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**Exploring the development of  
public green spaces as  
welfare landscapes:  
Three case studies in Oslo from  
the 1960s-1990s-2020s**

**Mahsa Sardarabadi**  
Master of Landscape Architecture for global sustainability

## Abstract

The transformation of Oslo's welfare landscape, influenced by changes in society, politics, economics, and the environment, closely aligns with how designers and planners adjust to evolving urban demands. This study investigates the significance of public green spaces as welfare landscapes in Oslo during three distinct eras in the post-war period: the 1960s, 1990s, and 2020s. It reveals their diverse impacts on individual and social well-being. Public green spaces play a crucial role in improving the overall quality of life for residents. They provide access to nature, promote physical activity and mental well-being, facilitate social connections, and enrich cultural experiences.

Analyzing Hydroparken (1960s), Vaterlandsparken (1990s), and Jordal Park (2020s) from different eras demonstrates distinct approaches to address various ecological, social, and cultural concerns. These strategies helped to improve health and democracy through different aspects of public green spaces as welfare landscapes. The findings provide valuable insights for shaping the future development of public green spaces as an essential part of Oslo's welfare landscape.

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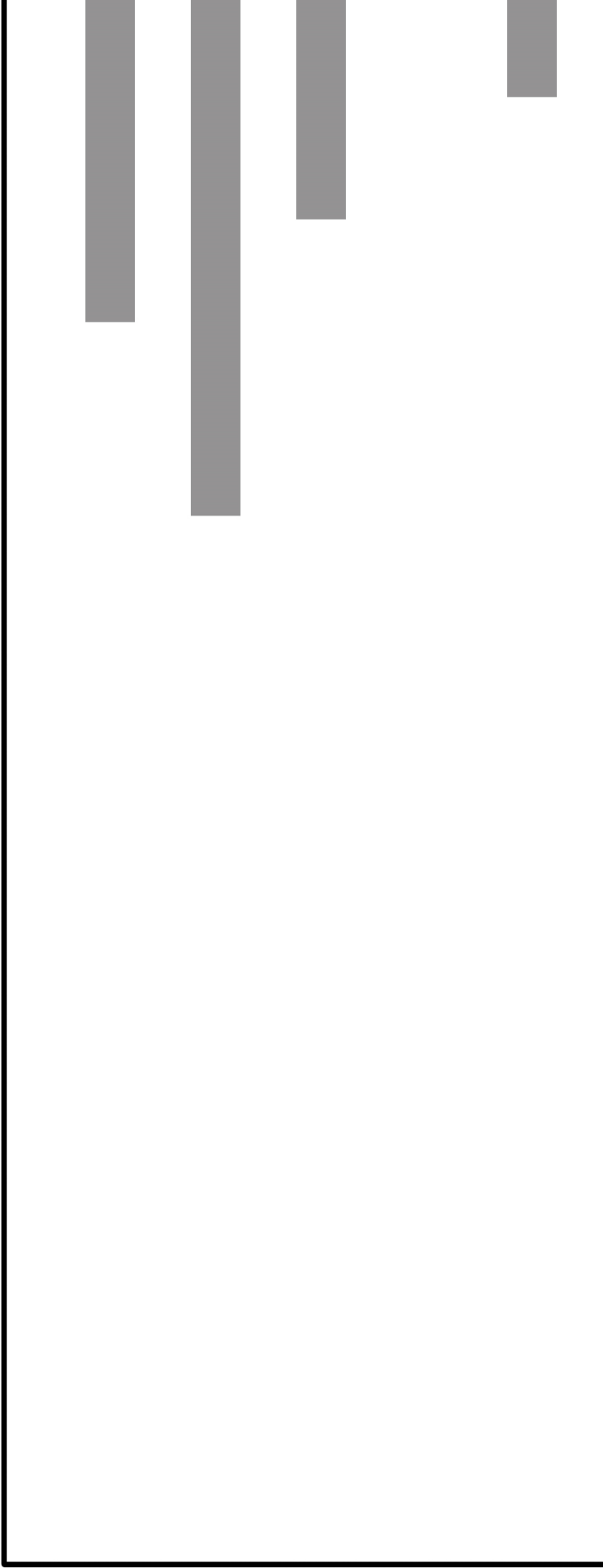
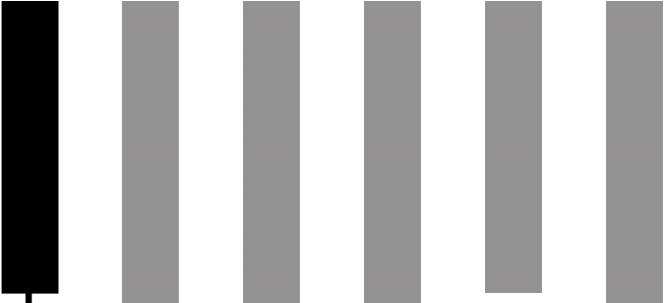
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**Introduction**

## 1. Introduction

The development of Oslo's 'welfare landscape' reflects the changing needs of its residents and the strategies of planners and designers in the socio-economic context of the country. The capital of Norway enjoys a "social democratic welfare model that characterizes the Nordic countries" (Lotz et al., 2017, p.46). Despite experiencing notable transformation since the post-World War II era, Oslo's welfare landscape has been understudied compared to other Scandinavian countries, Sweden and Denmark. Several factors including political and economic conditions, environmental concerns, and social changes have influenced the development of welfare landscape in this city.

The welfare landscape is a broad subject and can be studied from various angles; however, this study focuses on public green spaces and their impact on both individual and public well-being. That is, it explores the development in their concept, design, and role in shaping the Oslo's welfare landscape through post-war history.

The initial aim of this study is to explore the ways in which public green spaces contribute to welfare landscape in Oslo and to find their evolution over the past 60 years, including three distinct periods. Three case studies have been selected to compare their design concepts, which reflect the conditions and views of each era to the welfare landscape. Three public parks in the inner city of Oslo have been selected as case studies: Hydroparken from the 1960s, Vaterlandsparken from the 1990s, and Jordal Park from the 2020s. Through the analysis of these case studies, this thesis aims to answer the following questions:

- **What are the key aspects of the welfare landscape in public green spaces?**
- **How are these aspects of the welfare landscape manifested in each case study, reflecting the character of its respective era?**

This thesis concentrates on 'public green space' as a post-war welfare landscape in Oslo, Norway, by looking at its historical development from the perspective of design. Through the analysis of findings and comparing case studies of different periods, the concepts reflecting the values and aspects of the welfare landscape in their designing period have been determined. Moreover, it offers a comprehensive understanding of the relationship between public green spaces and individual and societal well-being in Oslo's urban context, tracing their evolution through post-war era.

To achieve these goals, multiple research methods have been used. Firstly, an extensive review of academic literature related to the welfare landscape helped to

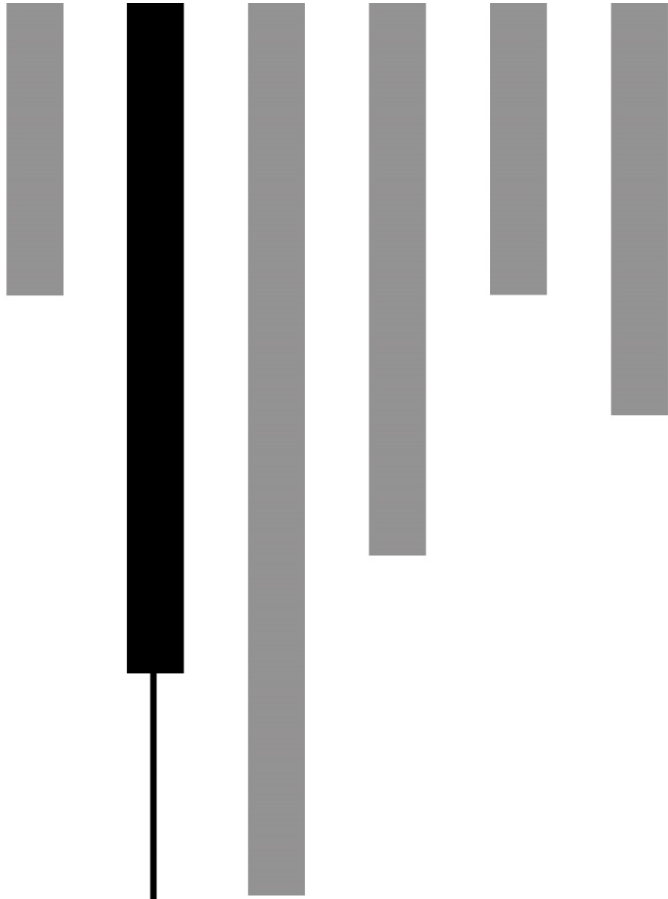


provide a theoretical framework. Secondly, research through historical reviews facilitated understanding of Oslo's welfare landscape development.

Information about the case studies was collected in various methods to gain a comprehensive understanding of development, design, and their impacts on Oslo's welfare landscape. As most of the documents are in Norwegian, I have personally translated them to English:

- Historical documents of the projects' design from various publications or online resources.
- Site visits, and collecting information in person helped to have firsthand impression and documentation of characters, and user experiences of them.
- Conducting an interview with a landscape architect involved in the design of the Vaterlandsparken project helped to gain insights from the designer's perspective.
- Critiques from architecture and landscape architecture journals of different periods provided valuable perspectives on design intentions, challenges, and outcomes.

It is important to mention that the concepts and design principles of Oslo's public green spaces experienced significant transformations between 1960 and 2020. This thesis focuses specifically on three distinct periods—1960s, 1990s, and 2020s—each influenced by the societal and economic conditions and the evolving perspectives of landscape architects during the preceding years. Therefore, it is not possible to generalize the conditions of one decade to another. So, to comprehensively grasp this sixty-year span, it is essential to analyze each decade separately.



Understanding the Welfare Landscape

## 2. Understanding the Welfare Landscape

The term 'welfare landscape' includes various aspects and can be interpreted in different dimensions according to the context. In general, 'welfare' refers to the well-being of groups, societies, and individuals (Pries & Qviström, 2021). The concept of welfare landscape has undergone extensive research in Sweden and Denmark, while research in other countries remained comparatively limited. Considering that Nordic countries enjoy similar approaches to social welfare (Hein et al., 2020), this research is conducted with particular attention to the studies carried out in the two mentioned countries (Sweden and Denmark).

In a broad perspective, the 'welfare landscape' can be described as a dynamic interplay between the physical, social, and economic dimensions of the urban environment, influenced by the implementation of welfare policies and programs in a given region. It includes the multifaceted aspects of social welfare and life quality through different factors such as housing policies, healthcare accessibility, educational opportunities, the distribution of public spaces, and access to leisure and recreational space, which result in social equality and justice (Lund et al., 2022). It is vital to emphasize that "the welfare landscape is not solely regarded as a historical landscape typology but is a dynamic and still active phenomenon" (Lund et al., 2022, p.119).

Pries and Qviström who researched on welfare landscape of Sweden suggest that "the outdoor environment made by post-war planning is best understood as welfare landscapes crafted to support what, at the time, was considered the project of building of welfare society". They also emphasize that "actual welfare landscapes were made by a process spanning several decades in which several planning actors involved in the material and cultural production of the land aligned with different aspects of the social democratic politics of welfare" (Pries & Qviström, 2021, p. 924). This is the definition that Høghøj (2022), who has researched about the welfare landscape of Køge Bay seaside park in post-war Denmark, also referred to and confirmed in his studies.

The welfare landscape offers 'culturally rich material' by indicating the connection between "private and (semi-)public, and between the individual, the collective and the state", and allows to recognize the "inherent ambiguities of the welfare project" (Braae et al., 2020, p.30). Van Haeren (2021), who studied the Danish welfare landscapes, suggests that welfare landscapes try to "materialize ideals of well-being that had never been constructed before" (p.31).

In the post-war era, well-being became the main aspect of the welfare state model in the Nordic countries (Van Haeren, 2021). Post-war development in the Scandinavian<sup>1</sup> countries show a great emphasis on mass housing as the vital element of the social welfare state in various models, “together with a continuous testing and debate between different architectural, urban and landscape models, all aiming to accommodate social welfare, individual well-being, and - increasingly – wealth...” for “...the realization of the ideal of ‘welfare state mass housing’, both organizationally and in-built form” (Glendinning & Riesto, 2020, p. 5). As Jassen and Tietjen (2021) indicate, one of the main welfare goals of social housing plans after the war was to provide access to open space. Braae and her colleagues suggest considering “the open spaces of the post-war welfare city as a welfare landscape” (2020, p.27). They, moreover, highlight that “These welfare landscapes of social housing were iconic in terms of attempting to counteract all the shortcomings associated with the dense, socially unjust, aesthetically outdated and slummy housing that had arisen from late 19th and early 20th-century urbanization processes” (Braae et al., 2020, p.27).

Considering the crucial role of green open space in 20th-century mass housing and the construction of post-war welfare states in the Nordic countries, these landscapes were directly linked to the concept of social welfare. They were designed to promote the well-being of citizens.

However, Pries & Qviström believe that concentrating on housing plans hides the importance of landscape for Sweden after the war. They also mention “life between buildings” which was first coined by Danish architect and urban designer Jan Gehl in 1971, and described as lacking of design and programming (Pries & Qviström, 2021, p. 924). Van Haeren also believes that referring to space around buildings as open green space hides the meaningful aspect of these spaces which focus on the landscape “for living where humans were central” (Van Haeren, 2021, p.32).

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<sup>1</sup> Scandinavian Countries comprise Norway, Denmark, and Sweden, while the Nordic countries encompass Finland and Iceland as well. Given Norway's dual classification, information from both categories has been incorporated into this study.

## 2.1 Public green spaces as welfare landscapes

After the Industrial Revolution (1760-1840) which started in England in 1843 the local government of the town of Birkenhead just outside Liverpool proposed the idea of a municipal park which was made by public expense for public access regardless of social class, color, and age. The park, officially opened in 1847, marked the initial action of having a public green space for the well-being of all citizens (Birkenhead Park, s.a.). Later, Frederick Law Olmsted, an American agricultural engineer and landscape architect, impressed by democratic structure of the park, referred to it as 'the People's Garden'. He remarked on his first visit to Birkenhead Park in 1850: "All this magnificent pleasure ground is entirely, unreservedly, and forever the people's own." Later impressed by this idea, he went on to design New York's Central Park (Birkenhead Park, s.a.).

The idea of People's Parks was spread all over the world. In 1847, in Norway, following the purchase of the King's farm (Kongsgården) by King Karl Johan in Bygdøy, public access to the land was declared a "public promenade", and this was the beginning of the People's Park establishment in the country (Jørgensen et al., 2010, p.14). In the 1890s, in Sweden, several People's Parks were built as a place for relaxing, leisure, and political activities and were accessible for every social class which, as Mitchell and his team describes, changed the "Scandinavian tradition of landscape as a shaped space belonging to those who shaped it" (Mitchell et al., 2021, p.23).

The Norwegian Association of Garden Architects was founded in 1929 with a focus on the role of parks for 'health and well-being' (Jørgensen et al., 2010, p.16). In the post-war city development, landscape had a key role in introducing the 'good life', in opposition to the poor condition of the industrial city: Good life was defined as 'daylight, fresh air, and good health' for all with a new companion, 'democracy'; everyone's access to open green space, was in the center of attention as a key aspect of healthy life (Lotz et al., 2017, p.46).

The most important feature of public green space is its accessibility for everyone regardless of their social, economic, and physical conditions. Public green space as a relatively low-cost recreation facility underscores the fact that individuals from diverse economic backgrounds can also benefit from its advantages (Schipperijn et al., 2010).

As cities expand, the need for public green spaces also rises, ensuring accessibility for every individual within close proximity. Among other factors such as amenities and size, distance is considered the most significant factor influencing usage (Schipperijn et al., 2010). There have been numerous studies regarding the optimal distance that encourages individuals to visit a public green space. As Ma and his colleagues showed

in their study, great participation of inhabitants in green spaces will increase their well-being and one of the elements of participation that they studied was the number of times a public green space was visited; among various factors, they discovered that people with less than 5 kilometers' distance from a public green space have the highest well-being while the ones with more than 10 km's distance have the least well-being. They concluded that “green spaces can have a very positive effect on people's welfare and provides support for their further promotion” (Ma et al., 2019, p.2793). However, other studies demonstrate that a distance of 300-400 meters is the limit, and after that, usage begins to decrease sharply (Schipperijn et al., 2010). This is in line with the ‘World Health Organization’ that suggests that all residents should have access to a public green space within 300 meters. Increasing equality “in access to high-quality green spaces can maximize the health and well-being benefits of nature in cities” (EEA, 2022).

In the rapid urbanization of the 19th century and the transition from agricultural to industrial society, public parks compensated for the loss of open spaces. They had a role in providing healthy recreation opportunities for both body and brain, as an alternative to ‘commercial pleasure gardens’ (Whalley, 1992).

As Lopes and Camanho also mentioned, fast growth in urban development that resulted in “smaller apartments with no private outdoor space” makes the “public space as an extension of the private household realm” which highlights the essential role of public spaces in increasing the ‘quality of urban life’, fulfilling ‘basic human needs’ and promoting physical and psychological well-being through outdoor exercise and relaxation (Lopes & Camanho, 2013, p755).

Qviström demonstrates the importance of green space as a welfare landscape in the post-war society. He refers to the book ‘Fit for Fun, a Swedish Message, by Brattnäs and Gullers 1973’ which emphasizes combating diseases associated with lifestyle, particularly heart attacks (as a health threat of that period) through working out on a daily basis, with a focus on running in urban and suburban recreational spaces. He also emphasizes the significant role of being in nature as a therapy (Qviström, 2022).

As the European Environment Agency (EEA) also confirms, the advantages of using public green space “range from reduced risks of obesity in children, to better cardiovascular health and lower rates of depression in adults”, in addition, there can be found other benefits such as decreasing the air and noise pollution as well as balancing the temperature and improving biodiversity in the urban landscape. (EEA, 2022)

One of the sustainable development goals outlined by the World Health Organization (WHO) is to achieve “universal access to safe, inclusive and accessible green and public spaces, in particular for women and children, older persons and persons with disabilities by 2030,” as supported by numerous studies highlighting the positive effects of such spaces on human health (WHO, s.a.).

Various research has demonstrated the effects of spending time in public green spaces on physical and mental well-being, highlighting benefits such as decreasing the chance of “coronary heart disease, respiratory disease, depression and anxiety, and increased longevity” (Irvine et al., 2013, p.420). Irvine and her colleagues who focused on “understanding the place of health and well-being in urban park usage” in Sheffield, UK, identified “physical effects such as relaxation and revitalization, positive emotions, attachment towards the place, spiritual tranquility and connection, cognitive satisfaction, an overall sense of health, and social connection” as the most important advantages of being in public green spaces (Irvine et al., 2013, p.429). Furthermore, in a study conducted in Norway, Ulset and his team observed the ‘increasing nationwide green space use’ during COVID-19 and highlighted the importance of ‘narrowing the gap of green inequalities’, emphasizing “the importance of preserving and promoting green spaces as a public health resource, particularly in disadvantaged neighborhoods” (Ulset et al., 2023, p.1).

Moreover, Ellis & Schwartz, who studied the roles of urban parks system in achieving various objectives, describe the significant role of public green spaces in well-being from different perspective. They believe that incorporating art into public green spaces through avenues such as art installations and performing arts enhances the 'community's sense of place'. They mention that art not only increases 'aesthetic appeal' but also showcases 'local culture', stimulates creativity, fosters 'self-expression', and promotes 'social interactions', all of which enhance the well-being (2016, p.2).

Pries and Qviström mention that landscape is one of the valuable outcomes of developments after the war which shaped various needs related to welfare, and massive investment in green spaces and leisure facilities during welfare development in Sweden is considered the foundation of outdoor activities and recreational areas (Pries & Qviström, 2021, p. 923). As Høghøj also indicates, researchers have recently pointed out the effective role of green and recreational spaces to create the Scandinavian welfare model. He emphasizes that these spaces are not just a symbol of good living conditions, but also ways of showing principles of the Nordic welfare landscape in daily life (Høghøj, 2022).

The design of public green spaces, as emphasized by Braae and her colleagues, includes certain ethics, relating to how it can be interpreted in terms of features, values, programs, and practices (Braae et al., 2020). Moreover, it pertains to how these spaces can be perceived as a common place accessible for all groups of people, thus fulfilling the democratic goal of equal access to urban public space.

The historical significance and impact of green planning during the welfare development era have often been neglected or criticized for lacking urban qualities and design excellence, resulting in a gap in understanding its role in shaping the welfare society's development. Landscape concentrates on the interaction between land and life and highlights the significant role of "greenery for welfare and as an imprint of welfare planning" (Pries & Qviström, 2022, p.188).



## 2.2 Key aspects of public green spaces as welfare landscapes

Considering the importance of public green spaces in fostering democracy and improving health and well-being of residents through myriad studies, this section aims to identify the key aspects of these places as a welfare landscape. Public green space as a welfare landscape should provide physical, mental, and social well-being, and this can be done through various means. Jørgensen and his peers point out that landscape architecture has three main aspects: Its position as an art (Garden art), being accessible for everyone to help their well-being, and care of nature; they also highlight that since the 1920s there has been “functionalism’s emphasis on parks and green areas as important for health and well-being, via cultivation of naturalness to a renewed interest in the cultivation of landscape and urban values” (Jørgensen et al., 2010, p.14).

Considering all the research mentioned in the previous section and inspired by Jørgensen, three key aspects have been considered for public green spaces as a welfare landscape to research and compare in case studies:

- **Environment**
- **Function**
- **Art**

- **Environment**

In the past, preventive environmental measures were deemed sufficient to prevent environmental degradation; nature and landscape conservation emerged as a compelling response to the growing concern over the destruction caused by the rapid development (Jørgensen, 2010). In Norway, the hydropower development in the 1950s catalyzed fast-paced development. Jørgensen highlighted “the 1970s as starting with nature conservation years and the beginning of a new era for Norwegian landscape architecture” (Jørgensen et al., 2010, p.19).

Therefore, the focus of the designers of public parks was on preserving the existing natural resources. However, in recent years environmental problems have changed pattern, and new actions are needed. That is, climate change has become one of the challenging issues affecting human health and well-being (IPCC, 2023). Ferreira and her team indicated that ecological issues and air pollution have a harmful effect on inhabitants' well-being. They also, referring to previous studies, mentioned that “noise, climate and natural hazards” have important effects on one's well-being (Ferreira et al., 2013, p.2).

Nature-based solutions have been introduced as one of the main remedies to curb this problem. Urban parks are considered as one of the solutions “to provide adaptation and mitigation actions to climate change and challenges from urbanization to increase the well-being” of all groups of citizens (Kabisch et al., 2017, p.208). Cities need green spaces to control these environmental issues to improve the residents' well-being (Ma et al., 2019).

Hence, the designs of successful contemporary parks emphasize a “balance between social benefits and ecosystem” preservation. This is achieved through various methods, including ecosystem restoration, soil rehabilitation, water retention, flood protection, and heat regulation (Frantzeskaki, 2019, p.101).

- **Function**

One of the aspects of the public green space is its function. As the European Environment Agency highlights, the function of public green space is “physical exercise and social interactions, relaxation and mental restoration” (EEA, 2022). Similarly, Schipperijn and his peers mentioned the following as the main reasons for visiting green spaces: “to enjoy the weather and get fresh air, to reduce stress, to relax, to exercise, to do something together with family or friends, to obtain peace and quiet, to follow the seasons and observe flora and fauna”; participants of their study also experienced “positive emotions within the self and towards the place, and spiritual well-being” while visiting a park (Schipperijn et al., 2010, p.133).

Moreover, Irvine and her team named two groups of motivators for using a park that will result in the well-being of individuals; in the first group which they called ‘Person level motivators’ they mentioned “Physical, cognitive, social, children, place connection and unstructured time”. In the second group, referred to as ‘environment motivators,’ they identified: “nature (Fresh air and sun, fauna and flora, view) and park features including location, facilities and atmosphere” (Irvine et al., 2013, p.433).

There can be various functions for public green spaces and parks as recreational spaces which will help to improve the well-being of residents. Therefore, public green spaces help to improve mental health by promoting relaxation and fostering a sense of pleasure. Additionally, they serve as a place for working out, leading to enhanced physical health and a venue for facilitating social interactions. “The emotions of relatives and friends are improved, family cohesion is increased, so social welfare is enhanced” (Ma et al., 2019, p. 2804). Public green spaces also contribute to improving

the sense of place and identity through “offering opportunities for reflection and as a source of positive emotional bonds” (Irvine et al., 2013, p.418).

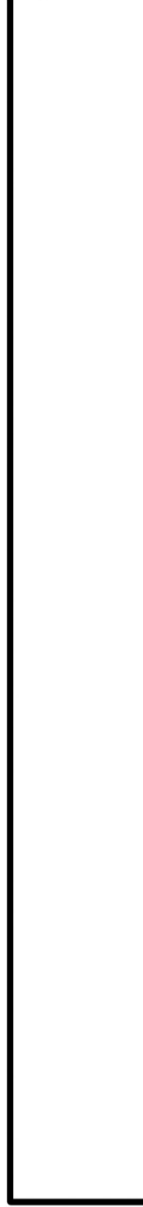
- **Art**

Landscape architecture is an art that evokes emotions and encompasses various ideas and concepts, shaping the culture of a particular part of the world (Schjetnan, 2021). In addition, having art in a public space helps to improve social and mental well-being. Mental well-being is an aspect often overlooked compared to physical health (Ellis & Schwartz, 2016). According to Ellis and Schwartz (2016) “Art in a park is inclusive and can be appreciated by anyone regardless of financial means” (p.2), so it promotes democracy.

Art serves to “increase aesthetic appeal and vibrancy, improve the sense of place, encourage creativity, innovation, culture and artistic expression.” Moreover, “featuring art in urban parks is a method to showcase local culture, stimulate creativity and self-expression, and even generate political or social conversation” (Ellis & Schwartz, 2016, p.2).

There are several ways to display art in a public green space, including planting design, installing and displaying art pieces, and designing spaces for artistic performances. However, dedicating space for performances also correlates with the functional aspects of public green spaces.

The interests of landscape architects in art have evolved over time. By the end of the 18th century, landscape architecture projects primarily prioritized natural beauty over art. However, during the 19th and 20th centuries, there was an interest in art and the philosophy of art within landscape architecture. Towards the end of the 20th century, there was a return to viewing nature as an art form. This shift was partly prompted by the environmental crisis, leading to a renewed emphasis on environmental aesthetics in landscape architecture ever since (Berleant, 2012).



**Exploring three case studies in Oslo**

### **3. Exploring three case studies in Oslo**

This section delves into an in-depth examination of the selected public green spaces in Oslo. Each case study begins with a condition of the welfare landscape during the respective era, as well as insights from landscape architects regarding the role of public green spaces and the prevailing design concepts. This provides a contextual framework to understand the significance of these spaces within their historical context.

Afterward, a detailed exploration of each park follows, covering its location, history, design plan, general characteristics, and unique features. By examining the historical context and physical attributes of each park, it is possible to understand how they have evolved over time and their importance as welfare landscape in Oslo.

Figure 1 demonstrates the location of each case study in Oslo in comparison to Oslo Central Station.

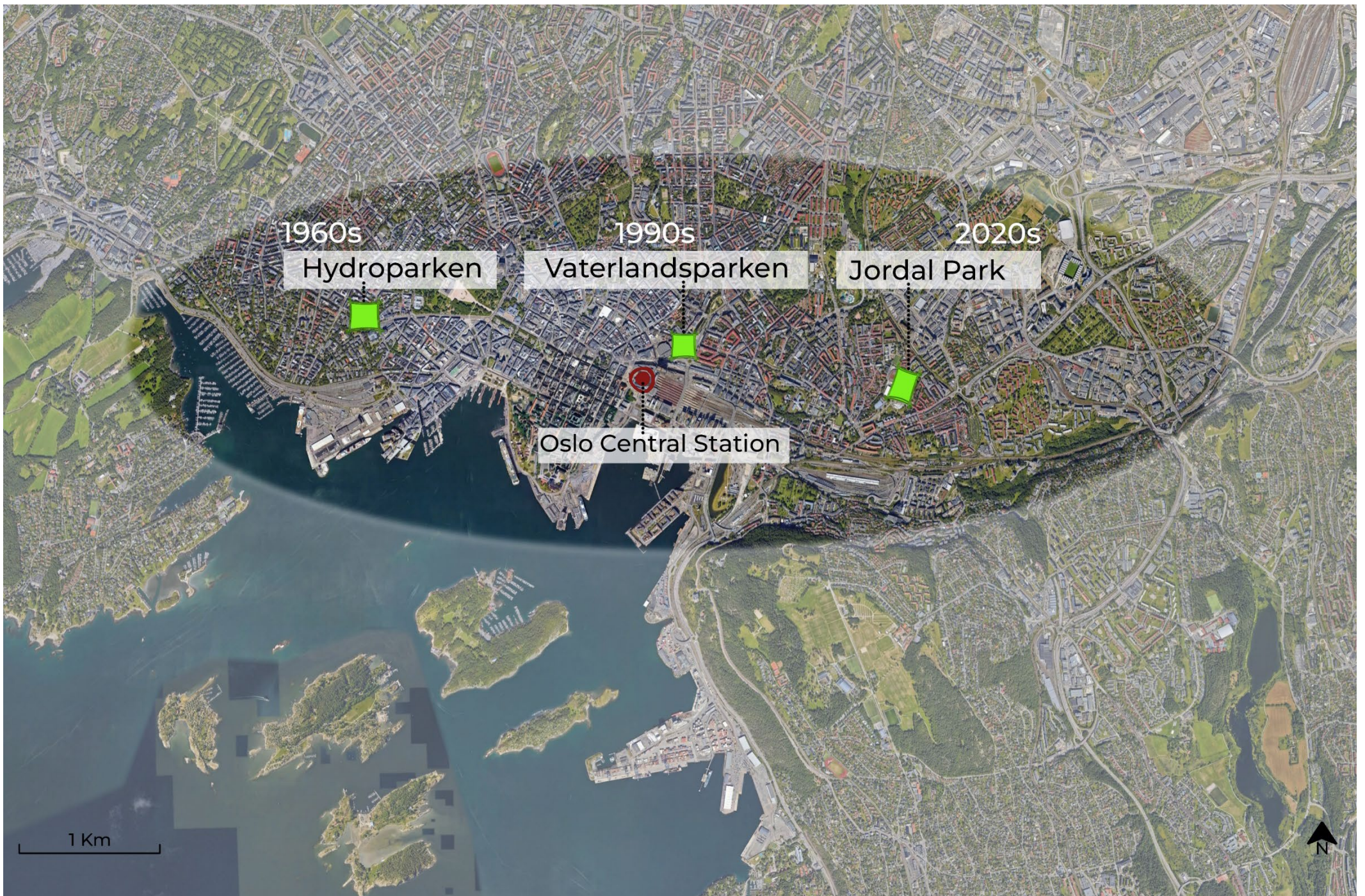


Figure 1. Location of three case studies in Oslo – Google Map of Oslo city. (2024). Available at: Google earth (accessed: 20.01.2024).

### **3.1 Oslo's welfare landscape in the 1960s**

The 'golden age' of Norwegian industry (1950-1970) resulted from growing prosperity due to industrial development and hydroelectric power production, leading to more focus on the Norwegian welfare state and the construction of public and administrative buildings (Dietze-Schirdewahn, 2018).

Hauxner, in her book 'Open to the Sky', describes well the changes in post-war development (1950-1970). According to her, some features are visible in the green spaces of this period, which include the following:

Post-war green space is considered as a building without elevations; it is structured and has a framework, so it looks like a room without a roof or with a leafy roof, and there is a strong connection between the building and the outside around the building. In order to show the connection between humans and the landscape, a soft slope used to be defined. There can be found a transition from a romantic structure to a more artistic one, especially in concrete and abstract art by omitting all the unnecessities, and according to the pioneer of the modern movement Mies van der Rohe's 'Less is More' (Hauxner, 2003).

The dominant pattern of the design of this era is rectangular and square, "Rectangular had its golden age in late 1950s and early 1960s" (Hauxner, 2003, p.312) and straight lines. This form leads people to pre-designed desired directions with no barriers on the way. This can even be identified by the balance between vertical and horizontal lines noticed in all the elements ranging from pathways to pools, flower boxes, lawn beds, furniture, etc. Moreover, other concrete elements such as wall segments, fences, and steps, are visible (Hauxner, 2003).

In the gardens of this period, there is not any place for colorful materials. It is more unified, simple, and rough; gray, black, and white are the predominant colors in use, so the use of asphalt and concrete is visible. Even colorful flowers have disappeared. Therefore, in order to complete the structure, even the planting was mono-culture in a framework and a preplanned arrangement, such as rows of trees, planting boxes, plants at the back of the wall, etc., to prevent vegetation from appearing loose, natural, and free, demonstrating human control over nature (Hauxner, 2003). "The composition is based on repetition of the basic idea in cultivation with a view to production" (Hauxner, 2003, p.316). As Hauxner has mentioned, the war demonstrated that human beings are unpredictable and can be brutal, so in order to have a successful welfare state, it must be cultivated and manageable (2003).

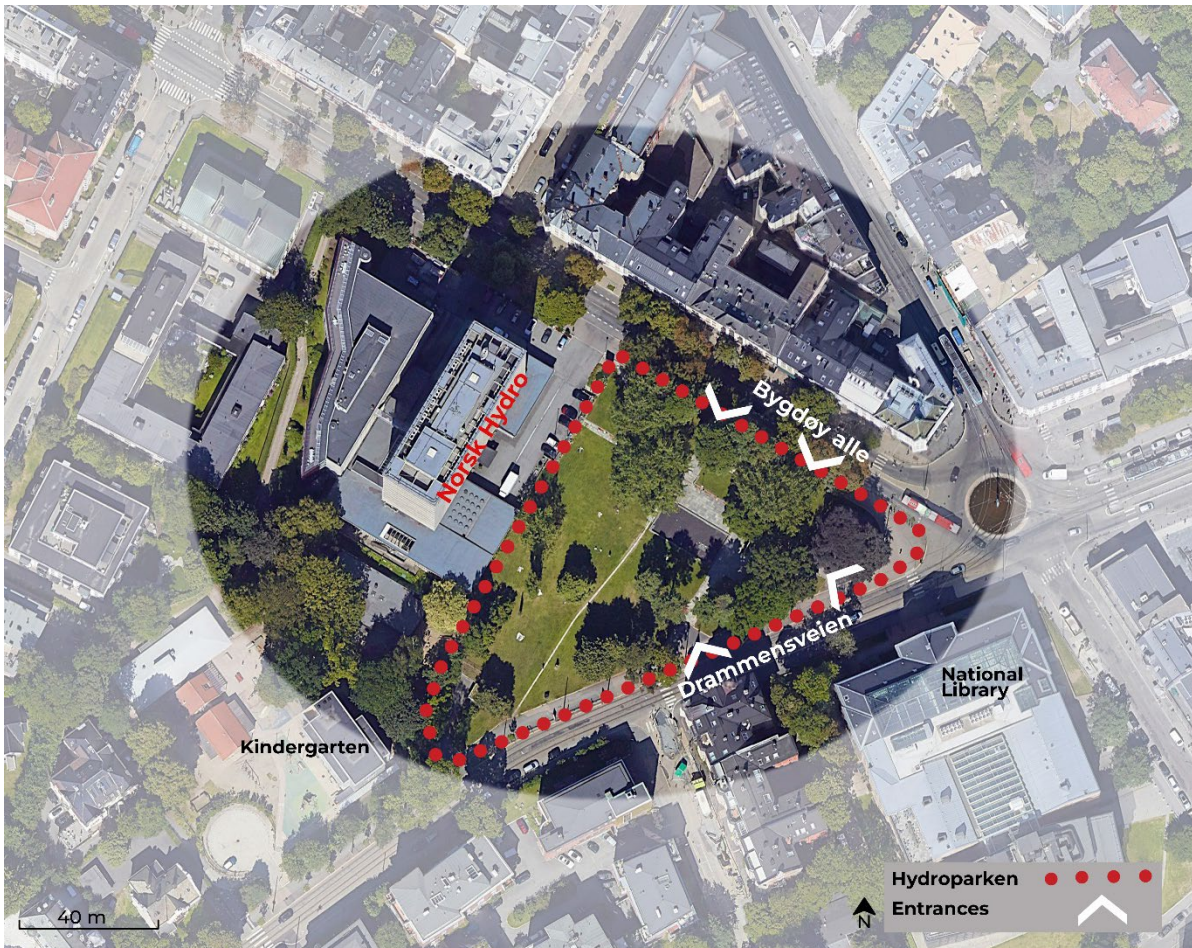
Jørgensen believes that changing the profession's name from garden architects to landscape architects, which started around 1966, continued with concerns from small-scale designs (designing private gardens) to larger-scale interventions (design of public spaces) in landscape (Jørgensen, 2010). This era indicates a transition from self-centeredness to community-centeredness, which is how the welfare state gained value (Hauxner, 2003). In the post-war period, Norway as a nation was to be rebuilt through, among other things, sports facilities (Hille Melbye, s.a.).



### 3.2 Hydroparken

The first case study is Hydroparken from the 1960s, playing an iconic role in the new era of landscape design approach in post-war Norway. Hydroparken is a small-scale park covering an area of around 7000 m<sup>2</sup>. It is situated approximately 2 kilometers west of Oslo central station, at the intersection of Bygdøy allé and Drammensveien (Figure 2), in front of the Norsk Hydro's 14-story office building (Hydrobygget- Figure 3). Considering the connection of this building with electricity power production, it can be highlighted as a symbol of the importance of social welfare in that era.

There is a kindergarten next to the park, and the national library (Nasjonalbiblioteket- Figure 4) with its magnificent building is located opposite the park on Drammensveien. The entrances to the park are on the north and the east sides. The park was named green park of the year in 1994 (Grindaker, s.a).



**Figure 2. Hydroparken-** Google Map of Hydroparken. (2023). Available at: Google earth (accessed: 15. 12. 2023).



Figure 3. Hydro Building (2024)



Figure 4. National Library (2023)

### 3.2.1 Tracing Hydroparken's history

Hydroparken's site belonged to the Mogens Thorsen foundation, an elderly house with a large, landscaped park including a wide variety of tree species (Jørgensen, 2011), as shown in Figure 5 in 1956. The development of this park took place between 1960 and 1963 by Morten R. Grindaker and his firm, Grindaker & Gabrielsen, in collaboration with artist Odd Tandberg, who designed the stone walls in this park. Hydroparken stands as a notable example of Norwegian landscape architecture during the transformative period of the 1960s (Dietze-Schirdewahn, 2018) and gracefully counterbalances the imposing presence of the Hydro building to the west (Jørgensen, 2011).

This park marks a change in the existing professional tradition. Up to that time, Norwegian garden architecture was mainly focused on the design of private gardens and the protection and design of natural landscapes and green areas in the cities (Jørgensen, 2010).

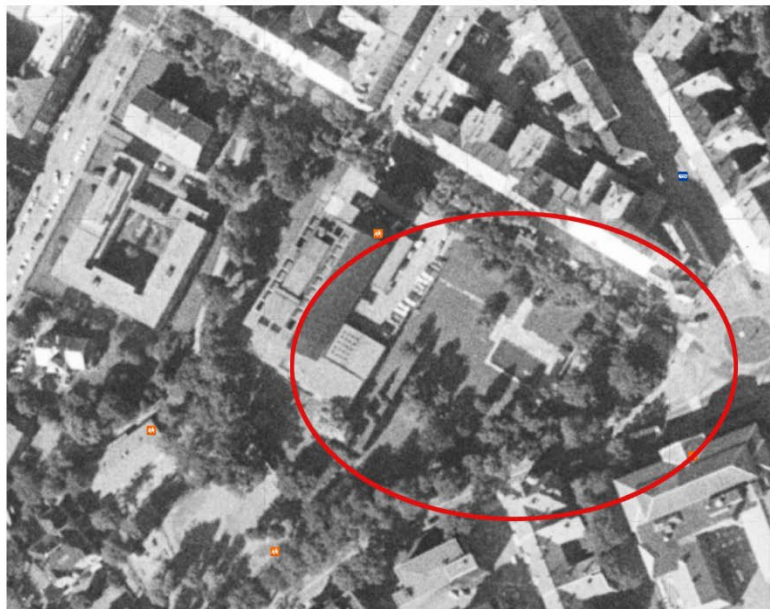
In the 1960s, when the project was conceived, the prevailing expectation for park design in Norway was a romanticized setting with lush flower plantings. Against this backdrop, Grindaker's Hydroparken project reflects the changing landscape architecture practices and a departure from traditional design norms; Grindaker and Gabrielsen took a bold approach by integrating the architectural lines and axes of the new administration building for Norsk Hydro, designed by Viksjø, into their landscape design<sup>1</sup>. This departure from convention marked a clear distinction in Norwegian landscape architecture, introducing a modernist facility that emphasized a strong connection to architecture and abstract art. The park's unique elements, such as the two free-standing slab walls, displayed Grindaker's innovative use of materials and design principles (Dietze-Schirdewahn, 2018; Grindaker, s.a).

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<sup>1</sup> The same team, with Viksjø as the architect and Grindaker as the landscape architect, designed both the governmental building and the surrounding public space. This building reflected the welfare state concepts of the era.



**1956**  
*Elderly House*



**1971**  
*After the construction of the Hydro building and the park*



**2022**  
*Today After 60 years, with less trees in the south*

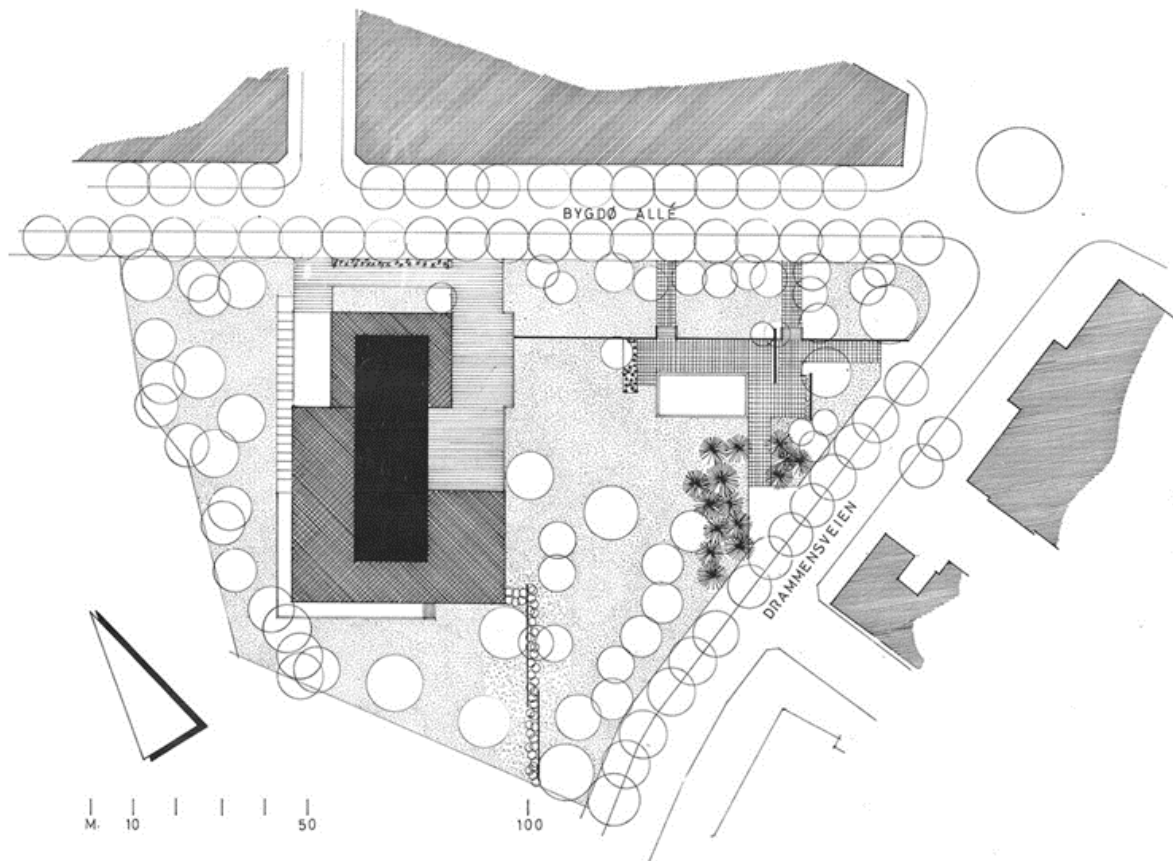
**Figure 5. Hydroparken's Timeline in 1956, 1971, 2022 – Maps of Hydroparken.** (1956, 1971, 1997, 2004, 2008, 2013, 2022). Finn. Available at: <https://kart.finn.no/> (accessed: 04.03.2024).

Karsten Jørgensen, referring to Malene Hauxner's book "Open to the Sky," believes that in Hydroparken, cultural landscape, modern architecture, and abstract art was more prominent than nature. In the park, there is a collaboration between a garden architect and an artist active in the field of non-figurative art. According to him, there were thirty sketches of designing the park in two groups:

- Sharp angles and long lines stretched diagonally to the building's direction
- Rectangular surfaces follow the building's direction

The second concept was selected (Figure 6), and although the park was designed separately from the building, its form was still derived from the building's design and intended to be seen from above (Jørgensen, 2011).

In the vegetation design, only one type of flower was planted, and large trees that were transferred from Germany supplemented the existing trees. The structured vegetation demonstrates the human control over nature and was inspired by "agricultural-landscape, modernist architecture, and abstract visual art" (Jørgensen, 2010, p.213). This style of vegetation design deviates from the tradition of nature-based gardens and is more relevant to an urban tradition influenced by art and architecture (Jørgensen, 2011). The design of Hydroparken indicates "a break with the prevailing style and focus on garden architecture" (Osuldsen et al., 2019, p.258).



**Figure 6. Plan of Hydroparken designed by Grindaker & Gabrielsen firm**

Figure 6. Skage, R., O (1963). Hydroparken, Oslo. *Havekunst: Nordisk tidsskrift for planlægning af have og landskab = Scandinavian review for garden and landscape planning = Hagekunst = Trädgårdskonst. København*, 44 (5): p. 92.

### 3.2.2 Characteristics of Hydroparken

The welfare landscape concept in Hydroparken is manifested through its role as a public space during the period of its design (1960s), aligning with the emphasis on community well-being, accessibility, modern design, and the integration of art into the public realm. The project reflects a shift in landscape architecture toward serving the broader societal goals of the time.

The most significant aspect of the design of this park, as highlighted in all researched documents, is that Hydroparken represented a departure from traditional landscape design in Norway during the 1960s.

After exploring the historical context of that era and the evolution of the design, studying reviews, and personally visiting the site six decades later, the various features of the park are as follows:

- **Form**

“The garden designer had loyalty with the buildings architect's intentions both in terms of form and use of materials” (Skage, 1963, p.92). The design's emphasis on the building's lines and axes suggests an integration of the park with its surroundings. Considerations of the environment and historical traces incorporated into the design indicate a conscientious approach toward the landscape. The park is characterized by the strict lines of the surface pattern, and the plan cannot be considered interesting for street passersby (Skage, 1963).

As illustrated in Figure 7, the concept design of the park and its features, including pathways, green spaces, pond, and art installations, are in rectangular forms and straight lines, creating a balanced composition with the building architecture.

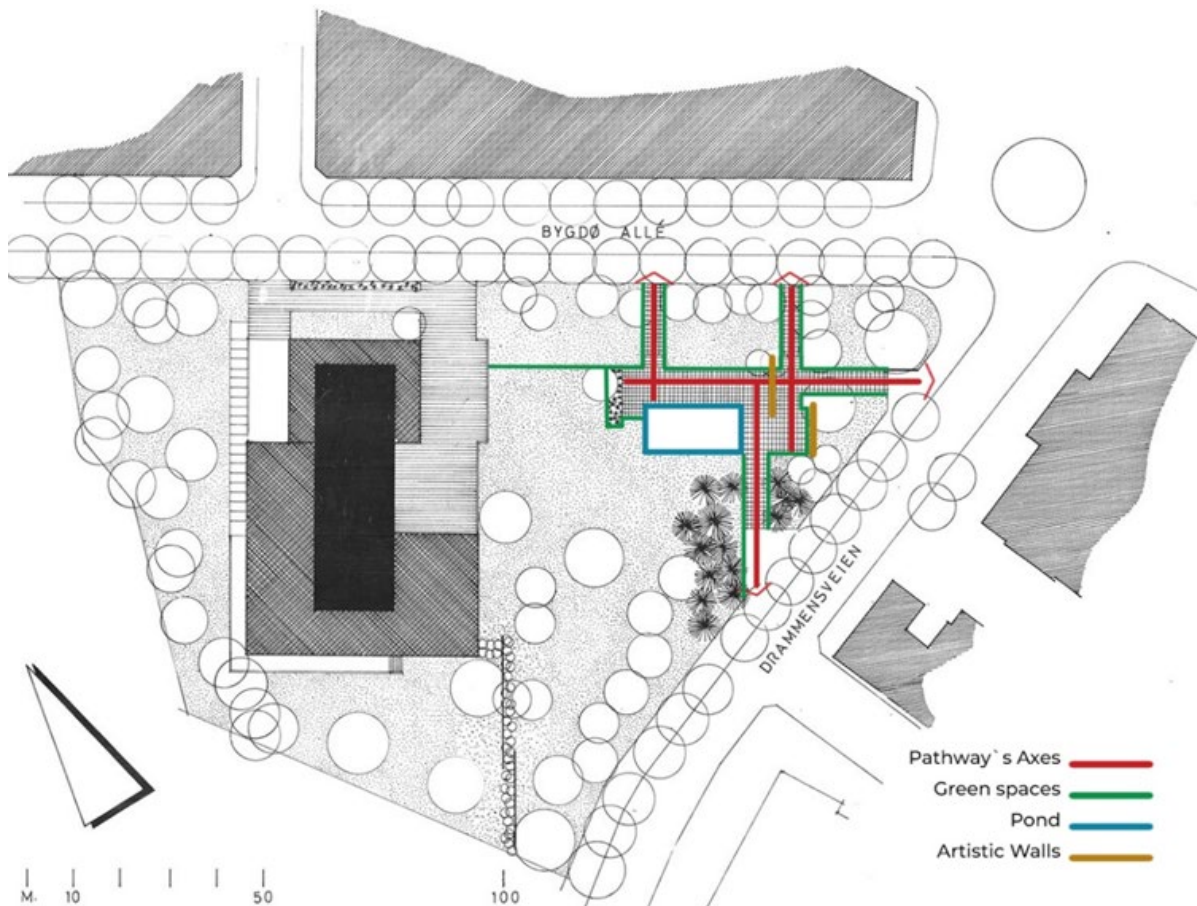


Figure 7. Analysis of Hydroparken`s design

- **Conformity to the shape of the earth**

The terrain slopes downward from Bygdøy allé toward Drammensveien. An integrated natural concrete retaining wall extends from the building, running parallel to Bygdøy allé until it reaches Drammensveien. This structure serves a dual purpose: not only does it effectively level out the variations in elevation, but it also imparts a cohesive visual aesthetic to the expansive grass surface, creating a harmonious view for passersby along the adjacent streets. At the juncture where the park meets the street, a tall curb has been strategically placed, defining the boundary between the two spaces while adding an element of elevation and distinction (Skage, 1963).

Additionally, being located at a lower elevation compared to Bygdøy allé has helped to separate visitors from the chaos of everyday life and increase calmness.

- **Function**

Hydroparken is well-representative of the period of its design. The park serves as a small-scale area for relaxation. The benches (Figure 8) and lawn beds (Figure 9) are the areas designed for relaxation. Reviewing the old Google Maps of the park reveals that the lawn beds have been widely utilized for seating and enjoying the sun during the summer (Figure 10). Visiting the site today also shows that the lawn beds are still in use for seating and sunbathing (Figure 9); however, not as much as in the past.

There is not a large biodiversity or any defined activities for recreation or exercise. This area can be considered as a park for enjoying the moment and appreciating the open green space and tall old trees.

Attention to the human scale of the elements in designing the park, together with the presence of old trees and art installations reinforces the sense of place and belonging, originality, and character within the park. All these characteristics could contribute to individuals feeling safe, tranquil, and comfortable while sitting in this area. However, at the same time, the small size of the park and the lack of interesting vegetation or activities have rendered it almost invisible to individuals who are not aware of the old and rich history behind its design.





**Figure 8. Seating area of the park (2023)**



**Figure 9. Using the lawn beds for seating and sunbathing (2024)**



**Figure 10. The function of lawn beds of Hydroparken in 1997,2004,2008,2013 – (Maps of Hydroparken, 1997, 2004, 2008, 2013). Finn. Available at: <https://kart.finn.no/> (accessed: 04.03.2024).**

- **Green space and vegetation**

As mentioned before, the design of this park is more inspired by art and architecture than by nature. Thus, first intention was to preserve and complement the existing trees, with the design of all vegetation preplanned within a structural framework of rectangular forms. According to the design, the variety of flowers and trees are limited. As Skage described, the main complaint from the public was that the park lacked 'interesting' decorative plantings (Skage, 1963).

- **Public access**

Due to economic prosperity in the 1960s, increasing investment in public infrastructure, services, and amenities aimed at improving the overall well-being of the population has been considered. The developer has chosen to divide the park into two separate units with the aid of two low walls. The western part is closely related to its structure and function and is semi-private due to the presence of the Hydro building. The eastern part is open to the public. This concept is, of course, popular in an area largely lacking daily green spaces (Skage, 1963). Today, after six decades, it appears to function in the same way. This means that the eastern side is more open to the public compared to the western part.

- **Art**

In the east entrance, there are two artistic stone walls (Figure 11); "to give the living space intimacy, two man-high slab walls decorated with "konglo<sup>1</sup>" plates have been erected to the east" (Skage, 1963, p.93). As mentioned before, economic prosperity led to attention to art in the creation of public spaces. The two walls not only contribute to aesthetics but also provide points of interest and engagement for visitors (Dietze-Schirdewahn, 2018).

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<sup>1</sup> Conglomerate is a coarse-grained sedimentary rock consisting of rounded stones embedded in a fine-grained mass (king, s.a.).



a.



b.

**Figure 11. a and b. Free-standing konglo walls designed by artist Odd Tandberg (2023)**

Moreover, in 1985, a bronze monument to the illegal press (Figure 12) from 1940-1945 was created by Skule Waksvik using the lost-wax casting technique. This monument is placed at the entrance of the park, where a commemoration is held on Press Freedom Day every year on May 3<sup>rd</sup> (Cubro, S.a.) (Figure 13).



**Figure 12. The monument to the illegal press built in 1985 (2023)**



**Figure 13. commemoration of Press Freedom on May 3<sup>rd</sup> 2024**

In 2018, an abstract sculpture called 'Bird in Space' was added to the northern side of the park, executed by Knut Henrik Henriksen (Figure 14). It is made of concrete, a material with river gravel mixed into the cast and later sandblasted.

This technique was developed by Erling Viksjø, designer of the Hydro building (Oslobyleksikon, s.a.). This artwork has a respectful design and development to the history and identity of the park and its elements.



Figure 14. Bird in space sculpture built in 2018 (2023)

#### - Overview of key features in Hydroparken

Today, more than 60 years since its design, the first noticeable feature at the entrance of Hydroparken is old trees and the art installations, followed by the water pond in the center. As one walks through the park, straight lines of the lawn beds and pathways unfold. Structured vegetation, a limited selection of trees and flowers, and restrained types of furniture and lighting make the park minimal, free from confusing or unexpected elements.

Moreover, the Hydro building, with its original connection to the park, plays a dominant role. Other surrounding buildings and streets are transparent and do not disturb the feeling of relaxation in the park, thanks to the trees planted around it serving as a soft barrier.

The main elements of the park from the northeast view (Figure 15) have been drawn in Figure 16.

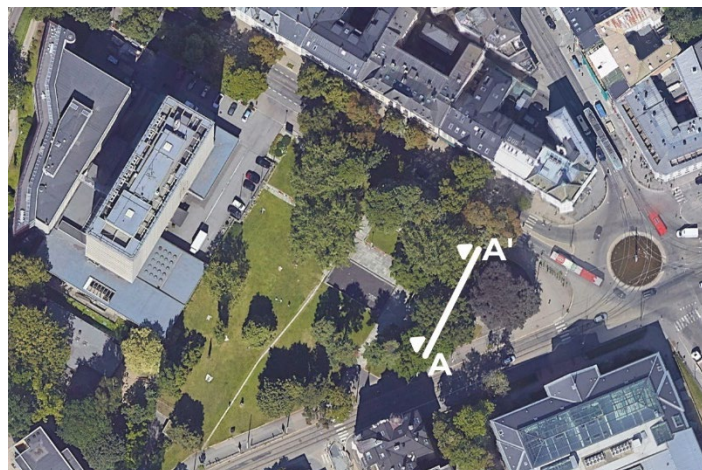


Figure 15. Section line of Hydroparken's Sketch

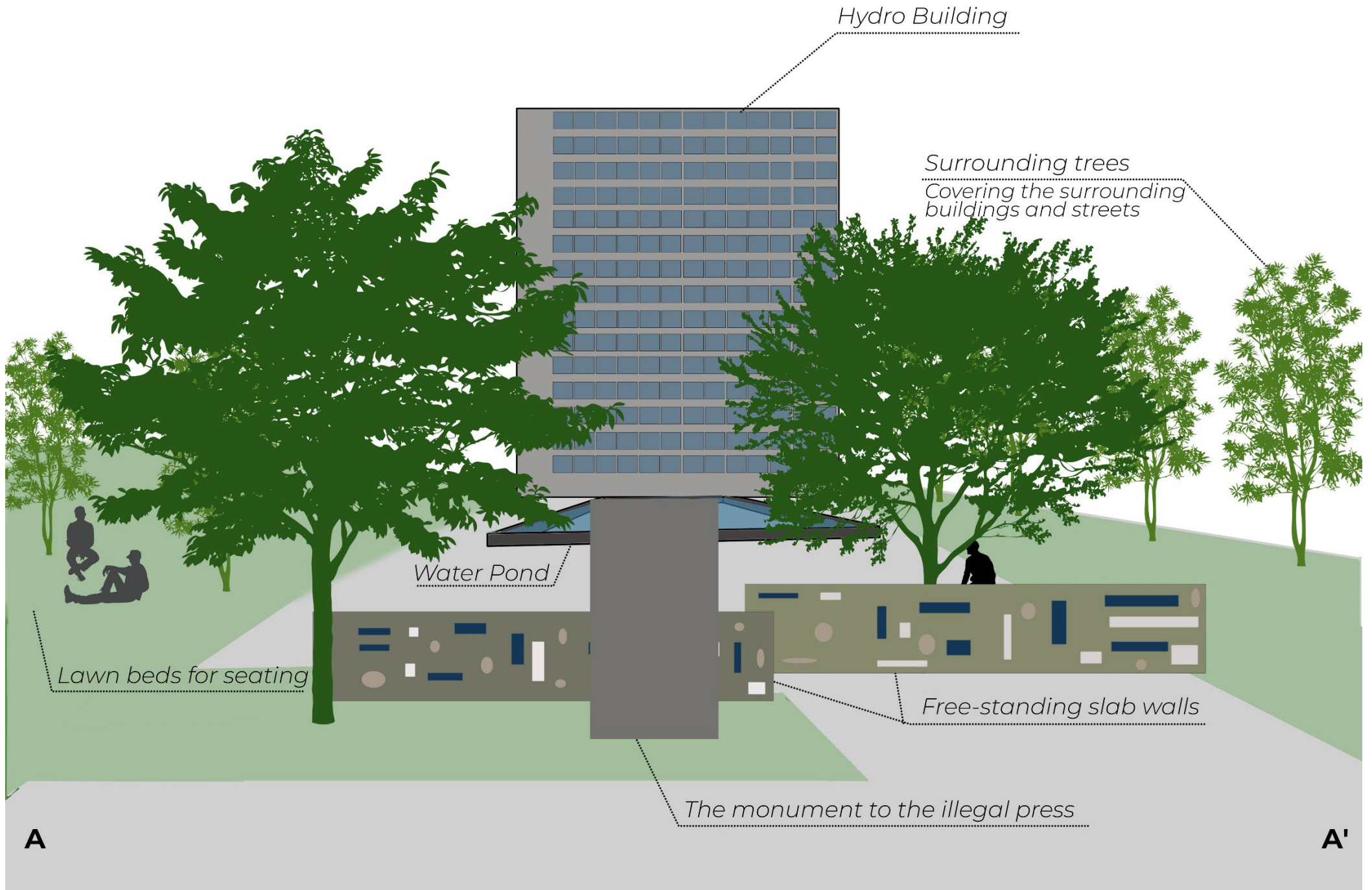


Figure 16. Main elements of Hydroparken

### 3.3 Oslo's welfare landscape in the 1990s

According to Hauxner, what can be understood about the general concept design of gardens in the 1970s and 1980s era is that the popular rectangular form of the post-war era was replaced by formlessness in the 1970s and curved shaped in the 1980s, as the rectangular form was perceived as limiting and unimaginative. Thus, the circle shape made a comeback in design (Hauxner, 2003).

Given the scant literature on the condition of landscape architecture design projects of the 1990s, and since I have chosen to research Vaterlandsparken as my second case study, I conducted an interview with Alf Haukeland, a senior landscape architect who was involved in the layout design of Vaterlandsparken. I asked about the design intentions and focus of that time. The following information results from the interview conducted on the 11<sup>th</sup> of March 2024:

“The first intention of Vaterlandsparken was to design public green space with a modern, urban, and artistic quality that was not overly complicated regarding the overall plan. The landscape architects of this park was concerned with designing the park with soft and urban elements, focusing more on vegetation in conceptual levels such as the main beam (strekket) along Sonja Henies` s plass and the framing of the park with rows of trees. They focused less on the surface where people were supposed to walk or stay and considered incorporating as few flowers as possible, prioritizing trees and shrubs to reduce maintenance. They inclined towards a less sophisticated landscape and vegetation design.

However, the plan of the park has not been fully completed due to multiple ideas and comments from people who were responsible in the park department (in various positions), making it difficult to reach a consensus on some issues. The intention of this park was both to expand the city center to the east and also to make a local park for residents of the eastern area.

From the 1990s until today, landscape architecture gradually gained more importance, and the number of landscape architects and landscape architecture offices has increased” (Haukeland, 2024).

Moreover, Ellefsen, a Norwegian senior landscape architects, mentions that “In the last 20 years, from 1990 to 2010, landscape architecture has gained much greater importance. The field is larger, and the expertise is more in demand, especially in the urban landscape.” He also highlighted the ‘ecological’ perspective and the role of landscape architecture as ‘infrastructure’ in the urban context of today (Ellefsen, 2010, p.27).



### 3.4 Vaterlandsparken

‘Vaterlandsparken,’ with an area of around 5000 m<sup>2</sup>, is a district park (13.3 landskapsarkitekter & Haukeland, 1996) located in only 500 meters to the northeast side of Oslo central station. It is located south of Brugata street (Figure 17), and west of the Akerselva River (Figure 18). This Park is close to Grønland in the east, Oslo Spektrum and Lilletorget in the west, and Radisson Blu Plaza Hotel in the south (figure 19), situated in one of the most crowded districts of Oslo.



Figure 17. Location of the Vaterlandsparken- Google Map of Vaterlandsparken. (2023). Available at: Google earth (accessed: 16.12.2023).



**Figure 18. Akerselva River in the east (2023)**



**Figure 19. Surrounding buildings - Radisson Blu Plaza Hotel in the left side and Oslo Spektrum in the right side (2023)**

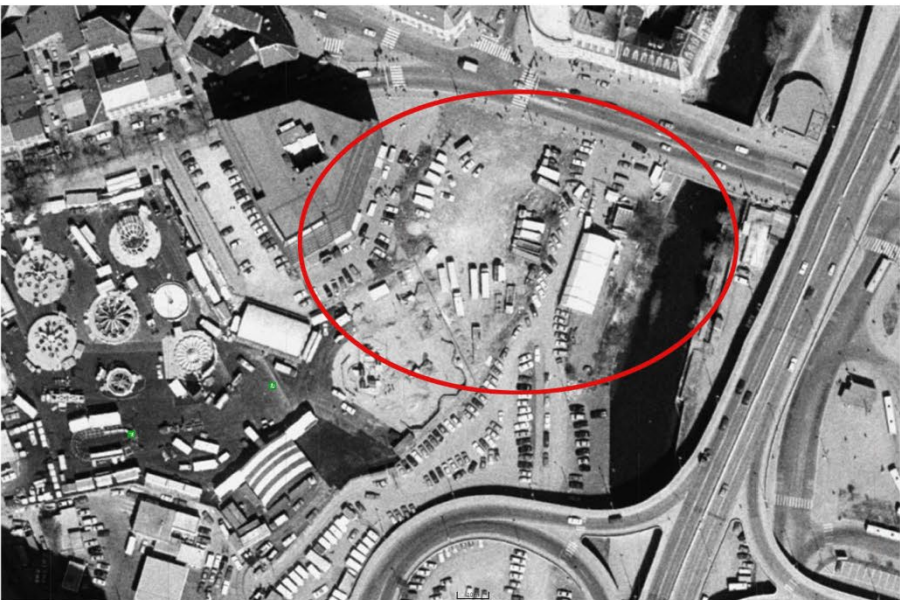
### **3.4.1 Tracing Vaterlandsparken's history**

Reviewing the historical map shows that the area used to have some constructions in 1956. After that, in maps from 1984, there was a car parking lot (Figure 20). This area was originally 'zoned' to be a front site of a mosque and was supposed to become an Islamic cultural Center. However, financial problems changed the plan (Oslobyleksikon, s.a.). Due to its location along the Akerselva river, as one of the main park routes of the city, this park was designed.

The intention of this park was to create a calm and unified place among the existing buildings and to mitigate the traffic effects of central train station, bus terminal, and commuting between existing buildings. The site was commissioned in 1993-1994 as a public park by Oslo municipality (13.3 Landskapsarkitekter As, 1991).



**1956**  
*Buildings*



**1984**  
*Parking*



**1997**  
*After the construction of the park*

**Figure 20. Väterland's Timeline in 1956, 1984, 1997- Maps of Väterlandsparken.** (1956, 1984, 1997). Finn. Available at: <https://kart.finn.no/> (accessed: 04.03.2024).

Since 1988, there have been several plans for the construction of the park with different ideas for the location of trees, material of the floor, and levels of the ground. The ultimate plan, which was implemented, decreased the amount of hard space with precise levels for being a passage zone and increased the 'park' features, creating a softer form by replacing some parts of the square floor with grass, providing more room for people on the lawns. One of the most important part of the park is what they used to call the 'forest,' which consists of rows of trees in the north along Brugata and in the west, which is believed to have been successful in creating a 'place' (landskapsarkitekter & Haukeland, 1996, p.30). According to the designing documents of the project, the main design criteria of the project are as follows (Haukeland, 1992):

- "The park's expression should be **independent, strong, and unifying**.
- The park should have a **green main character**, with grass being the dominant element in the sloping part and should contain a **significant number of trees**.
- Contribute **to improving the local climate**.
- The park will end at the Akerselva Environmental Park (river park), so it should have **good pedestrian and visual contact** between the riverbanks.
- Park elements include water, area for outdoor events, mingling area (for Oslo Spektrum), Pavilion, and outdoor dining.
- Important walkways must be secured.
- Great wear resistance on surface and equipment.
- Driving access to the Vaterland pump station ensured.
- There should be no parking in the park."

In addition, it has been suggested to include also the following:

- "To a significant extent, **environmental considerations** must be taken into account when designing, choosing materials, and operating plans for the park.
- The park will be **all-year park**" (Haukeland, 1992).

Regarding the function, designers have defined the following terms as the central focus in designing the park:

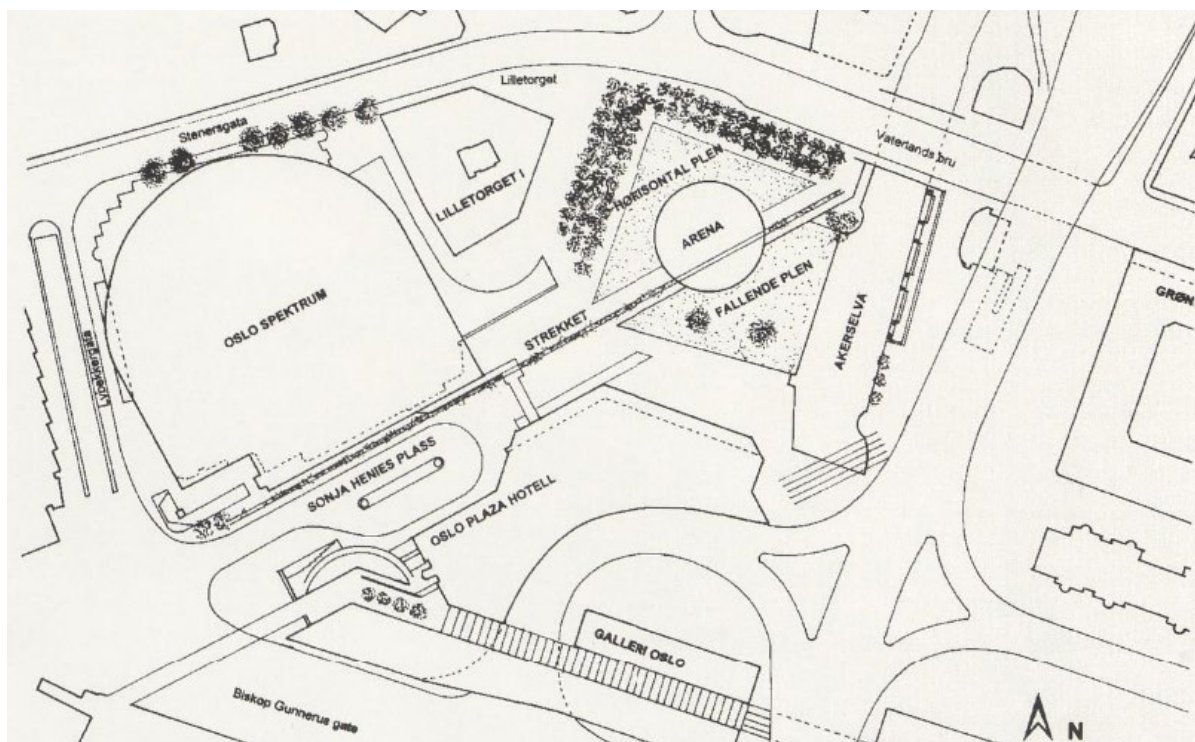
- "All-year Park: the park should be attractive and functional in all seasons.
- Activity Park: the park should be suitable for living, playing, and activity. However, its size and location limit the possibility of practicing team sports such as football, handball, etc." (Haukeland, 1992).

Functions that should be taken care of within the framework of the park:

- “Mingling area (for Oslo Spectrum): the requirement for an area with hard paving near spectrum’s main entrance is set at 3000 m<sup>2</sup>.”
- Gates towards Akerselva environmental park: making of access, information about the river park.
- Area of activity: an open area that should be able to provide space for events, play and activity.
- Operation Service: it may be appropriate to fit in a park pavilion in the size of a 200 m<sup>2</sup>. Current main activities: operation of outdoor dining, kiosk operation. In addition, the pavilion should be able to house the park's service functions such as: rental of skates, toilets, operating room for maintenance personnel.
- Flea market: a flea market similar to what is held on the Vestkanttorvet square may be applicable in weekends, and the area for this should be outside the ‘activity area’.

Main elements of the park are the arena, vegetation, floor space, park plan, the ‘stretch’ (diagonal walkway), lighting, art, water” (Haukeland, 1992).

In Figure 21, the park plan is shown.



**Figure 21. Plan of Vaterlandsparken designed by 13.3 Landskapsarkitekter & Alf Haukeland, 1996**

Figure 21. 13.3 Landskapsarkitekter, & Haukeland, A. (1996). Sonja Henies Plass og Vaterland Park, Oslo. *Byggkunst = The Norwegian review of architecture*, 6(78): p.27.

According to reviews, the park was “intended to be a setting for both activity and relaxation” (Landskapsarkitekter & Haukeland, 1996, p.28). Reviews from that time described the park as modern and distinctively shaped to conclude a journey through the river’s history. Reviewers believed that the park’s function should encompass recreation, serving as a traffic artery, and functioning as a floor in an urban space. In the 1982 competition program for Vaterland, the aim was to create open space for Vaterland as a hub for public transport and an attractive environment for central Oslo. However, it was later realized that the park was unlikely to become a place for recreation and sunbathing due to its close proximity to urban spaces with buildings blocking sunlight, lack of good views, and excessive noise (Landskapsarkitekter & Haukeland, 1996).

Critics, just two years after construction, believed that “It is heroic and meritorious to try to create a park there, but it should not have happened at the expense of the opportunity to add order to this messy urban space at ground level” (Landskapsarkitekter & Haukeland, 1996, p.29).

The initial plan underwent some changes, and the primary idea was not well constructed. For example, the ‘stretch’ (strekket) line, intended to create a green beam from Schweigaards gate to Brugata street using steel racks and 8 steel wires for planting trees, with the aim of clearly showing the connection with river in the north side and urban space in the south side, was only completed in Sonja Henies's plass. Additionally, the central idea for the landscape involved a very simple and precise handling of levels, with two main levels and the park supposed to be about 60 centimeters higher than Sonja Henies plass according to street levels. However, during planning, an intermediate level was introduced on which the arena was placed. In the central area of the park, there was a plan to connect the pipe system of the area to the city hall's ice-skating system (Oslo Spektrum) to provide ice in fall and winter, or to have stone paving. Instead, it was decided to use temporary asphalt, which has become permanent now (Landskapsarkitekter & Haukeland, 1996).

### 3.4.2 Characteristics of Vaterlandsparken

Vaterlandsparken is a square park with a circular arena in the center and the straight-line pathways. This park is located in the bustling area of Oslo city, surrounded by shopping malls, buildings and various activities, as well as passing vehicles, which contribute to sound pollution.

Being located in a busy center has resulted in widespread use by different groups of people, especially those who visit the city center. However, due to the presence of drug dealers, individuals may not feel completely safe and calm in this space.

The important features of this park related to its design concept and usage can be demonstrated as follow:

#### - **Form**

The important elements in the landscape of vaderlandsparken are the main line (strekket) (Figure 23), floor, arena (Figure 24), the connection between park and river with lawns which was decided to be a stay area for enjoying the morning sun, and the connection between Brugata and park which has been planned with so-called 'forest' including rows of oaks (Figure 25) (13.3 landskapsarkitekter & Haukeland, 1996, p.28) which has created a soft barrier to the street.

Furthermore, the connection with the river, as the most important ecological element of the park, is delicately designed with concrete stairs (Figure 26).

In Figure 22, rows of trees, main Arena, lawn beds, and the river are highlighted.

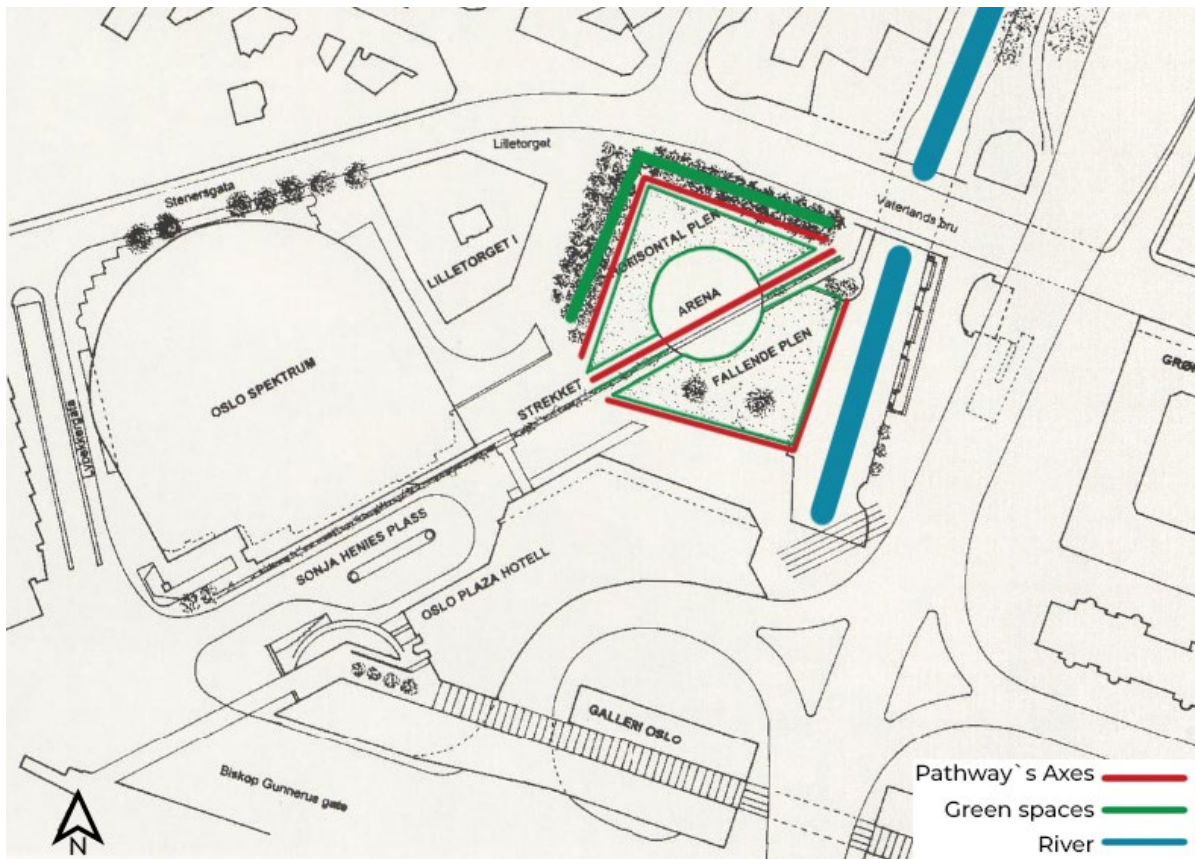


Figure 22. The main structure of the plan



Figure 23. Main line (strekket) (2023)



Figure 24. The arena (Central open space) (2023)





**Figure 25. Rows of trees (so-called forest) (2023)**



**Figure 26. Connection with Akerselva river (2023)**

**- Function**

Reviewing old Google Maps indicates that the lawns used to serve as seating areas (Figure 27), and the arena has been utilized for various facilities, such as a large chessboard, kiosks, and recreational facilities (Figure 28).



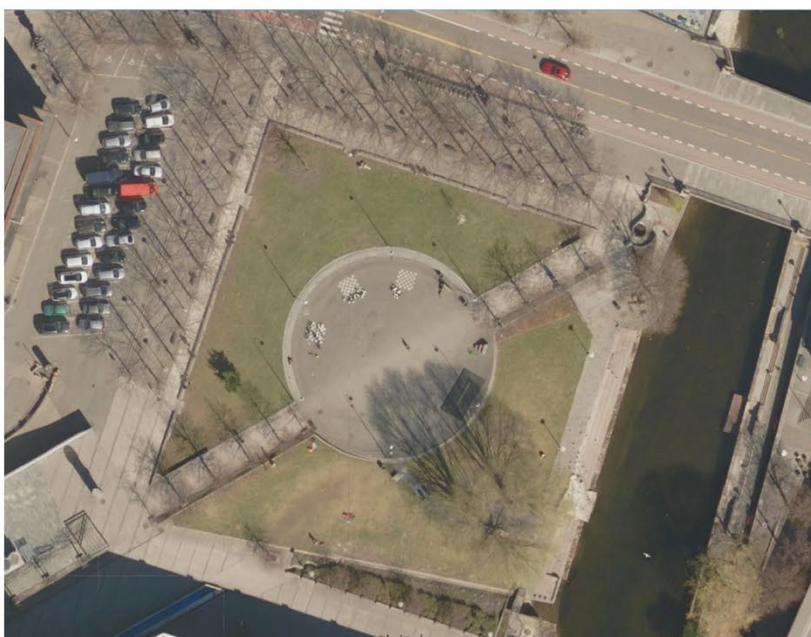
2004

Lawns were widely used for seating



2007

Lawns were widely used for seating



2017

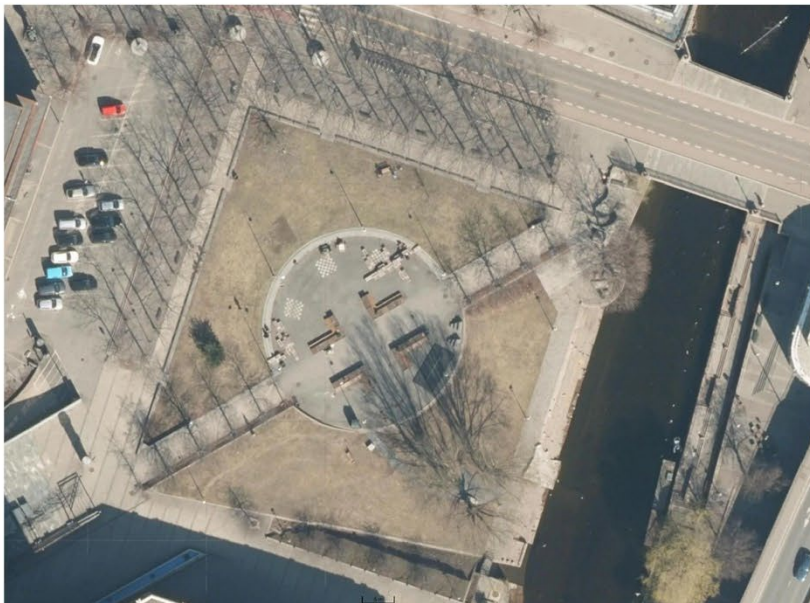
Temporary Large Chess boards in Arena

**Figure 27. Function of the Vaterlandsparken in 2004, 2007, 2017-** *Maps of Vaterlandsparken. (2004, 2007, 2017). Finn. Available at: <https://kart.finn.no/> (accessed: 04.03.2024).*



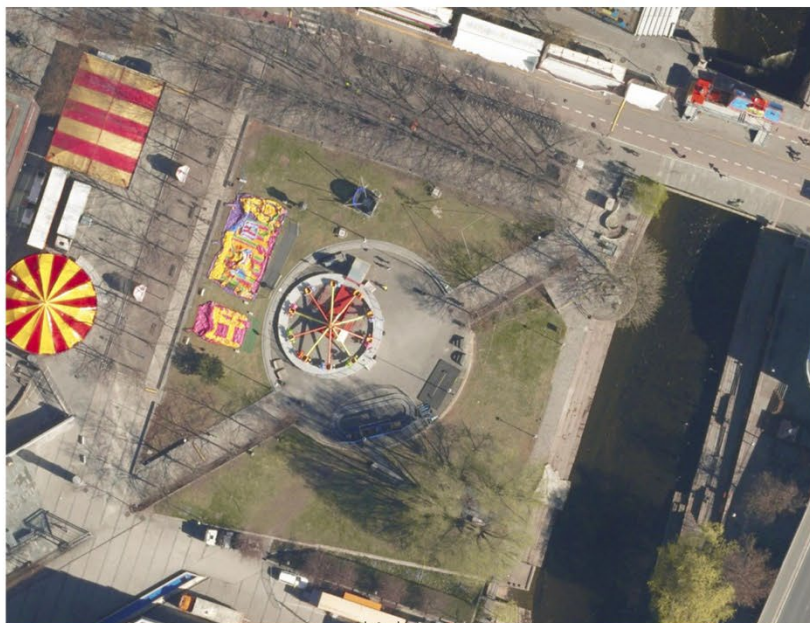
2020

Temporary recreational facilities in Arena



2021

Temporary recreational facilities in Arena



2023

Temporary recreational facilities in Lawns and Arena

**Figure 28. Function of the Vaterlandsparken in 2020, 2021, 2023-** *Maps of Vaterlandsparken. (2020, 2021, 2023). Finn.* Available at: <https://kart.finn.no/> (accessed: 04.03.2024).

In the design plan of the park, the main function was to use the lawn beds for seating and relaxing, and the main arena for temporary events and activities. In recent years, some other facilities have been permanently added to enhance the function of the park, such as chess tables and a ramp line (Figure 29 and 30). However, another aspect of the park is evident as a location for drug sales (Sand, 2021).



**Figure 29. Chess table (2023)**



**Figure 30. Ramp line (2023)**

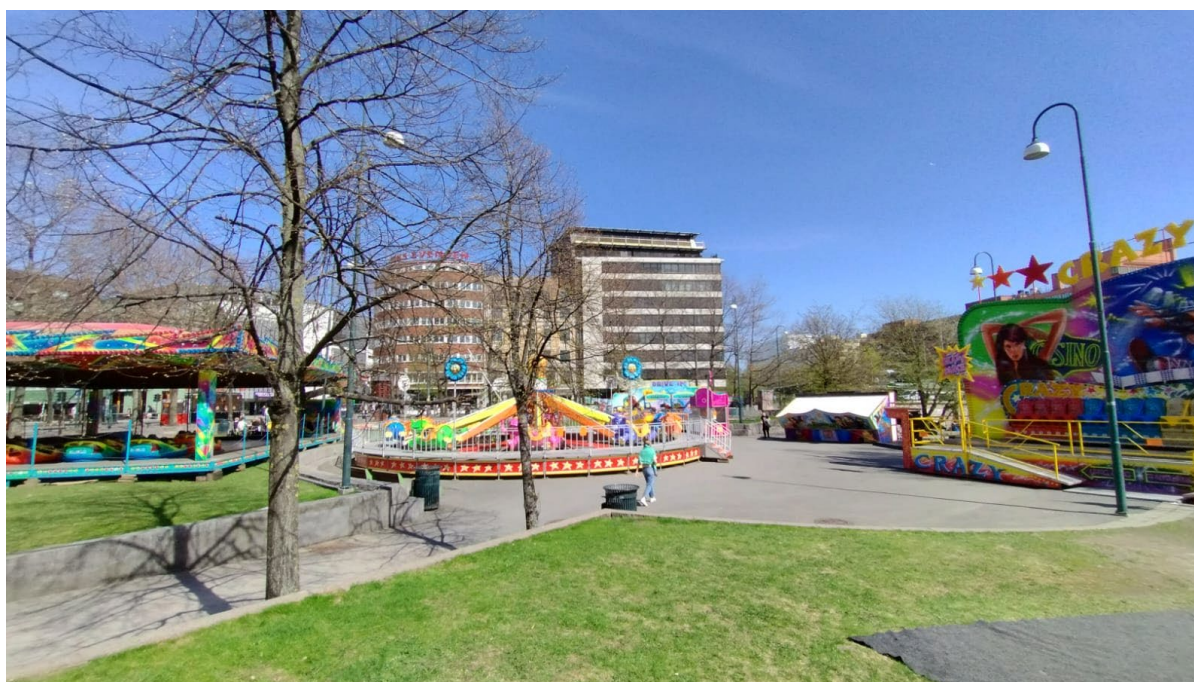
There have been several plans aimed at utilizing the opportunity of having a public space for the benefit of people by implementing facilities for example chess boards in 2015 (Figure 31).



**Figure 31. Chess facilities in the arena 2015**

Figure 31. Issuu, (2015). Erfaringer fra sjakkplassen. Available at: [https://issuu.com/katjabratseth/docs/erfaringer\\_fra\\_sjakkplassen\\_2015](https://issuu.com/katjabratseth/docs/erfaringer_fra_sjakkplassen_2015) (accessed: 12.02.2024)

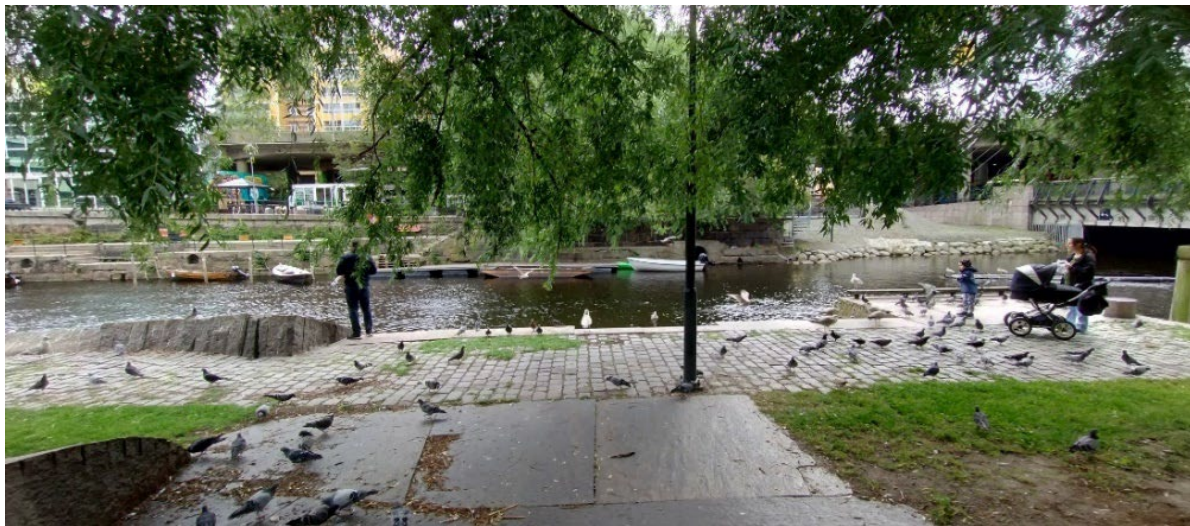
Recently, in spring 2024, large recreational facilities have been installed in the main arena and lawn beds, which have changed the function of the park to that of a small amusement park (Figure 32). This change may also reduce the number of drug sellers due to the presence of children.



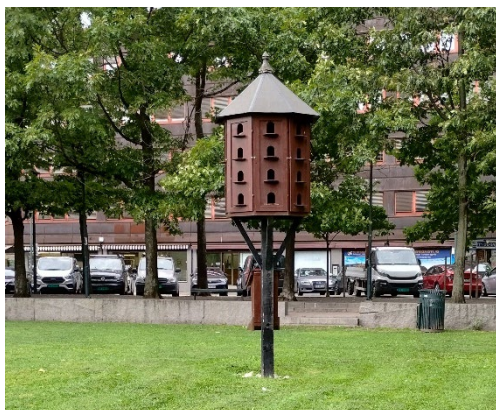
**Figure 32. Installation of new amusement facilities in the park 2024**

- **Species and Vegetation**

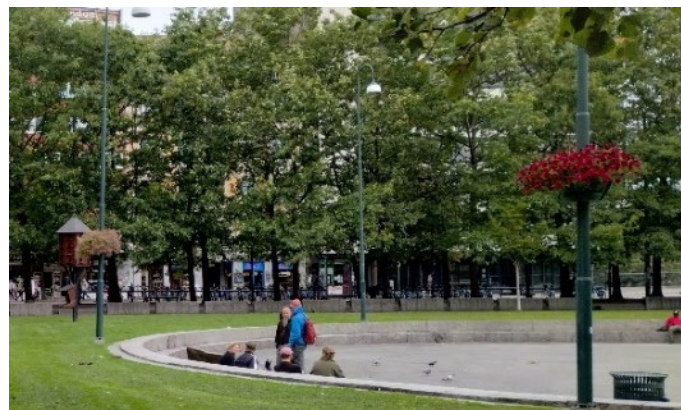
As mentioned before there are two rows of trees in the west and north sides of the park along the Brugata, and one row of trees that leads to the arena at equal distances. Additionally, there are some trees positioned at longer distance along the river, which “symbolize the transition from nature's freer and softer conditions to the city's shaped hard space (13.3 Landskapsarkitekter As, 1991). There is a clear contrast between hard surfaces surrounding the park and the green vegetation within the park (landskapsarkitekter & Haukeland, 1996). One notable feature of the park is the presence of birds (Figure 33), attracted by the nearby river, trees, and recently added nests (Figure 34). This feature contributes to the vibrant ecosystem within the park. Furthermore, a small variety of flowers in flower boxes is noticeable, which seems to have been added recently (Figure 35).



**Figure 33. Presence of Birds (2023)**



**Figure 34. Nest for birds (2023)**



**Figure 35. Flower boxes (2023)**

- **Furniture and materials**

The pavement of the pathways is concrete, and the central area is asphalt; however, the initial plan was to have a unified concrete floor (13.3 landskapsarkitekter & Haukeland, 1996), and they intended that “The floor should act as a carpet in the space between the buildings” (13.3 Landskapsarkitekter As, 1991, p.429). Moreover, variety in the type of furniture, such as concrete and wooden bench in different spaces, can help define different atmosphere, so that people with different needs enjoy the place (Figure 36).



Figure 36. Different kinds of benches (2023)

- Art

There is one sculpture in the entrance of the park from west, which is a bust of Ólafía Jóhannsdóttir, an Icelandic feminist pioneer and social worker, executed by Kristinn Pjetursson in 1930. It has been placed in the vaterlandsparken since 2004 (oslobyleksikon, s.a.) (Figure 37).

In addition, there is an artistic approach to demonstrate the connection of the park to the river with a big plate of stone with metal balls (Figure 38).



Figure 37. Bust of Ólafía Jóhannsdóttir (2023)



Figure 38. Stone plate with metal balls (2023)



The sculpture "Dykker Installation," created by Ola Enstad, had been installed at the beginning of the Akerselva river, southeast of Vaterlandsparken, since 1990, prior to the construction of Vaterlandsparken (Figure 39).



**Figure 39. Dykker Installation at Akerselva river.** *Image of Dykker Installation.* (2024). Available at: Google earth (accessed: 05.12.2024).

#### - **Future plans of the park**

In 2022, a feasibility study of Vaterlandsparken was conducted, exploring the possibilities of future park design (Figure 40). The study resulted in a flexible design that can be developed over time to make the park more functional, usable, attractive, and safer as a public space. The design aims to preserve and enhance existing qualities, such as trees, and better utilize the river. The plan addresses both physical and social dimensions, focusing on mobility and pedestrian access, and aims to transform the main arena into a green recreational area for people (NLA, s.a.).



**Figure 40. Proposed future development of Vaterlandsparken designed by Sweco 2022**

Figure 40. NLA, (s.a.). *Feasibility study vaderlandsparken*. Available at: <https://landskapsarkitektur.no/prosjekter/mulighetsstudie-vaterlandsparken> (accessed: 11.02.2024)

**- Overview of key features in Hydroparken**

The main features of the park are the main arena, rows of trees, the river, the lawn beds, the presence of birds—especially along the river—and the numerous visitors. The rows of trees effectively separate the park from the north and west parts. However, being surrounded by numerous buildings of different colors, architecture, and heights, some of which are taller than the trees, has led to visual chaos.

Although the main arena is at a lower level compared to surrounding streets, which, in tandem with rows of trees, has helped decrease the noise from surrounding car traffic and passersby, individuals may still be bothered by noise. The river in the east boasts the most advantageous environmental quality, well connected to the park by design details. The area along the river is a valuable spot for children to play and for birds to improve biodiversity. In Figure 42, these elements are shown.



Figure 41. Section line of Vaterlandsparken's sketch

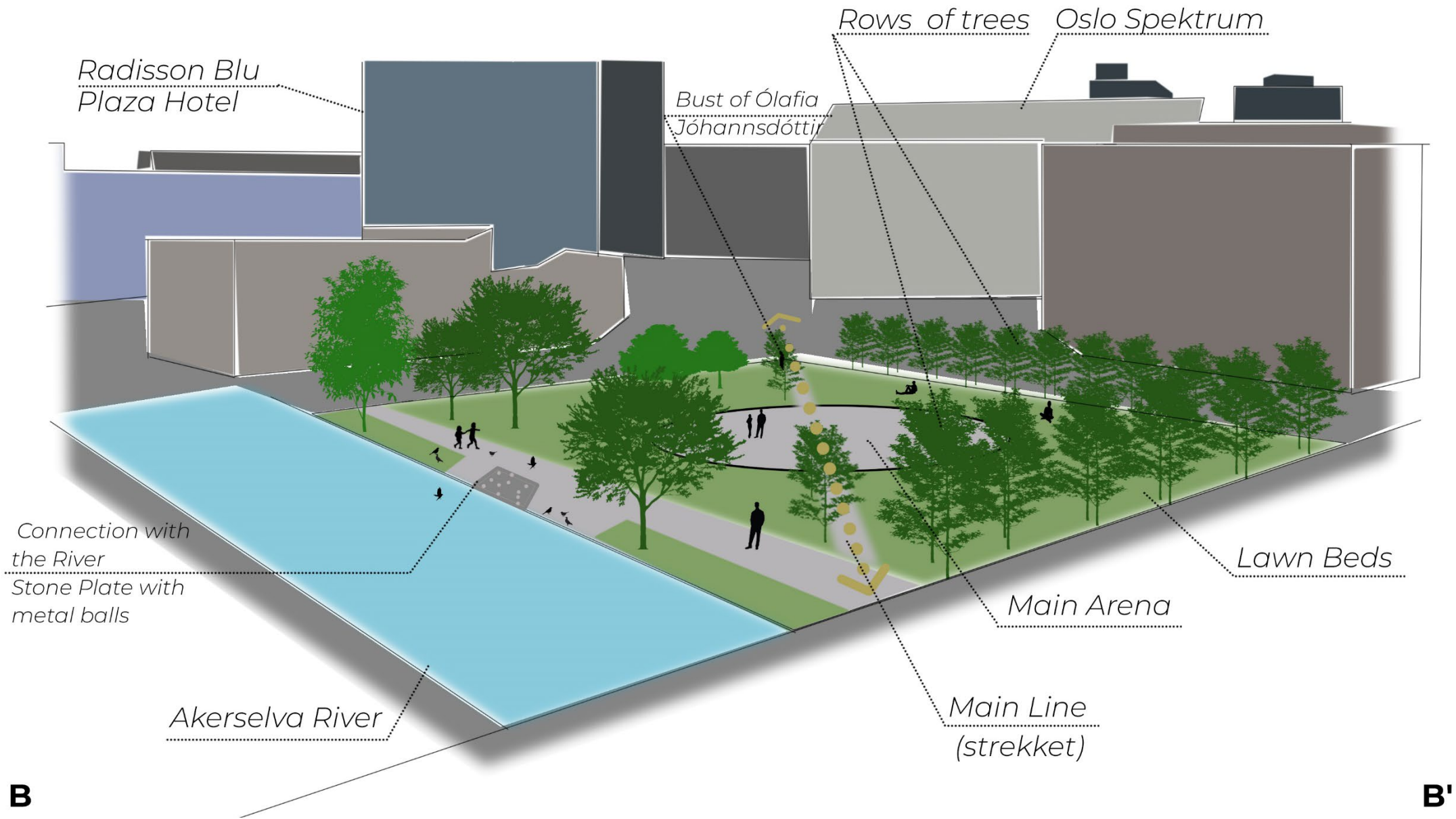


Figure 42. Main elements of Vaterlandsparken

### **3.5 Oslo's welfare landscape in the 2020s**

What we can see obviously in the design of contemporary public parks is a return to some values of the inter-war period when according to Hauxner the plant was “self-set, spontaneous, free and natural” (Hauxner, 2003, p.311). Uncontrolled, natural plants were appreciated and interpreted as a symbol of freedom, where individuality was important (Hauxner, 2003).

In the design of contemporary public green spaces, some points are significantly emphasized. It is not unreasonable to argue that climate change, global warming, and environmental crisis have become the predominant challenges of recent decades, arising from fast-paced city development, intense human activities in nature, and a growing number of constructions in urban areas. Therefore, public green spaces are not just considered for leisure time with recreational aim but are also regarded as nature-based solutions for mitigating environmental problems in cities worldwide. Nature-based Solutions (NbS) are increasingly implemented to “maximize the provisioning of ecosystem services and improve the life quality of city dwellers” (Sikorska et al., 2021, p.1).

Moreover, in addition to 'walkable spaces, green spaces, and community spaces' already recognized for human well-being, “promoting biodiversity is important and is linked to human well-being” (Taylor & Hochuli, 2015, p758). Studies indicate a correlation between individuals' well-being and the level of biodiversity in their residential areas (Maller et al., 2019). Biodiversity is crucial for a healthy ecosystem, and human well-being is connected to ecosystem functioning. Various strategies have been implemented worldwide, such as the “development of green infrastructure, water management, green and blue spaces” (Taylor & Hochuli, 2015, p758). In the new design of public green spaces of cities, landscape architects are increasingly focused on enhancing biodiversity through various actions. Considering spontaneous vegetation and natural habitats, or “spontaneous wild vegetation (SWV)” (de la Fuente de Val, 2023, p.1), has helped improve biodiversity and provide significant ecological services (Del Tredici, 2010).

In addition, from a democratic point of view, authorities attempt to ensure an adequate provision of public green spaces in every neighborhood so that everyone, especially low-income inhabitants, can spend time in these public places. While this has been the aim of designing public green spaces in the past, it has recently become even more important and is receiving greater attention.

### 3.6 Jordal Park

Jordal park is situated 2.5 kilometers northeast of Oslo central station, in a residential area (Figure 43). It is a newly constructed public park surrounding a sports pitch from 1930 (Figure 44). Additionally, Jordal Amfi (Figure 45), built for the Oslo winter Olympic Games in 1951 (Henninglarsen, s.a.), along with Jordal youth hall (Figure 46) and Jordal sport hall (Figure 47), are located on the northwest and west sides of the park. These facilities offer various alternatives for working out and exercising.



**Figure 43.** Location of the Jordal Park – Google Map of Jordal Park. (2024). Available at: Google earth (accessed: 05.02.2024).



**Figure 44. Sports pitch (2023)**



**Figure 45. Jordal Amfi (2023)**



**Figure 46. Jordal Youth Hall (2023)**



Figure 47. Jordal Sport Hall (Idrettshall) - (2023)

### 3.6.1 Tracing Jordal park's history

The Hille Melbye architectural office was Responsible applicant for the park and stream project from 2017 to 2020, while the Henning Larsen studio was responsible for Landscape Architecture, Master Planning, and design of the park, which was completed in 2022<sup>1</sup> (Hille Melbye, s.a.; Henninglarsen, s.a.) .

“After over 60 years of use, a new sport Amfi was built, which became the catalyst for the upgrade of the park around it with the goal of creating a more integrated and social connection to the surrounding urban setting” (Henning Larsen, s.a.). “It has been a goal to exploit the social potential of the interface between buildings and parks to a greater extent than its predecessor did” (Hille Melbye, s.a.).

The timeline of constructing of Sports Pitch, Jordal Amfi, Jordal Hall, Youth Hall, the new construction of Jordal Amfi, opening the stream, and the construction of Jordal park is shown in Figures 48 and 49.

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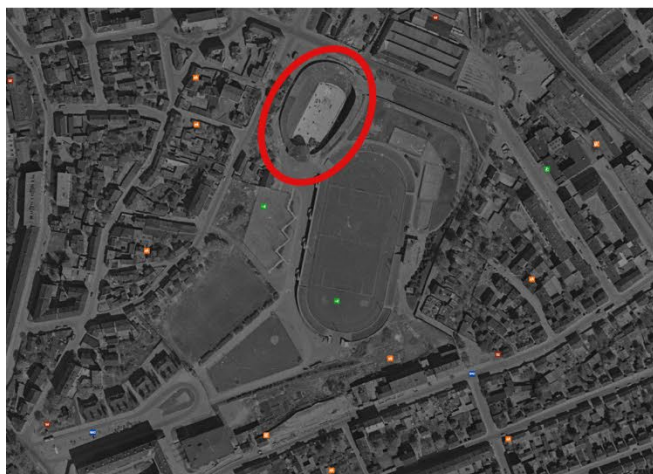
<sup>1</sup> Since Jordal park is a large-scale project with different spaces, other consultants were also involved in the development and design of the project, covering various subjects.





**1947**

*Sport Pitch*



**1956**

*After the construction of Jordal Amfi*



**1997**

*After the construction of Youth Hall*



**2004**

*After the construction of Sport Hall*

**Figure 48. Timeline of Jordal Park in 1947, 1956, 1997, 2004 – Maps of Jordal Park. (1947, 1956, 1997, 2004). Finn.**  
Available at: <https://kart.finn.no/> (accessed: 04.03.2024).



**2017**

*Construction of  
New Jordal Amfi*



**2021**

*Opening the  
stream*



**2022**

*Constructing the  
Jordal Park*

**Figure 49. Timeline of Jordal Park in 2017, 2021, 2022 - Maps of Jordal Park.** (2017, 2021, 2022). Finn. Available at: <https://kart.finn.no/> (accessed: 04.03.2024).

In Figure 50, the final map of Jordal park is shown. There are two entrances to the park from the north and south sides. Several zones can be found within the park: in the north, there is a viewpoint and water dam; in the east, there is a playground; in the west, the running stream of Hovinbekken has been reopened. This stream serves as local stormwater management (Skjerdingsstad, 2023); and in the south, there is a skate park and barbeque facility. Sloping green areas, various benches, walking and cycling paths can be found in different parts of the site.

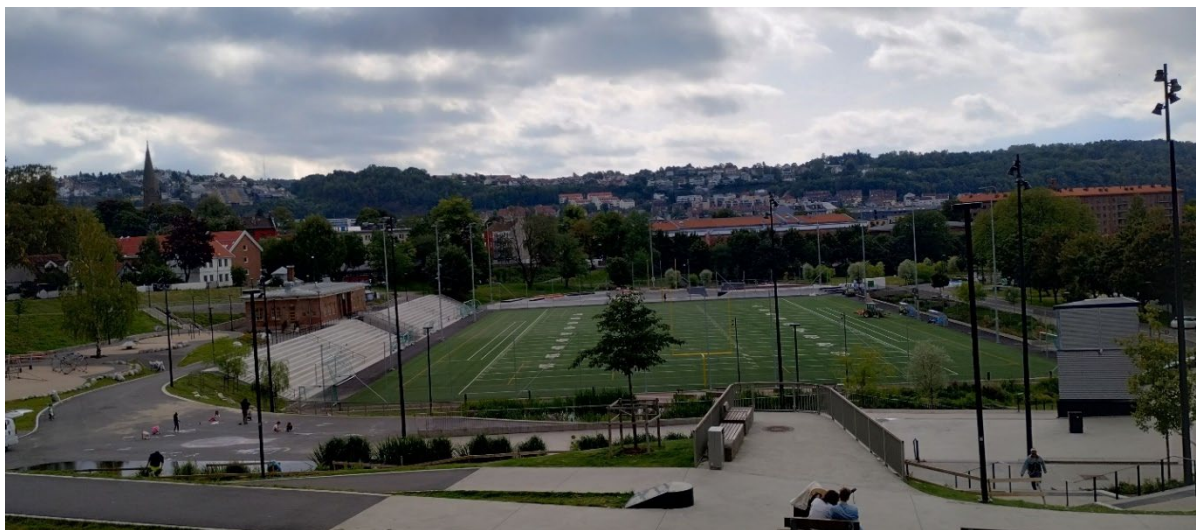


**Figure 50. Plan of the Jordal Park designed by Hille Melbye and Henning Larsen studio 2020**

Figure 50. Hille Melbye, (s.a.). *Jordal Amfi*. Available at: <https://hmark.no/projects/jordal-idrettspark/> (accessed: 19.02.2024).

### 3.6.2 Characteristics of Vaterlandsparken

Jordal Park is considered a large-scale park in Oslo city serves mostly as a local park, while offering various activities and sports facilities both inside and in the surrounding area. This diversity of activities and sports attracts different groups of people regardless of their age, gender, living area or vulnerability condition, as there is something for everyone in this park. It is a combination of a myriad of vegetation species that enhance the biodiversity and a wide range of activities that welcome all groups of people. One of the most interesting features of the park is the panoramic view of Oslo city, which adds to its appeal (Figure 51).



**Figure 51. View from the park to the surrounding (2023)**

Jordal Park encompasses various elements, ranging from different types of species to various kinds of furniture and activities, which are as follows:

- **Form and Conformity to the terrain**

The dominant idea of the park is to preserve the environment concerning the form of the earth, topography, and opening the Hovinbekken stream; it seems that in the design, they have tried not to disturb the natural features. So, the paths are the combination of straight and winding lines, conforming to the shape of the land, in different levels and various forms (bridge, asphalt, concrete, wooden, stairs, ...), which has created interesting, unexpected and sometimes surprising views; however, it can sometimes be confusing to find your way. Other than the main paths, there are several paths among the water and vegetation, which improve the sense of adventure. The vegetation spaces and lawn beds do not follow any specific form either (Figure 52).



**Figure 52. Various Paths (2023)**

- **Function**

As mentioned before, apart from the sports pitch, several defined activities for different ages can be found in the park (Figure 53), including sitting and enjoying nature and the view of the city from the viewpoint (Figure 54), children playing in the playground (Figure 55), outdoor workout equipment (Figure 56) skating in the skatepark (Figure 57), and having picnics and using the barbecue space (Figure 58).

The steep lawns of the park are used as a place where children play and slide or do tube skiing in the winter. Following feedback from parents visiting the park, placing relatively large stones in the playground and at the end of this steep path has made this place unsafe for children, which worries parents during the snowy months.

It should be noted that despite being classified as a large-scale park, its location within a residential area makes it effectively serve as a local park for residents of surrounding apartments who lack sufficient open space within their homes.



**Figure 53. Various spaces for different age groups (2023)**



Figure 54. Viewpoint in the north (2023)



Figure 55. Playgrounds in the east (2023)



**Figure 56. Outdoor workout equipment in the east (2023)**



**Figure 57. Skate park in the south (2023)**



**Figure 58. Barbeque facility in the south (2023)**



- **Combination of green spaces, water, and stones**

The use of a wide variety of different species of trees, vegetation, and flowers in the style of 'nature-like' is clearly evident in this park. Dense vegetation can be seen, especially in the western part by the stream (Figure 59), while scattered green spaces dominate in the eastern part (Figure 60). Since the main structure maintains a nature-like character, there is a combination of water, vegetation, and stones in different sizes (Figure 61), here and there.



**Figure 59. Dense nature-like vegetation in the west side (2023)**



**Figure 60. Sloping space and scattered plants of east side (2023)**

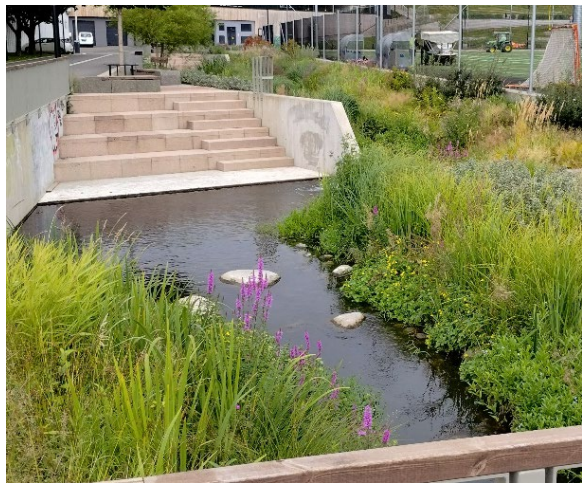


Figure 61. Use of stones (2023)

- **Furniture and materials**

Similar to the variety found in vegetation and activities, the park's furniture exhibits a multitude of forms and materials. For example, benches of different levels, shapes, and materials like stone, wood, and concrete are scattered throughout. Furthermore, various lighting fixtures, differing in shape and height levels, enhance the park's ambiance (Figure 62).



**Figure 62. Some furnitures of the park (2023)**

- Art

The primary focus of Jordal park lies in its emphasis on nature and the environment, with the art of gardening being a prominent aspect. Furthermore, on the west side where a running stream flows, there is an artful creation of the sound of water through the incorporation of simple design features (Figure 63).



Figure 63. Designs of water and sound of water (2023)

The main elements of the park are shown in Figure 65. Unlike the neat structure of the two other parks, the image of Jordal Park shows a set of features. A wide variety of species, the soothing sounds of water in various locations, scattered stones, the lively presence of both children and adults, and the picturesque view of the city with a wide view of sky.

The significant difference in elevation between the park and the surrounding streets, with the wide variety of vegetation in the park, helps to separate visitors from the outside. This enhances the park's serene ambiance.



**Figure 64. Section line of Jordal park's sketch**

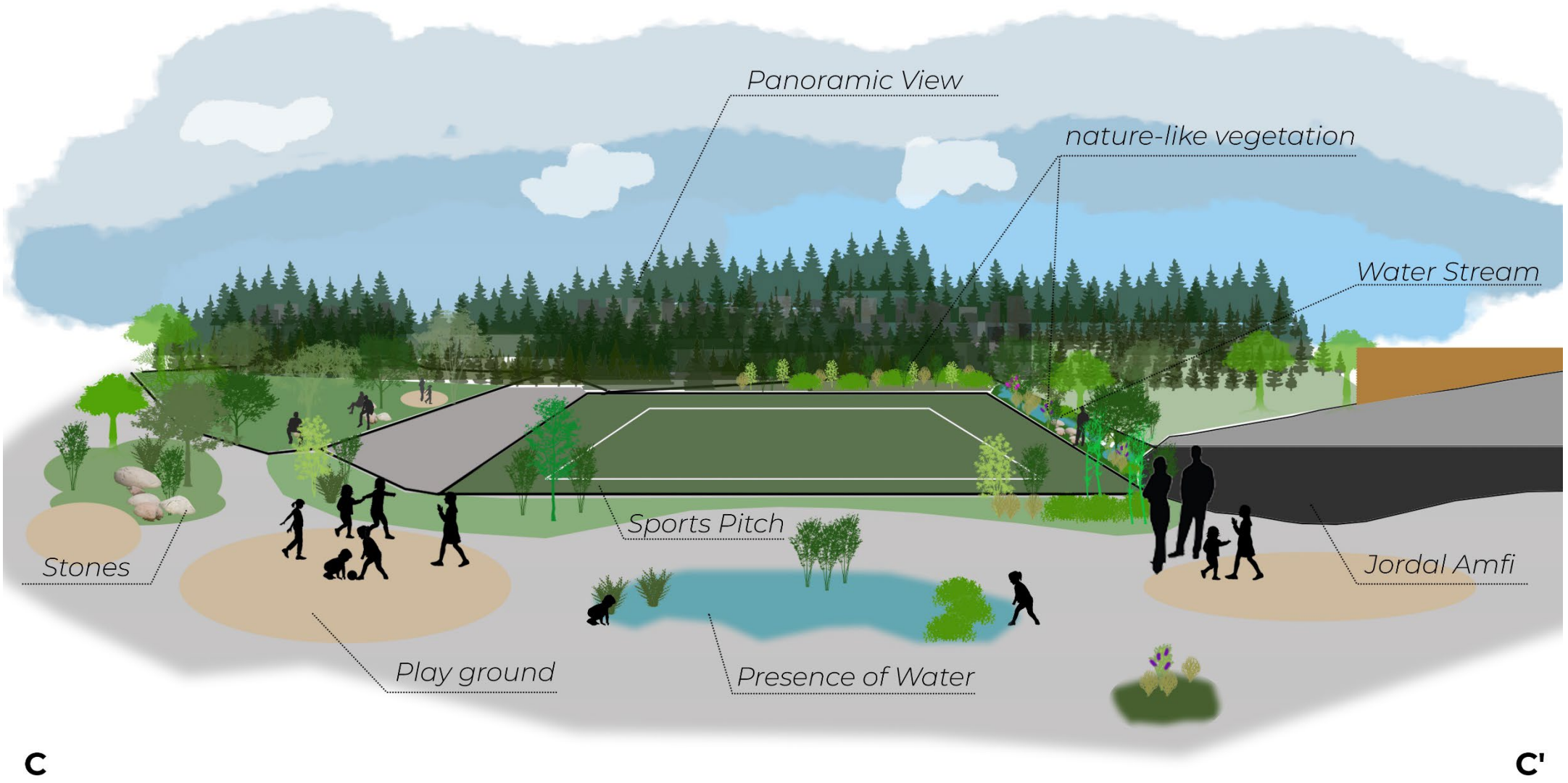
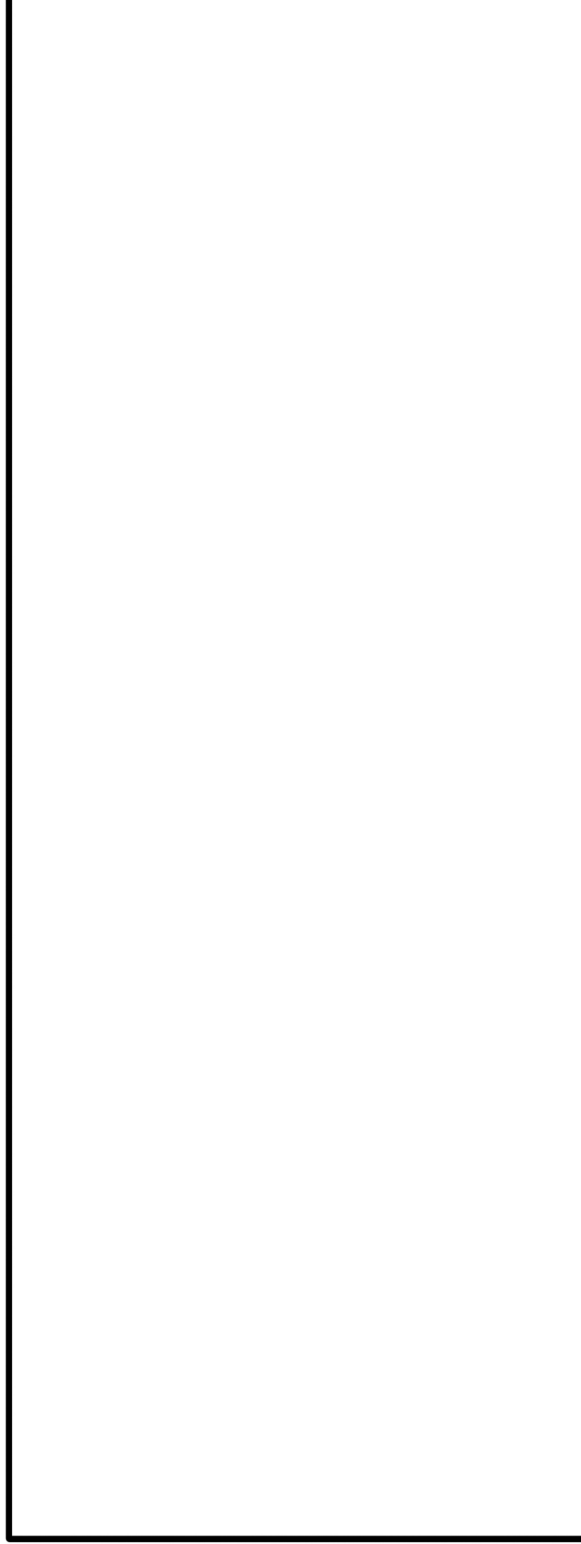


Figure 65. Main elements of Jordal Park



**Discussion**

#### **4. Discussion**

Based on the literature review and the study of the three mentioned cases, it becomes evident how the design of each case serves as a welfare landscape. The design of studied public green spaces aimed to enhance the well-being of visitors in terms of health and democracy aspects. Moreover, by comparing these case studies, it is now possible to identify commonalities and differences in the features and aspects considered by landscape designers. This, in fact, reveals the significant subjects, concerns, and issues of the historical periods in which they were designed.

To provide a comprehensive comparison between the cases, the analysis is conducted through the framework of three aspects of the welfare landscape in public green spaces, as acquired from the literature, including Environment, Function, and Art.

- **Environment**

As mentioned in section 2.2, environmental issues affect individuals' well-being. Therefore, it is crucial to consider nature-based solutions, such as public green spaces, to address environmental challenges and enhance individuals' well-being.

In Hydroparken, preserving existing trees from the elderly house was considered an important action in the 1960s, before the climate change crisis became widespread. Completing the lines of trees as a soft barrier successfully separates the park from the surrounding streets and buildings. Designing large lawn beds around a central water pond enhances the calm atmosphere for visitors, and provides a valuable space for seating and sunbathing, which directly result in individuals' well-being. The structured vegetation design which arose from the need for tranquility in the post-war period, significantly contributed to a calm and manageable environment. This also helped enhance visitors' well-being without any unexpected elements.

the Akerselva river benefits Vaterlandsparken as its most vital natural element, which is well connected to the park's design. This connection not only enhances environmental values but also promotes the well-being of visitors and provides a habitat for other species. The planned rows of trees (so-called forest), as a natural boundary, effectively separate the park from the bustling Brugata in the north and the car parking area in the west while promoting the mental health of visitors. These features with large lawn beds provide a view of the river, enhance both the visual and ecological characteristics of the park, and boost visitors' well-being. Furthermore, these measures are in line with the initial aim of the Vaterlandsparken project to improve the local climate in the busy center of Oslo. Recent installations, such as new bird nests and flower boxes, contribute to enhancing the ecological values of the park.



Climate change concerns and environmental issues have become increasingly prominent in recent years. The design of Jordal Park shows an effort to address these challenges by prioritizing biodiversity enhancement, flood management, and the improvement of local climate quality. In contrast to Hydroparken's structured approach, Jordal Park with more natural and rich vegetation, highlights contemporary confidence in natural processes. The emphasis on controlling nature seems to have declined, which is in contrast to the postwar concerns of the 1960s. This shift is obvious in Jordal Park's design, where vegetation can grow more naturally and spontaneously.

The environmental aspect has greater importance in Jordal Park's design compared to the other case studies. This importance is due to the urgency of the climate change crisis. Considering parks as solutions for mitigating climate change impacts led designers to focus on the ecological values of Jordal park. So, efforts are towards improving local climate conditions, enhancing visitors' well-being, and addressing climate change through various strategies. A key strategy is using natural vegetation to enhance biodiversity which is important for ecosystem health and human well-being as described in section 3.5.

Jordal Park consists of various species in a naturalistic form. In addition, design elements such as opening the stream, using water, and placing stones contribute to biodiversity enhancement which benefits visitors and local inhabitants. However, placing big stones around the playground has decreased children's safety during snowy months, as described in Section 3.6.2.

Jordal Park's environmental design elements, including elevation differences, lines of trees, and various species, helps to improve sensory experiences, local climate, and the health and well-being of both humans and various creatures in the park.

- **Function**

According to section 2.2 of this study, the function of public green spaces as welfare landscapes includes fostering social interactions, facilitating physical and mental health, and providing entertainment. These functions contribute to the enhancement of social and personal well-being.

Hydroparken, situated in an area identified by Skage (1963) as lacking daily green spaces, played a crucial role in enhancing democracy by providing access to green areas for residents. Although the area of the park is not large enough to accommodate physical exercise or sports activities, historical Google Maps (Figure 10) show that the park's lawns were widely used for sunbathing, contributing to visitors' well-being. In addition, visiting the site today reveals the usage of lawn beds for sunbathing and relaxing to a smaller extent than before. It seems that the simple decoration and design of the park are no longer as welcoming compared to contemporary public green spaces in the 2020s.

The park's connection to the Hydro building on the west side has limited public access from this side and creates a semi-private area, reduces democratic principles.

Although Hydroparken is not used as much as in the past, it is still valuable among landscape designers for its historical significance and its contribution to inhabitants' well-being.

Vaterlandsparken's design with vast lawns for relaxation and sunbathing (as shown in Figure 27) close to the existing river, not only helped the development of Oslo's city center to the east but also provided a local green space for residents of the east part of Oslo, who are mostly considered low-income citizens.

The central arena is a suitable space for various activities and encourages dynamic usage —being dynamic is an essential feature of a welfare landscape according to Lund and his colleagues (2022) —and community interactions. This usage can vary based on citizens' needs and creative initiatives, as illustrated in Figure 28.

Moreover, situated in the bustling center of Oslo, this welfare landscape serves as a tranquil area, providing a break from the city's hustle and bustle and improving the local climate (as initial intention) in a high-traffic area. However, Vaterlandsparken is not functioning as the mingling space of Oslo Spektrum as its designers intended.

Vaterlandsparken has faced safety challenges due to the presence of drug dealers and needs efforts from authorities to address these issues and preserve its function as a welfare landscape.

Recent visits in spring 2024 show the installation of new recreational facilities in the arena and lawn beds (Figure 32), which has transformed the park into a small

amusement park. This change can help to entertain children and enhance their well-being while reducing the presence of drug dealers. However, it changes the park's original function especially the lawn beds as a tranquil green space used for relaxation and sunbathing.

Jordal Park, located in a residential area, has significantly increased access to valuable public space for middle-income residents of the surrounding apartment buildings. The park's location at a lower elevation than its surrounding areas, especially evident in the northern section, effectively separates visitors from their surroundings and provides a panoramic view of Oslo city and the sky (as shown in Figure 51).

One of the important functions of Jordal park as a welfare landscape is providing various sports facilities, including pre-existing ones such as Sports Pitch, Jordal Amfi, Youth Hall, and Jordal Sports Hall and newer designed ones inside the park like the outdoor workout equipment, skate park, playgrounds for children, and large walking and cycling paths. These facilities directly result in the physical health of visitors.

The park's facilities together with its various paths and landscapes, promote creativity, a sense of adventure, and it can also surprise visitors. However, sometimes navigating the paths to reach a specific location in the park can be confusing. Nevertheless, this public green space offers visitors multiple options for relaxation, exercise, and exploration, which enhances the democratic nature of the space.

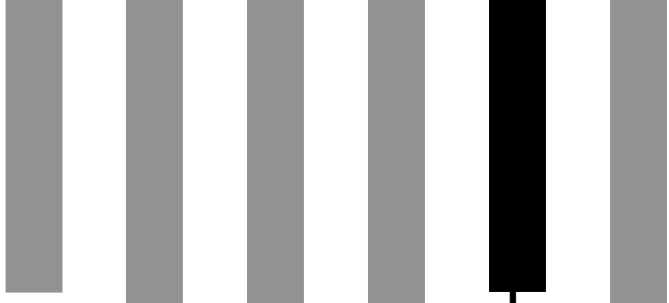
- **Art**

According to Ellis & Schwartz (2016) in section 2.2, the presence of art in public parks enhances inclusivity regardless of financial status. A comparison of the three cases reveals varying views and different degrees of emphasis on art.

In Hydroparken, art plays a key role. Installations of the Konglo slab walls (Figure 11), the monument to the illegal press and the commemorating event for the illegal press on May 3 every year (Figures 12 and 13), and the recently installed Bird in Space sculpture (Figure 14) provide free access to artistic pieces. These features enhance the visual and cultural values of the park and indicate the park's role in promoting democratic values.

In Vaterlandsparken, the concept design, including rows of trees on two sides, a circular arena surrounded by lawn beds, and a central main line (strekket) with a row of trees, can be considered an art form in itself. Moreover, while initially intended as a mingling area for Oslo Spektrum's art performances such as concerts and various other events, it enjoys artistic elements like the bust sculpture of Ólafía Jóhannsdóttir (Figure 37) and artistic connections to the river with metal balls on a stone plate (Figure 38). However, the focus on art is less pronounced in this park compared to Hydroparken.

In Jordal Park, art is expressed in another form. The art of planting, gardening, and other natural elements such as stones, water, and the sound of water play a central role in recreating a natural environment in an urban context. Traditional art installations have not been placed in Jordal park and the focus of designers is on the artistic expression of natural elements.



**Conclusion**

## 5. Conclusion

As cities grow and people's needs change, designers try to adjust their approaches to meet these new needs. Studying cases helped to explore the answers to the research questions. This study shows the contributions of public green spaces to the well-being of individuals and communities in three different post-war eras in Oslo. It also highlights the need for further research in different eras over the past six decades.

The findings emphasize the crucial role of public green spaces as a welfare landscape in Oslo which helps to promote human well-being. Since these spaces provide access to nature, spaces for physical activity, social interaction, and cultural enrichment, they contribute to the physical, mental, and social well-being of residents.

The literature review shows the importance of green spaces in promoting health and democracy to enhance inclusive and healthy communities. The study highlights three key aspects of the welfare landscape in Oslo's public green spaces and analyzes cases based on them, including Environment, Function, and Art.

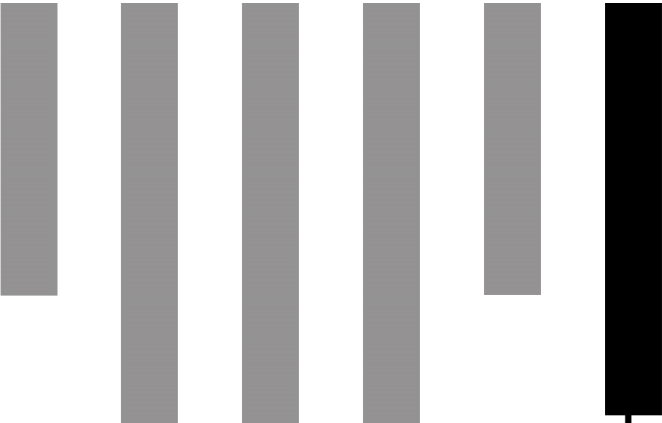
According to the cases, the environmental aspect of welfare landscapes emphasizes strategies in utilizing public green spaces to address environmental concerns of their eras and enhance well-being. Hydroparken's structured design preserves existing trees with designed lawn beds, and creates calm environments, reflecting the post-war need for tranquility. Vaterlandsparken integrates natural elements like the river, rows of trees, and lawn beds to enhance environmental values in response to fast-growing urbanization. In addition, Jordal Park's naturalistic approach prioritizes biodiversity and reflects contemporary climate change concerns.

Analyzing the function shows that each public green space helps the social and personal well-being of visitors. Hydroparken's role in providing access to green spaces highlights its focus on democracy in the 1960s era. Vaterlandsparken's central location provides a relaxing space in Oslo's urban center and allows various temporary activities in the arena and community engagement. Jordal Park's various mostly sports amenities help to meet the needs of residents and promote inclusivity and access to recreational spaces. These cases indicate the different functions of public green spaces and emphasize the importance of investment and maintenance in public green spaces.

The analysis of art in public parks in the three cases highlights its diverse expression and contributions to enhancing the well-being of visitors. Art installations in Hydroparken, an art installation and artistic connections in Vaterlandsparken, and the emphasis on natural elements and art of planting in Jordal Park demonstrate how art

promotes inclusivity and democracy and improves the visitors' experience, regardless of its form.

Overall, the analysis indicates the connection between historical contexts, social values, environmental concerns, and design principles in shaping Oslo's public green spaces. In the early post-war era, the emphasis was on health and democracy, whereas in the contemporary era climate change issues are more challenging. The design of green spaces shows the relation between different needs and various values of each period. The cases reflect distinct historical contexts and design approaches to enhance community well-being and show the role of these spaces in promoting health, equity, and environmental protection. As Oslo continues to evolve, the lessons learned from the mentioned periods provide valuable insights for shaping the future development of public green spaces as an essential part of the city's welfare landscape.



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**Norges miljø- og biovitenskapelige universitet**  
Noregs miljø- og biovitenskapelige universitet  
Norwegian University of Life Sciences

Postboks 5003  
NO-1432 Ås  
Norway