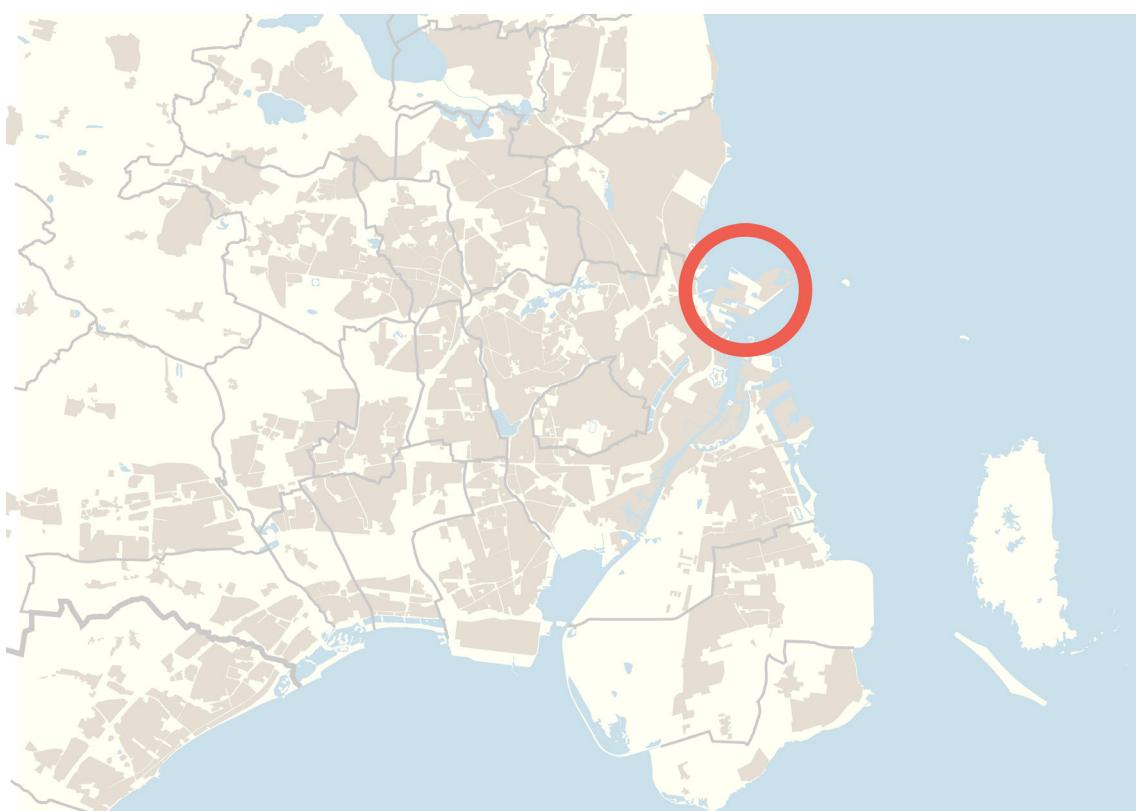


Fig 1: Location of Nordhavn in Copenhagen.

After years of discussion and debate, the strategic vision for Nordhavn to become the 'sustainable city of the future' was finalised. This plan has been built on six objectives, shown in figure 2. One core part of the strategy aims to achieve vibrancy in Nordhavn by creating a city that 'should vibrate with life as a versatile urban area with a multitude of activities and a wide range of shops, cultural facilities and sports facilities.' It emphasises the need for inclusivity. 'The urban spaces, the natural environment and not least the water should invite experiences, enthusiasm and activity for everyone.' (Copenhagen City & Port Development, & COBE, 2009).

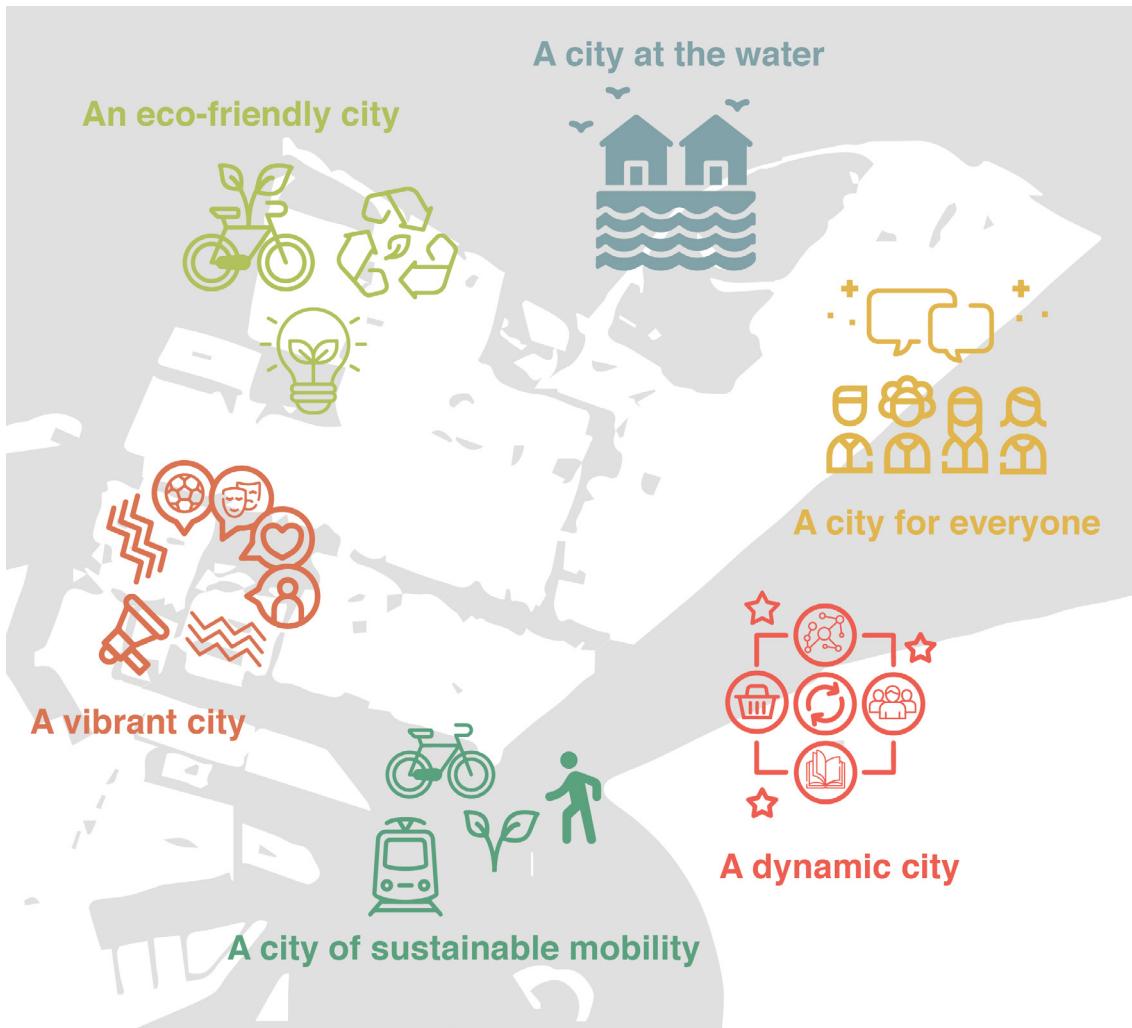


Fig 2: Six objectives stated in the Nordhavn: Urban development strategy (Copenhagen City & Port Development, & COBE, 2009).

While the idea of vibrancy is just one of Nordhavn's strategic objectives, its importance cannot be understated. Creating spaces where life naturally flourishes is essential to sustainable urban development. A vibrant city can foster positive social interactions, support local economies, and contribute to environmental sustainability. This essay will explore how the ideas in the strategy document have been executed to answer the question:

Does the existing development in Nordhavn live up to the strategy documents' goal of becoming a vibrant city?

APPROACH AND METHODS

Inner Nordhavn, also known as Århusgadekvarteret, is designed as the entrance to Nordhavn (figure 3). It has the important role of setting the tone for the entire district, and acts as a spine that connects Nordhavns' residents and visitors with each other. It showcases how life could be when the entire development is complete. Intended to be an active, sustainable, compact, contrasting district near the waterfront (COBE et al., 2012), it is the ideal location to assess whether the desired level of vibrancy described in the strategy plan has been achieved in real life.

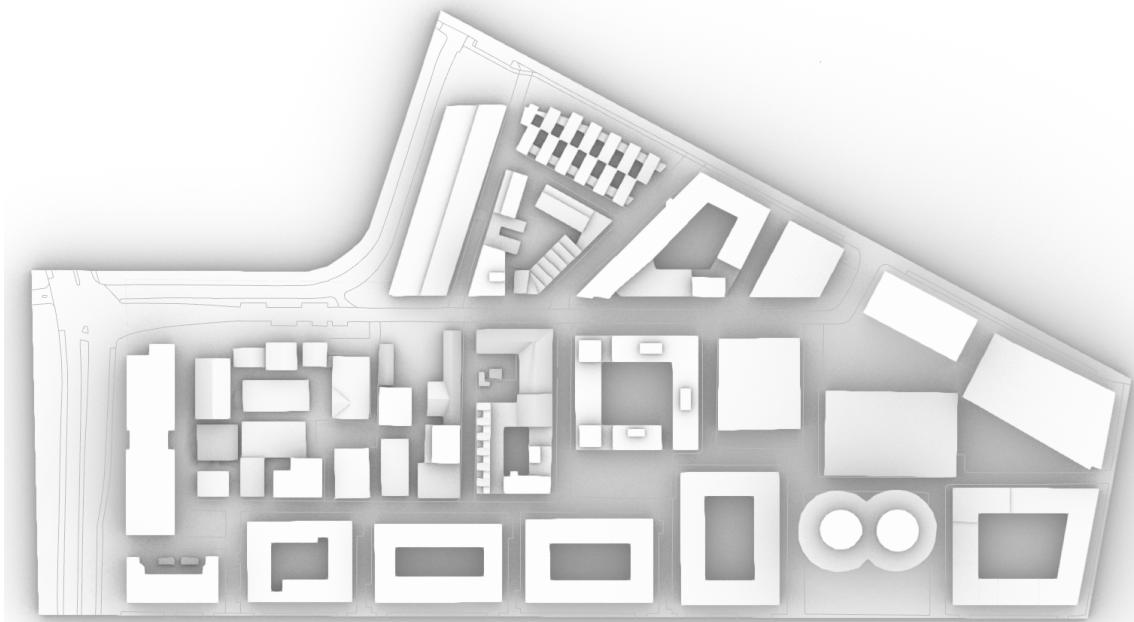


Fig 3. Map of Århusgadekvarteret

Århusgadekvarteret is home to major anchor projects designed to give Nordhavn a unique skyline and visual identity (Portland Towers, Konditaget Lüders, The Silo, etc.), but the way the district is experienced at ground level is highly influential over whether the public life can be considered vibrant. Three locations were chosen within Århusgadekvarteret, which are shown in figure 4. Århusgade, the Red City square, and Hamborg Plads will be critiqued from the theoretical positions of authors discussing urban design in order to asses the degree to which real development has matched the strategic goals for Nordhavn.

PUBLIC SPACE ASSESSMENT

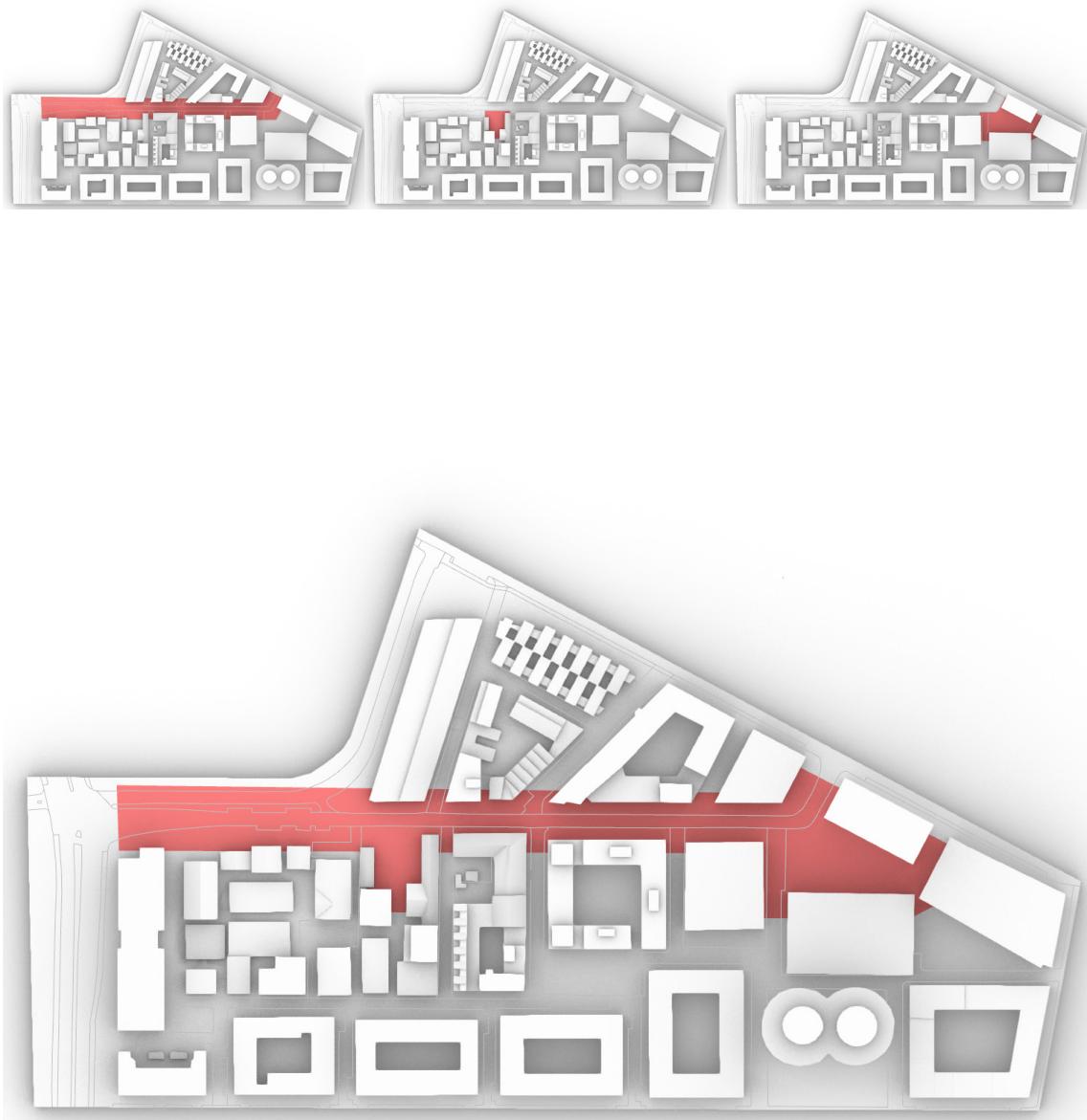


Fig 4. Above from left to right: Århusgade, Red City square, Hamborg Plads. Below: The whole study area

ÅRHUSGADE



STRUCTURE & DESIGN

Århusgade is the main thoroughfare in Århusgadekvarteret. It is a mixed-use street accessible by foot, bicycle, and private vehicle. Its spatial design has been informed by the concepts for public space developed by Danish urban planner, Jan Gehl. Gehl (2010) values the human experience of urban spaces and views a successful urban environment as one that allows for complex and diverse interactions between people. He also criticises the ‘top-down’ approach to planning, arguing that although towering buildings and vast open spaces can look appealing from above, humans tend to feel uncomfortable at the ground-level in these environments.

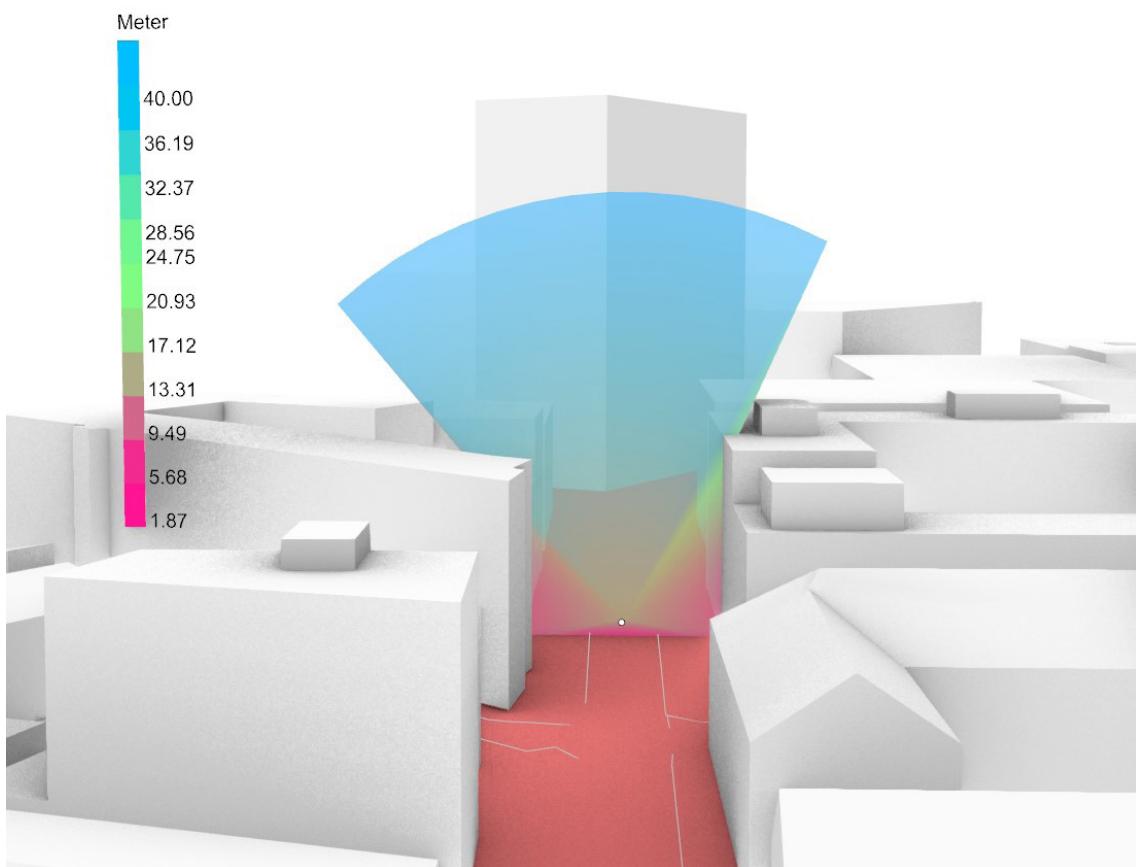


Fig 5. Vertical view rose analysis of street section. This shows the scale of the street and how the lower buildings improve the human to sky relationship. Made using Ladybug (Ladybug Tools, n. d.).

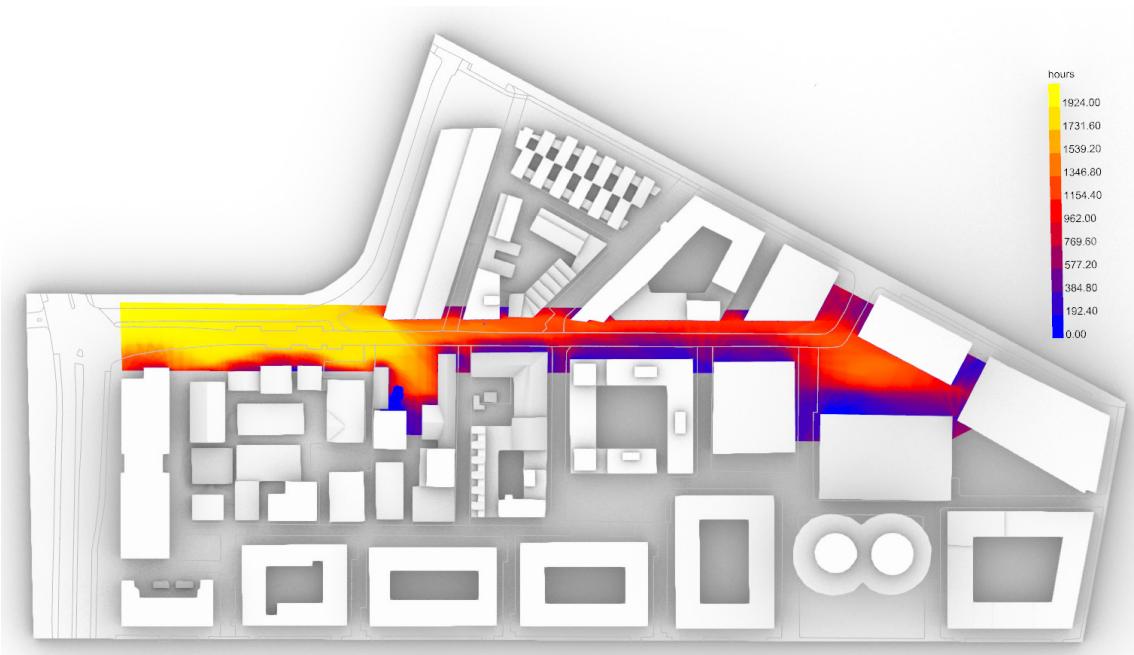


Fig. 6. Sun hour analysis based on dates from April to July. Made using Ladybug (Ladybug Tools, n. d.).

Along Århusgade, most building heights do not exceed six storeys, emphasising the importance of the human-scale and allowing natural light to reach the street-level (figure 5, 6). Wide footpaths (figure 7) mean the movement of pedestrians is prioritised over private vehicles, and there is space for people to stop, wait, or make conversation without disturbing the flow of pedestrian movement. Street-facing balconies manifest a passive presence of eyes on the activity below, promoting a sense of safety. The design of Århusgade helps to facilitate a vibrant environment by focusing on the comfort of its users.



Fig 7. Width of footpaths along Århusgade

A BALANCE OF USERS

Like Gehl, Carmona (2019) emphasises the importance of designing for active uses of a space to facilitate human interaction. Carmona is motivated by finding an ideal balance between users of the space and ensuring that this is protected as the space matures. As the spine of Århusgadekvarteret, avoiding congestion and confusion on the roadways is vital to ensure an enjoyable experience for all street users. However, the removal of the common Copenhagen bike lane found on many other streets in the city seems to spark some friction between private vehicles and cyclists (figure 8). By keeping drivers more alert and cautious, the design aims to reduce speeds, but it also places additional responsibility on all users to navigate the space attentively. Installing subtle cues like signs or road markings could help all kinds of traffic move in a harmonious manner.

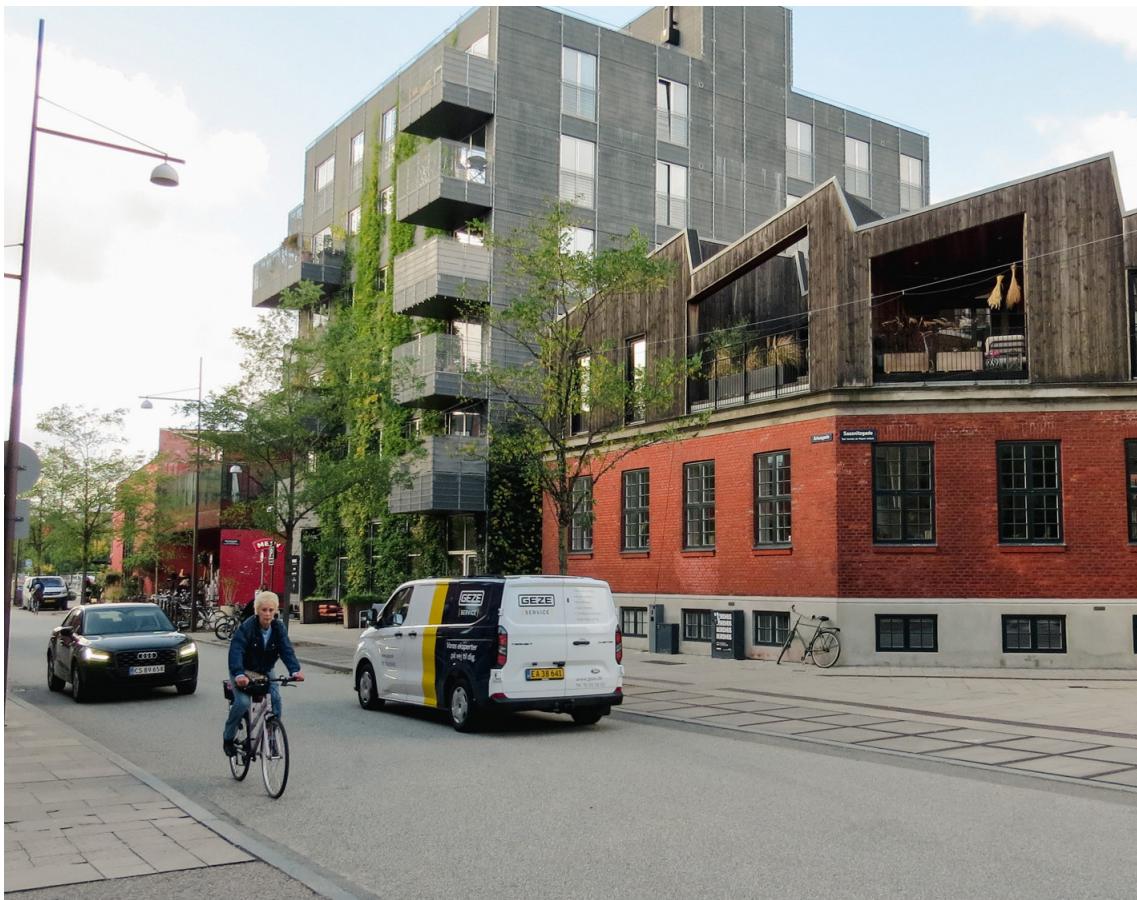


Fig 8. Cars and cyclists mixing on Århusgade

The balance of users in Århusgade is not only represented in the street itself, but it has also been demonstrated in the application of mixed-use urbanism. Ground-level spaces are accessible to pedestrians, offering a variety of shops, restaurants, and other amenities, while housing and office spaces occupy the floors above (figure 9). A rigid representation of the principles of new urbanism discussed by Kelbaugh (1996). It advocates for mixed-use development to cultivate vibrant, sustainable urban environments. However, Kelbaugh also states that an objective of new urbanism is ‘to equitably mix people of varied income, ethnicity, race and age’. While the architecture and layout support the structural foundation of mixed-

use development, the social dimension is essential to avoid creating spaces that cater solely to higher-income groups and instead foster a truly integrated urban community.

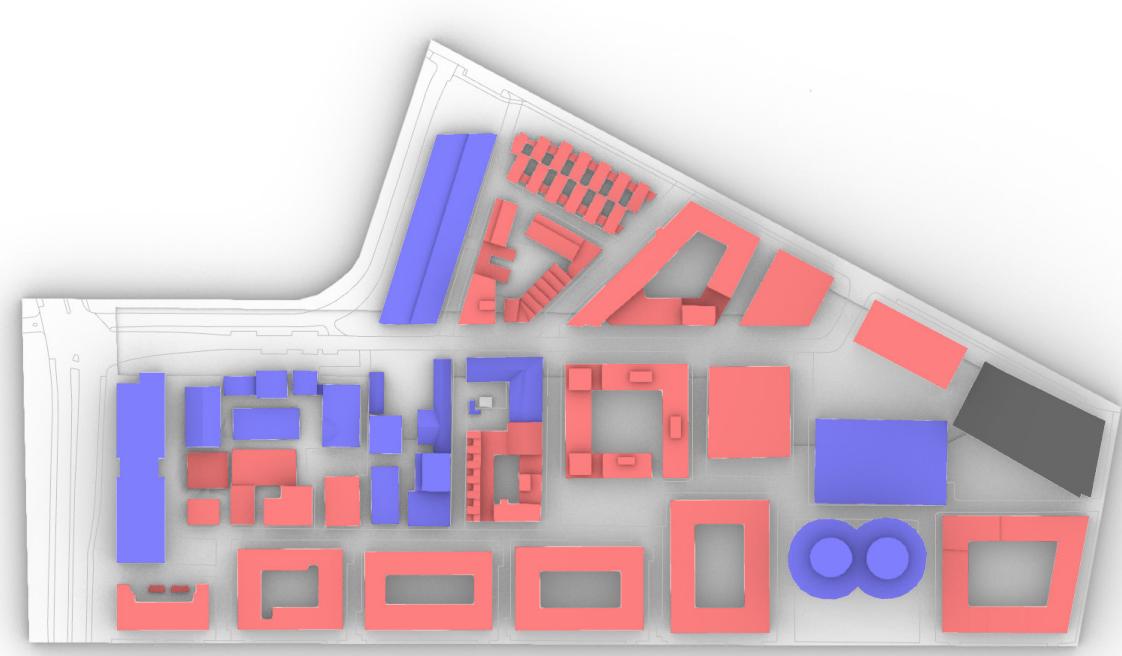


Fig. 9. Map of building functions based on the local plan of Nordhavn (By & Havn. n.d.). Blue is commercial, red is residential and black is a parking area. Functions do differ in reality as multiple buildings are mixed-use.

PLACE & PLACELESSNESS

Sense of place is a key factor in fostering a vibrant atmosphere along Århusgade. Relph (2016) claims that ‘the identity of a place is both different from, and similarities with other equivalent spaces.’. Koolhaas (1994) also suggests that in an increasingly globalised world, cities are becoming more and more like each other. To balance uniqueness with a comfortable familiarity is a challenge, but by utilising its status as a young industrial landscape (Heesche, 2022), Århusgade has transformed in a way that attempts to hold on to aspects of the past while crafting a relatively unique identity for itself. This transformation is especially visible in the adaptive re-use of old harbour buildings and the use of materials that respond to these buildings in new construction (figure 10).



Fig. 10. Frikvarteret (left), an old harbour building that has been adapted for residential use. The new neighbouring buildings have drawn on the materiality of the old in their design.

Despite these efforts, there are some areas where Århusgade gravitates towards a sense of placelessness. The strategy highlights the blue network of canals and the connection to water as a key objective for achieving a vibrant city (figure 11), but the street fails to take full advantage of its proximity to the harbour. Although Øresund is approximately 150 m away from the street, when it's not visible it is easy to forget that Århusgadekvarteret is a city built on water. Creative ways to integrate water into the inner part of the district through nature-based solutions and water sensitive urban design could have helped to illustrate this relationship.

The types of shops along the main street also contribute to this sense of placelessness, as the majority are franchises with branches across the rest of the city. A lack of affordable retail space due to high rents limits the presence of independent businesses that could further contribute to a distinct place identity. These chain stores potentially limit Århusgades' ability to develop a unique food culture, which is a strong strategy to re-embed a sense of vibrancy and place to an urban environment (Relph, 2016).



Fig. 11. ‘The city on the water’. COBE, the architects behind the masterplan of Nordhavn state that the planning of blue and green city qualities precedes the design of buildings. Other parts of the development celebrate the water (Sandkaj and the canals), however this relationship is lost along Århusgade. (images from Cobe, (n.d.))



RED CITY SQUARE

THE PUBLIC DOMAIN

Given its positioning adjacent to the public thoroughfare of Århusgade, the Red City Square is guaranteed to foster some kind of interaction between its visitors. But are these interactions the kind that could help to create a more vibrant Nordhavn? Hajer and Reijndorp (2002) discuss the importance of the public domain when analysing the essence of an urban space. The public domain refers to a space – physical or virtual – where people from different backgrounds or dissimilar interests can achieve a shared positive experience. The public domain should not be confused with public space, which simply defines an area accessible to everyone, the opposite of private.

At first glance, it appears that the square itself has not been designed to exclude certain users. It includes seating and is demarcated as a free public space (figure 12) (Carmona, 2018). However, the surrounding higher-end stores and businesses create an environment that is likely to draw in a select group who can afford to shop or dine there, not entirely representative of the public. The interactions that occur in this space are unlikely to be between fundamentally different social groups, and therefore the emergence of progressive thought might be scarce. It then must be recognised that the red city square is not a public domain. Instead, it fosters primarily passive and non-confrontational interactions, generating a calm but socially limited environment.

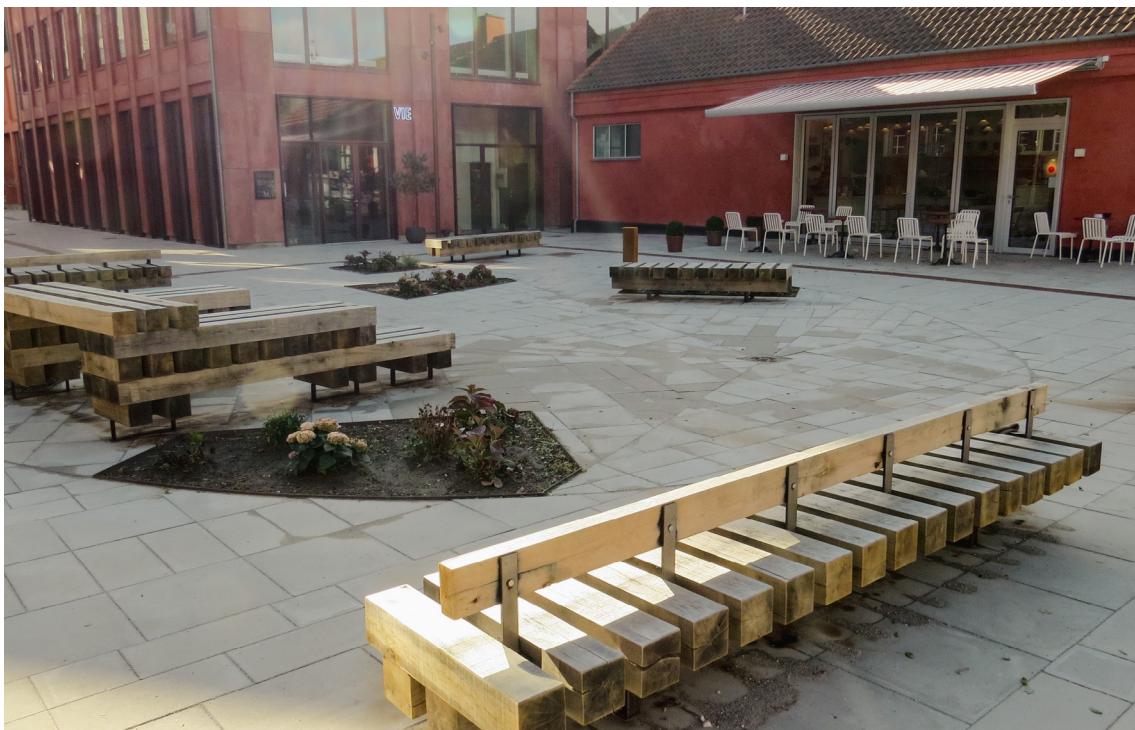


Fig. 12. The public space in the Red City Square.

PLACE MEMORY

In the Red City Square, the reuse of old harbour buildings invokes a sense of place memory, inviting its visitors to connect with the area's industrial past (figure 13). Hayden (1999) defines place memory as the ability of urban landscapes to spark social memories, connecting individuals to a space and each other through their shared memories. Architectural preservation is the primary method used to foster this sense of place memory in Red City Square, with historic buildings offering visitors a connection to the past. Hayden notes that when people experience 'their own social history preserved in the public landscapes of their own neighbourhoods and cities, their connection to the past might be very different.'



Fig. 13. The Free Port of Copenhagen (now Nordhavn) in 1904. The area was a hub for vibrant industrial activity in the early 1900's (Cobe, n.d.).

This preservation of historic structures generates a feeling of nostalgic comfort, fostering vibrancy in the public space by making it meaningful for both locals, visitors and possibly ex-employees from when the harbour was operational. According to Hayden, "places can often represent shared pasts to outsiders who might be interested in knowing about them in the present." By conserving these structures, the Red City Square respects its industrial heritage and invites newcomers to share in the place's historical narrative.

While Red City Square's design respects the area's historical use, it does not freeze it in time; instead, it allows for new functions and identities to emerge (figure 14). This balance honours the location's history while adapting to contemporary needs, and it enables the square to serve both as a public remembrance space and as a functioning urban area. Hayden suggests that this balance could be furthered, proposing that if urban spaces could incorporate the "social portraits of the communities they [the past users] created," then these projects could become „even more public and even more permanent.“ Using this approach, the Red City Square could evolve while still resonating with its past as a working-class harbour environment, enriching its vibrancy by creating a dynamic, layered experience of place memory.



Fig. 14. Converted harbour buildings currently used for high-end retail and dining in the Red City Square.

PRIVILEGE OF PUBLIC SPACE

In and around this square, businesses such as Meny take an active role in shaping the public space. Decorations in the shared area surrounding the storefront create a more vibrant atmosphere for the people using the space, regardless of whether they make a purchase (figure 15). It is entirely likely that these decisions are made due to their commercial interests, however it shows that businesses are aware of their responsibility to maintain an appealing but accessible public space. Despite its current positive impact on the vibrancy of the Red City Square, it is a practice that should be monitored into the future.



Fig. 15. Decoration outside of Meny, opposite to the Red City Square. The diverse plant life helps to bring vibrancy to the public space, even though it is for sale.

Carmona states that ‘particular problems occur when owners and managers seek to use the privilege of ownership to exclude key groups, restrict access or impose codes of behaviour that go beyond societal norms.’ This highlights the importance of maintaining clear rights and responsibilities for owners and managers of public space.

Without adhering to these ideas, ‘public’ space can become overly privatised, leading to restrictions on what is acceptable in the public sphere. Carmona suggests that public space users have the right to roam freely, demonstrate peacefully, and perform. In its current state, the Red City Square may already passively restrict some of these behaviours. Though the surveillance and care of the public space by these private businesses may make the area more comfortable for some, it could simultaneously deter others, as active public displays are likely to be discouraged. Creating spaces where not everyone feels welcome inherently limits the level of vibrancy that can be achieved in the public sphere.



HAMBORG PLADS

AN EXPERIENTIAL PUBLIC PLAZA

Hamburg Plads is an irregular shaped public square at the end of Århusgade (figure 4). A natural design feature fills its centre, and shops, businesses, and restaurants fill the edge spaces at the ground floor (figure 16). The unorthodox shape of Hamburg Plads shows the promising potential of the site. Camillo Sitte (1898) suggests that 'Without exception it is the irregular sites that present the most interesting and generally superior possibilities.' This implies that designers were presented with the opportunity to create an exciting public space, yet it seems that it was forgotten about. Instead of purposefully creating a plaza based on Sitte's principles, the plaza seems to have been treated as residue, or as a forgotten space that was left over after the development of the buildings surrounding it were complete. Despite the promise of the plaza, its full potential was not realised.



Fig. 16. Above: Bird's eye view of Hamburg Plads showing its irregular shape and jagged natural centrepiece. Below: Hamburg Plads at eye-level, giving a sense of comfort and human-scale provided by the building edges.

However, some effort has been made to improve the experience for users of Hamborg Plads. Gehl (2010) discusses how people feel comfortable at the edge of spaces. The jagged shape of the central natural feature provides pockets of space which feel more secluded, allowing for some privacy in an otherwise busy place (figure 16). The tight grouping of buildings surrounding the plaza also makes for shorter distances between people in the space, increasing the likelihood and complexity of social interactions (figure 17). This helps to foster vibrancy by increasing the types of activity that can occur in Hamborg Plads.

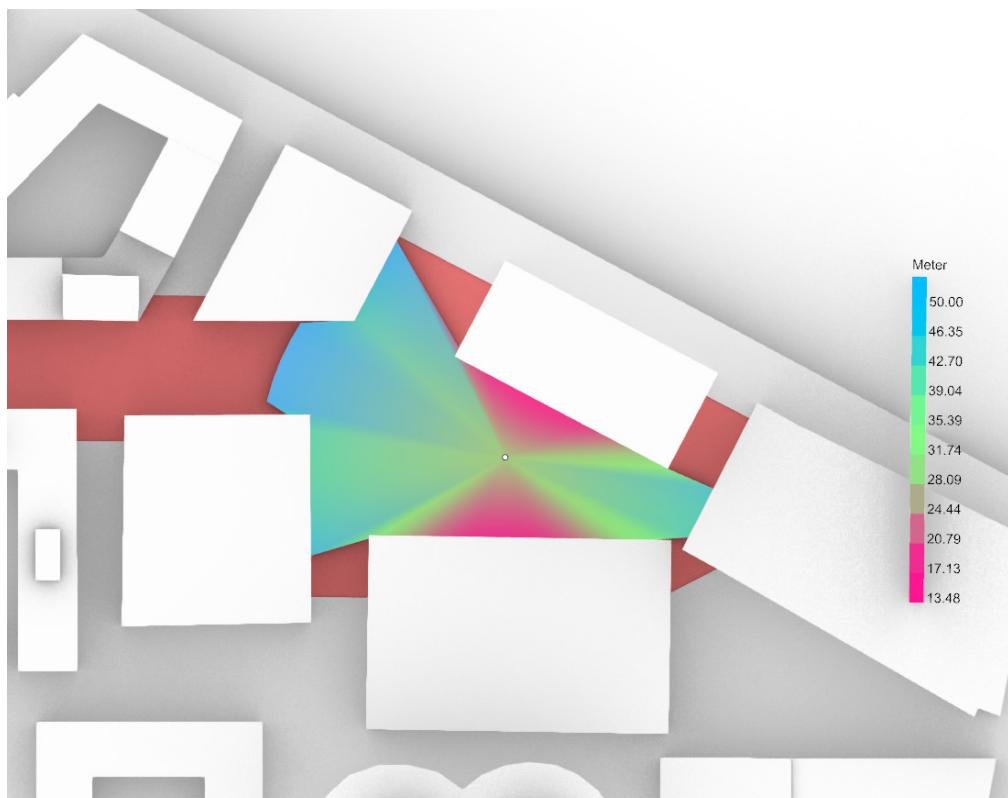


Fig 17. The size and shape of Hamborg Plads, makes for short distances, fostering social interactions. The viewrose analysis is made with Ladybug (Ladybug Tools, n. d.).

ACCESS, USE, AND PRIVATISATION

Hamborg Plads and its surroundings are physically accessible to all; however, nonmaterial barriers remain. Low and Iveson (2016) state that “differences of wealth are a product of processes that systematically distribute resources and opportunities unequally, such that class inequalities take hold,” and argue that such inequalities are unjust. This could explain why some people might feel out of place here, as they may be unable to afford to spend money in the shops and cafés in the neighbourhood. Even when prices aren’t exceptionally high, the illusion of luxury projected by these establishments can be off-putting. This perception impacts the space’s vibrancy, as fewer people feel comfortable expressing themselves within it, and the retail aesthetics appear the same everywhere.

The shops’ muted colours and ‘timeless’ designs create a sense of uniformity, with only signage distinguishing one shop from another—a stark contrast to truly vibrant spaces that invite diverse expressions and uses (figure 18). Low

and Iveson (2016) note that ‘one of the reasons public spaces such as parks and libraries are often highly valued is that they tend to enshrine the principle of ‘access for all’ that takes no account of individual wealth and means.’ This inclusivity is crucial, especially as profit-seeking developers are increasingly motivated to shape urban landscapes (Low & Iveson 2016). Mandanipour (2019) suggests that public space which is cared for can increase demand for residential space, resulting in higher values for such properties.



Fig. 18. A commercial space near Hamborg Plads. Minimal branding and high-end products are characteristic of most stores in Nordhavn.

CONCLUSION

Returning to the question whether Nordhavn has successfully been able to follow their strategy upon becoming a vibrant city, it appears that the strategy has led to the development of physical conditions conducive to vibrancy considering the three targeted areas. The physical boundaries of the public space are neither too large nor small, which accommodates social interaction and creates a key relationship with the natural environment. The architecture has also taken the industrial history of Nordhavn into consideration although other steps could have been taken to relate to Nordhavn's surrounding blue environment.

It appears that factors beyond the physical are heavily influencing the vibrant environment. The governance of the public space in Århusgadekarteret is mostly dominated by businesses, who play a significant role in caring for the space. It is also driven by those who choose to live there. Higher property prices mean that only a certain few can afford the lifestyle offered in Nordhavn, which creates a superficial environment and an atmosphere of exclusivity where a truly diverse and vibrant public domain cannot be established.

Despite the fact that construction in Århusgadekvarteret is nearing completion, A matured social domain still is yet to develop. As Nordhavn becomes more established as a district of Copenhagen, a unique identity is likely to emerge in the future, helping to create a vibrant city.

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