CONTRIBUTION OF ENVIRONMENTAL ART TO URBAN PLACE-MAKING

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ABSTRACT

CONTRIBUTION OF ENVIRONMENTAL ART TO URBAN PLACE-MAKING

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In the contemporary era, urban dwellers are becoming increasingly detached from natural processes. This disconnection often results in a diminished understanding of and interaction with nature, leading to ecological unawareness and challenges in fostering environmental stewardship. Environmental movements gained momentum in the 1960s with the growing awareness of the detachment from the natural environment. Concurrently, environmental art emerged, using artistic expression to draw attention to ecological issues and enhance environmental awareness. Artists strengthened the connection between urban dwellers and nature through projects in urban open spaces, aimed at raising awareness of ecological issues. These initiatives to foster nature awareness in urban settings can be associated with place-making. Urban place-making should not disregard nature and natural processes, but should incorporate them. Environmental art provides a foundation for creatively proposing new possibilities for the co-existence of urban and natural elements, and fostering nature awareness. This study aims to analyze contribution of environmental art to the practice of urban place-making. It will explore how the spatial relationships created by environmental artworks, along with the nature-related messages they convey, help strengthen the connection between urban environments and nature, and how these artworks function as integral components in the planning and design of open spaces.

Keywords: *Environmental Art, Place-making, Nature Connection, Spatial Relations*

ÖZ

ÇEVRESEL SANATIN KENTSEL MEKÂN ÜRETİMİNE KATKISI

Engin, Ecem
Yüksek Lisans, Kensel Tasarım, Şehir Bölge Planlama
Tez Yöneticisi: Prof. Dr. Bahar Gedikli Bilgin

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Günümüzde, kentliler doğal süreçlerden giderek daha fazla kopmaktadırlar. Bu kopukluk, doğal süreçleri kavrayışta ve onlarla etkileşimde azalmayla sonuçlanmakta, bu da ekoloji konusunda bilinçsizliğe ve çevre koruma yönetiminde zorluklara yol açmaktadır. 1960'lı yıllarda, çevre hareketleri, doğal çevreden uzaklaşmanın anlaşılmasıyla ivme kazandı. Aynı dönemde, çevresel sanat ortaya çıkarak, sanatsal ifadeyi ekolojik sorunlara dikkat çekmek ve çevre koruma bilincini geliştirmek için kullandı. Sanatçılar, kentliler ile doğa arasındaki ilişkiyi kentsel açık alanlarda, ekolojik sorunlara yönelik farkındalık geliştirmeyi amaçlayan çalışmalarla güçlendirdiler. Kentsel mekânda doğa farkındalığı yaratmayı hedefleyen bu çalışmaları, mekân üretimi ile ilişkilendirmek olanaklıdır. Kentsel mekân üretimi, doğayı ve doğal süreçleri göz ardı etmemeli, aksine bunları bünyesinde barındırmalıdır. Çevresel sanat, kent ve doğanın birlikte var olmasına yönelik yeni olanakların yaratıcı bir şekilde önerilmesine ve doğa bilincinin geliştirilmesine zemin oluşturmaktadır. Bu çalışma, çevresel sanatın kentsel mekân üretimi pratiğine katkısını analiz etmeyi amaçlamaktadır. Çalışmada, çevresel sanat eserlerinin kentsel tasarım öğeleri olarak açık alanların tasarımında nasıl işlev gördüğü incelenmektedir. Çalışma, çevresel sanat eserlerinin oluşturduğu mekânsal ilişkilerin ve ilettikleri doğa temalı mesajların, kentsel çevreler ile doğa arasındaki bağlantıyı nasıl güçlendirdiğini ve bu eserlerin açık alanların planlanması ve tasarımında nasıl tamamlayıcı bileşenler olarak işlev gördüğünü inceleyecektir.

Anahtar Kelimeler: *Çevresel Sanat, Mekân Üretimi, Doğa Bağlantısı, Mekânsal İlişkiler*

To those who find meaning in their connection to place.

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INTRODUCTION

1.1 Urban-Nature Relationship

The relationship between cities and nature has long been complex and ever-changing. As urbanization rapidly advances, incorporating nature into urban areas becomes more crucial for addressing environmental challenges and shaping sustainable urban futures (Archer & Bezdecny, 2016). Contemporary urban planning is emphasizing the need to integrate nature into urban areas to improve sustainability, resilience, and overall quality of life (Paquot, 2005). This approach involves re-imagining cityscapes, understanding ecological dynamics, and creating spaces that combine urban infrastructure with natural elements or transform natural landscapes to attract and engage urban dwellers (Loughran, 2017).

The disconnection between urban dwellers and nature is a recurring theme in urban discourse (Gandy, 2006). It is argued that by the developing term *'urban nature'*, nature in post-industrial cities is not experienced as a vibrant, integrated part of urban life but rather as something missing or diminished. This portrayal reflects the disconnection between urban dwellers and the natural environment, where nature is perceived more as a void, something that once existed but has been largely removed or overshadowed by industrialization and urban development. (Millington, 2013).

This disconnection has been linked to a range of negative outcomes, including reduced well-being and environmental irresponsibility (Church, 2018). Urbanization and modern lifestyles increasingly distance people from nature, reducing both cognitive and emotional connections. This detachment impairs individuals' capacity to experience, value, derive benefits from, and protect nature (Bashan et. al., 2021).

It is also a well-known fact that urban dwellers require direct nature connection to achieve optimal mental and physical well-being (Howell and Passmore, 2012). The rise in urbanization correlates with a reduction in the frequency, duration, and intensity of exposure to nature, potentially affecting health outcomes such as depression, self-reported health, social cohesion, and physical activity (Cox et. al., 2018). Urban open spaces and local natural environments can enhance the health and well-being of both ecosystems and people (Church, 2018; Suomalainen, 2021). In a social context, nature connection not only enhances emotional well-being and health (Church, 2018; Chiesura, 2004; Kaplan, 2001; Kaplan, 1995; Thwaites, Helleur, and Simkins, 2005), but also enriches the possibilities of social interactions (Church, 2018; Burgess, Harrison, and Limb, 1988; Firth, Maye, and Pearson, 2011; Kuo et al., 1998).

Researchers argue that a disconnection between humans and nature can lead to reduced environmental knowledge and a lack of understanding of natural processes (Hester, 2006; Hough, 2004; Orr, 1992). Nature awareness, as defined by Sanjaya (2023), is a critical aspect of environmental awareness, with a significant impact on gratitude towards nature. Experiencing nature plays a crucial role in developing knowledge, values, and actions related to the environment (Bögeholz, 2006). Direct engagement with nature is essential for preserving health and well-being, as well as cultivating positive emotions, attitudes, and behaviors towards the environment (Soga and Gaston, 2016).

Urban-nature disconnection may weaken efforts towards ecological sustainability by reducing awareness, support for conservation, and the integration of nature-based solutions in urban development. Natural habitats essential for sustaining life are being transformed into vast economic zones, resulting in extensive environmental deterioration. Additionally, the disruption of ecological systems caused by industrial activities and the widespread use of synthetic materials instead of natural ones have further exacerbated environmental damage. This disconnection may also contribute

to environmental degradation by encouraging the overuse of natural resources (Church, 2018; Nisbet and Zelenski, 2013; Rees and Wackernagel, 1996; Soga and Gaston, 2016).

A sense of connection to nature is considered essential for fostering environmentally responsible or protective actions (Church, 2018; Mayer and Franz, 2004; Nisbet and Zelenski, 2013; Schultz, 2001). Research on distanced relationships with nature often examines aspects such as wildlife value orientations, revealing that individuals with more distanced perspectives show less interest in wildlife and related concerns (Beery et. al., 2023; Teel et al., 2010). In both urban and non-urban settings, the study highlights that those who are more engaged with nature are generally more inclined to contribute to conservation efforts (Duvernoy and Gambino, 2022). It is evident that urban dwellers who are regularly exposed to and engaged with natural environments often feel a stronger sense of responsibility and obligation to protect and maintain these areas.

Overall, integrating natural elements into urban landscapes should be more widely adopted to foster a deeper human–nature connection and reinforce our interconnectedness with natural systems and processes (Church, 2018; Cronon, 1996; Beatley, 2011; Kellert, 2012). Natural landscapes within urban areas and their influence on the cognitive map of urban dwellers are critical factors in shaping the image of cities (Falahatkar and Aminzadeh, B, 2018).

1.2 Evolution of Environmental Art

As ecological issues have increased, the decreasing interactions with nature have led to diminished motivation for taking action, raising awareness, and developing an emotional connection to the environment. This has resulted in a weakening of people's bond with nature and a reduction in environmental sensitivity and responsibility. Environmental art, together with other approaches from different

disciplines, emerged as an artistic response providing artworks that advocate for environmental stewardship and highlight ecological issues, especially after global environmental movements. It emerged as a way to expose urban dwellers to nature and natural themes.

The environmental movement in the U.S.A. began with debates about the nature and extent of the environmental crisis (Sills, 1975). What sparked the first environmental movements in the U.S.A. was Rachel Carson's *Silent Spring* in 1962, providing evidence that human activities were causing soil degradation, acid rain, water pollution, and species extinction. The book's impact was reinforced by a series of events, including deaths from severe air pollution, a river catching fire due to chemical contamination, major oil spills, and endangered wildlife. In the following years, the environmental movement officially began with the first Earth Day in 1970, the same year the Environmental Protection Agency (EPA) was established in the U.S. (Weintraub, 2012: 19-20).

Consequently, the environmental art practices developed in the U.S.A. and spread globally (Çakıroğlu, 2022). Since then, artworks intricately connected with the environment have emerged. These projects include environmental, public and land art conducted in open spaces and in nature which transcend the physical boundaries of galleries and museums. Notably, projects involving land reclamation or reuse methods in post-industrial areas have been carried out in collaboration with environmental art (Çakıroğlu, 2022).

Meanwhile, in the early 2000s, Paul Crutzen and Eugene F. Stoermer (2000) introduced the term Anthropocene in their scientific works to denote the current geological epoch, emphasizing the extensive and increasing impacts of human activities on Earth and its atmosphere at a global scale. The aim was to emphasize humanity's central role, as well as its impact in geology and ecology (Çakıroğlu, 2022; Crutzen and Wacklawek, 2014:18). The Anthropocene epoch, i.e. the age of humans that began with the Industrial Revolution, marks the start of human-induced

changes to ecosystems (Çakıroğlu, 2022; Mauser, 2006: 5). Concurrently, under the umbrella term of environmental art, eco-art movements that emerged in the 1990s intersect with the concept of the Anthropocene, emphasizing the necessity for urban dwellers to reconnect with nature in the midst of rapid urbanization and environmental degradation.

As previously mentioned, the 1960s marked a significant shift in art towards environmentalism (Nisbet, 2014). During this period, environmental art emerged as a prominent form of expression (Selanon, 2020) and has since been recognized as a tool for fostering positive environmental change (Curtis, 2006; Potter, 2009; Marks, 2016; Bentz, 2019). This art form is acknowledged for its ability to influence both individual and community behavior, mobilize communities, and empower individuals (Curtis, 2006). Additionally, environmental art plays a role in creating public awareness and engaging audiences in the generation of knowledge and new practices (Potter, 2009). It encourages pro-environmental behavior and fosters a sensitive approach to the nature (Marks, 2016). In line with this perspective, there is a growing call for incorporating creativity, imagination, and aesthetics into environmental art, reinforcing its role as a powerful instrument for positive environmental change (Inwood, 2018).

There are several ways to blending environmental art within the field of urban place-making. Public art is the most prevalent art movement in urban spaces, engaging a broad audience. While not all public art is inherently environmental, many public artworks intersect with environmental themes, making this form of art highly accessible in cities. Environmental art, such as 'Land Art,' 'Eco-Art,' and 'Eco-Public Art,' often overlaps with public art, particularly when these works are placed in public settings. In the literature review, public art will be considered an umbrella category that frequently includes environmental art, reflecting its broad applicability and potential to address environmental concerns in urban environments.

Public art refers to artworks created for public spaces that are intended to engage with and be accessible to the general public (Morea, 2020) (Cartiere and Zebracki, 2015). Public art serves as a catalyst for community engagement, fostering connections between people and urban ecologies, thereby promoting integration between individuals and their surroundings (Nursey-Bray, 2020). Since it has no limits in scope or form, public art also encompasses environmental art when it engages with environmental themes and contexts. **Environmental art** involves artworks that integrate with the surrounding context to create a cohesive space, using urban open areas as canvases rather than existing merely as objects on walls or within a space (Pacquement, 2002). It creatively combines aesthetics and ecological principles to promote a safe, efficient, healthy, and inviting environment for people, enhancing comfort and visual appeal (Song, 2017). **Land art**, also referred as earth art, differentiates with its distinctive use of scale and typically locate at natural landscapes in rural rather than urban areas (Yağmur, 2016). Land art mostly improves the rural lands by integrating art with rural nature, promoting a harmonious relationship between humans and the natural environment, and enhancing the visual aesthetics of villages and towns (Shen, 2020). **Eco-art** and **ecological art** are subsets of environmental art that relatively put higher emphasis on bridging and connecting human and natural systems. Eco-art installations blend art, environmental design, and architecture, function as agents of sustainable urban change (Cucuzzella, 2019). **Eco-public art** is a branch of eco-art that engages with ecological themes in public spaces. Eco-public art serves as the most direct way to expose urban dwellers to nature-related issues in public spaces. Therefore, environmental artworks exist with the help of urban space, and at the same time, they shape urban space.

In short, it is not easy to classify these fields definitively, as they show variations, particularly in terms of material selection and intentions behind their creation (Aydın and Zümrüt, 2013). However, they share similar concerns about building nature connection, bridging the gap that urban dwellers create between nature and themselves. Artworks reflecting a questioning of the human-nature relationship often

shift urban dwellers' focus towards nature, adopting a renewed consciousness and perspective (Bilir, 2014; Düzenli et al., 2017b; Yılmaz et al., 2021). It should be noted that, in this thesis, artworks that establish a connection with nature do not necessarily need to convey an explicit message about nature. Instead, qualities such as the use of natural materials, site selection, the temporality of the intervention, and the incorporation of natural processes (e.g., decay, bloom, weather conditions) will also be considered in creating nature connection.

1.3 Art in Urban Place-Making

Art functions as a means to create new connections between places and urban dwellers, as well as among the urban dwellers themselves. Art in place-making addresses urban space issues by promoting co-production, constructing new spatial configurations, and fostering relationships between users and their environment. Place-making will be discussed in more detail in the literature review, but as an introduction, it can be defined as a process aimed at making places meaningful and engaging for people, enhancing their connection to the environment and fostering a sense of community (Courage, 2020).

Place-making is often centered around art and community-based methodologies, increasingly becoming a crucial area for addressing significant social and environmental challenges in the context of urban development (Sachs Olsen, 2022). It emphasizes the collaborative creation of urban spaces by diverse actors, and is increasingly recognized as a key approach for addressing social and environmental issues to develop more sustainable cities (Olsen, 2022; Raven, 2021). In recent years, there has been a remarkable tendency towards creative and innovative urban place-making strategies. Among the actors, artists play a significant role in contributing to urban place-making by engaging the public in the creative process across various places in cities (Lovell, 2020).

Along with these developments, a series of spatial transformations through art began across various urban segments, including public open spaces, parks, streets, post-industrial zones, coastal areas, and rural areas. Artistic methods in place-making have been diverse and impactful, with potential to foster a rethinking of place-making (Olsen, 2022). Hence, the imaginative power of artists has been harnessed to solve community issues and shape places (Redaelli, 2019). This trend has involved application of diverse strategies, encompassing utilization of open natural environments, incorporation of organic materials, promotion of environmental consciousness, resolution of urban dilemmas, active involvement in restoration efforts, implementation of recycling and rejuvenation practices (Rembeza, 2016), as well as implementation of site-specific projects (Aydın and Zümrüt, 2013; Kurdoğlu et al., 2019; Yılmaz et al., 2018).

Art in urban place-making is closely connected to 'site-specific' or 'place-specific' concepts, prioritizing a design approach that uncovers new dimensions of a location instead of generalizing it in a way that could apply to any other place (Hes and Hernandez-Santin, 2020). Also, urban space as a constantly changing entity, holds great importance in creating a dynamic and vibrant interplay in daily urban life. Concepts such as the quality of life, quality of space, experience, meaning, and connection should not be underestimated in the discourse of urban place-making and design. In particular, art is a key urban strategy for encouraging coexistence of urban space and nature elements.

Artworks in urban settings, which reexamine human interactions with the environment, could serve as a foundation for developing knowledge aimed at addressing environmental concerns (Setyawan et al., 2021, p:1-2). In response to the environmental crisis, artists have increasingly started to take role, actively engaging in efforts to mitigate ecological challenges. Today, the significance of artistic contributions through creative efforts in tackling environmental issues cannot be

underestimated. Overall, through these initiatives, art has evolved into a powerful call for awareness.

The rise of environmental art in response to global environmental concerns has led to a shift from traditional gallery settings to the use of natural landscapes and urban open spaces as creative canvases. This transition sparks a discussion about whether these open spaces, urban or rural, should be considered both integral to the artwork and part of the broader natural processes they inhabit. In this context, urban sites become dynamic and ever-evolving expressions of ongoing natural and human activities, reflecting different times and processes as they adapt to changing conditions (Beyes, 2010; Thrift, 2007, p. 12).

In the context of producing meaning and awareness, especially about the theme of 'nature', artworks do not necessarily convey a message about nature. Artworks can also be created for purposes other than conveying natural messages, such as public health and education, still foster a connection to nature through important aspects like the use of natural or recycled materials, their temporary presence at specific locations, and the characteristics of the sites where they are situated (e.g., post-industrial or ecological). For example, ‘art trail’ is a concept that can recycle unused or excluded paths or streets within the city, which, in most cases, is a practical concept that evokes many themes of natural processes and recovery. In fact, art plays a significant role even in urban regeneration, neighbourhood development, or place-based renovation. Therefore, within the scope of environmental art, it is essential to carefully examine how examples position themselves in urban spaces and to explore concepts that can be used as strategies for urban development.

1.4 Research Aim and Scope

The aim of this thesis is to explore how environmental artworks contribute to urban place-making by examining their impact on spatial relations and nature-related

message delivery. Specifically, it seeks to investigate how environmental artworks interact with their urban settings to influence spatial organization and user experience. This includes examining how artworks integrate into the physical layout and structure of public spaces. Secondly, it seeks to assess how artworks convey environmental messages and promote nature connection through their design, placement, and engagement with the public. The research uses tools and frameworks from urban design, namely, city components introduced by Kevin Lynch (The Image of the City, 1960), and Principles of Gestalt Psychology (Koffka, 1935), to evaluate spatial relations in urban place-making, and explore how people perceive and emotionally connect with artworks in urban spaces. This multi-faceted approach allows for a comprehensive analysis of how environmental artworks contribute to nature awareness and nature connection through spatial dynamics.

The process begins by examining urban design dimensions such as morphological, perceptual, social, visual, functional, and temporal aspects to understand how artworks interact with their surroundings. Lynch's five components for the city, namely, paths, edges, districts, nodes, and landmarks, offer a framework for analyzing how these artworks fit into and enhance the city's spatial structure. For example, how artworks integrate with paths or serve as landmarks can affect their impact on the urban experience and their ability to convey environmental messages.

Gestalt Principles further refine this analysis by focusing on how visual and perceptual elements influence the way people experience these spaces. Principles such as figure-ground relationships, proximity, and continuity help assess how artworks create meaningful and coherent interactions within urban settings. By applying these tools, researchers can measure how effectively artworks contribute to facilitate nature connections and engage with the public on environmental issues. This comprehensive evaluation ultimately provides insights into how spatial relations shape the effectiveness of environmental art in urban place-making.

Within this scope, the concept of urban place-making alongside a detailed theoretical analysis of environmental art and its sub-categories will be examined in this study. Following this, the research will present practical examples, focusing on their locations, assessing them using urban design dimensions and tools from Lynch and Gestalt, and highlighting the key characteristics of the artworks. The assessments will cover urban and rural contexts, as well as focusing on frameworks and plans, to provide a comprehensive analysis of spatial relations. The study will then elaborate a case study, named 'Fata Morgana' in Ordu, analyzing its place-making impact as an environmental art example.

Chapter 2, Literature Review will delve into the scope of environmental art and its various sub-categories, alongside the concept of public art, especially where it intersects with environmental themes. This chapter will examine urban place-making in the context of environmental art, presenting practical examples ranging from individual art projects to large-scale urban initiatives. Each example will be analyzed by first considering the broader context, such as Lynch's components and Gestalt Principles, before focusing on the artwork itself, its temporality, materials, scale, form, and color, to understand how these elements contribute to effective place-making.

Furthermore, the chapter will analyze a broad range of environmental art examples, focusing on the spatial relations they create within their settings. It will explore how these artworks are integrated into their sites and how they engage with their surroundings. This includes examining the process of nature-related message delivery involved in each example, looking at how the spatial relationships between the artwork and its environment help communicate these messages. A comprehensive table will summarize the insights, discussing their contributions to nature connection and urban tapestry.

Chapter 3 will build on the literature review findings to present a cohesive framework that integrates the collected insights into a structured approach. It will

explore three spatial scales of environmental art in urban place-making, investigating various design approaches to foster direct and indirect nature connections. This framework will offer a systematic method for identifying design elements and decisions, across different urban scales, that can be combined with environmental art to effectively enhance nature connection within urban environments.

Chapter 4 will present a case study of the 'Fata Morgana' art exhibition (June 20 - September 10, 2023), held at four distinct locations in Ordu. This case will be analyzed within the environmental art framework established in Chapter 3, allowing for a detailed exploration of how the discussed principles and strategies contribute to urban place-making. The analysis will include the exhibition's connections with public spaces in urban contexts, and its integration with waterfronts and natural landscapes in rural settings, examining elements like scale, proportion, material, and temporariness.

Chapter 5, Conclusion will synthesize the findings from the previous chapters, drawing comprehensive conclusions about the role of environmental art in urban place-making and its potential to bridge urban and natural environments. The conclusion will outline outcomes from practical examples and the case study, discussing the broader implications for urban place-making and offering strategic insights into how environmental art can be used to enhance urban environments.

CHAPTER 2

LITERATURE REVIEW

To grasp the contribution of environmental art to urban place-making, it is essential to first explore urban place-making, along with the concepts and themes at the intersection of art and urban development. Therefore, this chapter begins with exploring urban place-making, particularly focusing on creative place-making and urban tapestry. Art is becoming increasingly integral to both the physical and cultural infrastructure of cities, shaping and enhancing urban spaces in significant ways. Environmental art is typically considered a strongly site-specific intervention in urban space at the crossroads of urban place-making and art.

Understanding the components and tools of place-making is essential for integrating environmental art into this field. To highlight the contributions of environmental artworks to the urban place-making process, this study will establish connections to the dimensions of urban design and provide an evaluation of them. The review on urban place-making will also highlight city components introduced by Kevin Lynch and Principles of Gestalt Psychology, as a composition of interconnected elements.

Following this, the chapter delves into public art, examining its role in urban contexts and its connection to environmental art. Many environmental artworks also serve as public art, particularly when located in urban or accessible natural settings. Public art often explores environmental themes, thus contributing to the realm of environmental art. While public art is broader in scope, encompassing a wide range of forms and functions, environmental art is more specialized, with a deep focus on ecological issues. Both art forms play vital roles in fostering a connection to nature and enhancing the quality of life. Since public artworks can intersect with environmental themes, it is essential to include public art in this research.

An informative section on environmental art follows, breaking down its various sub-categories, including land art, eco-art, ecological art, and eco-public art. Depending on their context and audience, these art forms can all be considered public art. The inclusion of these sub-categories in the thesis is crucial due to the distinct nature-related messages conveyed by each category. For example, eco-art, which evolved significantly from the 1960s to the 1990s, reflects the growing awareness of the Anthropocene epoch and its environmental impacts. To ground these concepts in real-world practice, the chapter then presents a series of examples of environmental art.

These examples span a variety of settings and approaches, from large-scale installations like *The Gates* in Central Park, NY, to more localized projects such as the *Freestanding Waterfall.* Examples of environmental art as an urban development strategy, focusing on public art master plans and frameworks from various cities, will also be included in the global examples. Art collaborations with city councils and governments, particularly in the realm of place-making, have become a transformative trend. This section underlines the strategic importance of environmental art in urban planning and design, and its potential to foster community engagement, enhance public spaces, and address environmental concerns.

The examples of environmental art are analyzed through the lens of Gestalt Principles and Lynch's five components which elucidate how environmental artworks are perceived as part of a greater whole, establishing a connection between the artwork, the viewer (urban dweller), and the environment. The inferences drawn from environmental art examples using these two tools to assess urban place-making dimensions (morphological, perceptual, social, visual, functional, and temporal), are explored and gathered.

In this regard, this literature review examines the intricate relationships between environmental artworks and their sites across three distinct contexts: urban and rural contexts, as well as design frameworks. Analyzing global examples provides

valuable insights into how different settings impact the experience and interpretation of environmental artworks. The focus will be on analyzing the intricate relationship between the artwork and its site, investigating how this interaction influences spatial perception and the parameters that define this dynamic. The aim of examining a wide range of examples from around the world is to extract comprehensive data to develop a protocol to address the visual configuration for delivering environmental messages, building spatial relations, and for the nature connection fostered by these installations.

2.1 Urban Place-Making

Place-making is a collaborative strategy for creating and rejuvenating public spaces, promoting community engagement, and enhancing quality of life (Helmy, 2020; Lastochkina, 2021). Being relatively 'new' compared to established fields such as architecture or urban design, it is still in the process of being defined (Courage et al., 2021). Place-making is a planning approach that focuses on the physical design of a place based on its locational contexts (Jordaan and Roos, 2008).

Recognizing a location as a place involves understanding its unique character and the collective experiences that define its essence (Norberg-Schulz, 1985). Place is a complex concept that encompasses nature, social relationships, and meaning (Hes and Hernandez-Santin, 2020; Williams, 2014). It is a geographical area or locality that influences human experiences and identity through intentional interactions with space, materiality, and narrative. Places are singular, with a character unique to each one (Hes and Hernandez-Santin, 2020; Malpas, 2015, p. 65).

The creation of place identity is a crucial element frequently overlooked in the urban discourses (Hassan et. al., 2022). Respecting a place means thoughtfully integrating new structures that honor and complement this inherent identity (Hassan et al., 2022). Place-making starts when a physical location transcends its physical

infrastructure and becomes a living, dynamic space filled with the meanings and memories assigned by its users (Hassan et al., 2022; Hubbard, 2006). This underlines the importance of understanding how people perceive and emotionally connect to spaces (Guaralda, 2017; Tullis, 2021). This connection enhances the identity of places, making them more than just physical infrastructure but dynamic entities imbued with meanings.

Place-making is a term used by architecture and planning professionals to describe the process of creating physical and social spaces that are appealing for the public to visit and spend time in (Courage, 2017; Marshall, 2009; Olin et al., 2008; Uytenhaak, 2008; Wiedenhoeft, 1981). It recognizes that being in a place involves a combination of sensory experiences, including visual and auditory stimuli, environmental factors, and contextual elements, both historically and in the present (Courage, 2017; Bachelard, in Coglan, 2010; Herbert and Thomas, 1990, p.255). These factors collectively contribute to the understanding of how individuals perceive and interact with their surroundings (Courage, 2017). Place-making efforts can range from spontaneous, individual actions to deliberate, large-scale initiatives by governments and organizations (Lew, 2017). The process typically involves both tangible aspects, such as physical design, and intangible aspects, like mental imagery (Vodanović Lukić, 2021). This approach includes inclusive planning, design, and management of urban areas, taking into account local needs and contexts (Horgan, 2020).

Urban place-making has a way of creating connections within a space by emphasizing engagement and experience. In urban design, to achieve outcomes like emotional connections, strong imagery, perceptions, and sensory experiences, it is essential to consider the main dimensions of design. These dimensions include morphological, perceptual, social, visual, functional, and temporal aspects (Carmona and Tiesdell, 2007).

The morphological dimension focuses on the spatial organization, form, orientation, and structure of urban environments, whether fragmented, cohesive, or otherwise. It

also includes key factors such as layout patterns (like grids), typologies, physical constraints, plot development, road networks, and considerations of hierarchy and scale (Carmona and Tiesdell, 2007).

The perceptual dimension involves the identity of places, the city's image, and the creation of the built environment. It examines both the inherent and socially constructed meanings of places, considering the interplay between psychology and urban spaces, as well as the impact of aesthetics and human experience. In place-making, emphasis is placed on the psychological and experiential aspects of sense-of-place. Kevin Lynch's five components of imageability are crucial here, focusing on mental imagery, patterns, legibility, and above all, the psychological dimensions of urban design (Carmona and Tiesdell, 2007).

The social dimension encompasses the dynamics of outdoor spaces and activities, focusing on aspects such as safety (as highlighted by Jane Jacobs), the vitality of public spaces, and the character of places. Key concepts include quality, livability, interaction, public life, and the public realm (Carmona and Tiesdell, 2007).

The visual dimension involves the integration of architectural elements, characterized by siting, massing, scale, proportion, rhythm, and materials. It also addresses the aspects of circulation (paths), transitions (portals), activity, and ambiance. This dimension explores what constitutes an effective building and a vibrant outdoor space, emphasizing how these elements contribute to the overall context of a place (Carmona and Tiesdell, 2007).

The functional dimension highlights the alignment between human needs and design considerations. It addresses various human needs, including psychological, aesthetic, cognitive, and self-actualization requirements, and how urban design should meet these needs within the place-making process. It also examines both passive and active engagement in public spaces, and discusses the significance of shape, form, and multifunctionality (Carmona and Tiesdell, 2007). Active engagement in public

spaces encourage people to interact not only with the physical space but also with other users, fostering social connections and vitality. It indicates direct participation such as walking, cycling, playing, or socializing in the public space (Carmona, 2021). Passive engagement involves more observational or reflective interactions such as sitting on benches, enjoying the scenery, making observations or simply passing through the space (Carmona, 2021).

The temporal dimension focuses on the dynamic nature of the urban landscape, emphasizing the movement of images, the presence of historical layers, and the awareness of change. It explores the perception of time's flow, evolving processes, and rhythms, as well as issues related to preserving the past, establishing personal connections, and adapting to the evolving dynamics of the city (Carmona and Tiesdell, 2007).

This study will focus on how environmental artworks contribute to different dimensions of place-making across various sites. In exploring such relationships through global examples, Lynch's five components and Gestalt Principles will be utilized in order to measure the common grounds in spatial relations. This interplay will ultimately define a set of spatial parameters in the process of conveying nature-related messages in urban place-making.

Kevin Lynch defines five components of city image, paths, edges, districts, nodes, and landmarks, that integrate seamlessly into place-making discourse by providing a framework for understanding how people perceive and navigate urban environments (Damayanti and Kossak, 2016). These elements contribute to creating spaces that are functional and coherent. Each element helps in achieving a well-organized environment, facilitating easier connections between people and their surroundings.

Paths are the routes along which people typically, occasionally, or potentially travel. These can encompass streets, walkways, transit routes, canals, and railways. As

individuals move through the city, they perceive and interact with their environment, with other urban elements arranged and connected along these pathways (Lynch, 1960).

Edges are linear elements that observers do not perceive or use as paths. They act as boundaries between different areas, creating a linear break in continuity, such as shores, railroad cuts, development edges, or walls. These edge elements play a crucial role in organizing spaces, particularly in defining broad areas, like the outline of a city formed by water or a wall (Lynch, 1960).

Districts are relatively large sections of a city that possess a distinct, identifiable character, making them recognizable and coherent to those who perceive and experience them. These districts are regions where people can mentally ‘enter’ and feel a sense of being inside a unique area with specific, distinguishing features (Lynch, 1960).

Nodes are crucial points in a city where paths intersect or activities concentrate, serving as focal points for movement. They often act as symbolic centers of districts, influencing the surrounding area. Nodes are key elements in city images, blending the characteristics of junctions and concentrations (Lynch, 1960).

Landmarks act as point-references, distinguished by their easily recognizable physical features. Typically, landmarks might be prominent buildings, distinctive monuments, signs, stores, or a natural feature like a hill or river that helps people orient themselves within a city. Distant landmarks such as Eiffel Tower or a prominent mountain are easily identifiable from a distance and serve as city-wide reference points. In contrast, local(ized) landmarks such as sculptures, important squares, or street signs provide orientation and identity within specific areas. Local(ized) landmarks, serving as key identity markers and structural reference points, are crucial for navigation and understanding a city's layout. Urban dwellers

must become acquainted with the area to effectively recognize and use local(ized) landmarks for orientation (Lynch, 1960).

Kevin Lynch, in *'The Image of the City' (1960)*, discusses how legible cities are those where urban elements are organized in a way that people can easily grasp the layout and orientation. This legibility also relies on the Principles of Gestalt Psychology like proximity, similarity, and continuity, which help people navigate and make sense of urban spaces.

Place-making applies Gestalt Principles to analyze how individuals perceive and interact with urban environments (Todorović, 2008; Aravot, 2002). Gestalt Principles provide a structured framework for improving visual clarity and organization in urban place-making, contributing to more coherent and accessible designs (Moore & Fitz, 1993a). By incorporating principles such as figure-ground relationships, simplicity, closure, continuity, proximity, and similarity, designers can create urban spaces that are visually organized and functionally intuitive, improving the overall usability and comprehension of these environments.

The term 'Gestalt' is a German word meaning 'shape' or 'form', and the core idea of Gestalt Principles is that the human brain actually works to perceive overall patterns and configurations first, before analyzing individual parts (Koffka, 1935). Instead of seeing isolated elements, our minds tend to group these elements together based on certain principles, allowing us to perceive a unified whole (Todorovic, 2008) (Koffka,1935).

(1) Figure-Ground is by creating a clear contrast between different elements of a space (Koffka,1935), such as using distinct materials or colors, ensuring that key landmarks stand out from their context. For example, a vibrant, well-lit artwork as a landmark can be visually distinct from its surroundings, creating a focal point and guiding attention.

(2) Law of Prägnanz (Simplicity) proposes that a well-organized layout offers clear and predictable paths, making the environment easier to navigate and more pleasant to experience. Our brains seek the simplest and most organized form. This principle reflects our innate preference for clarity, coherence, and minimal complexity in our visual experiences.

(3) Law of Closure, where the mind completes incomplete forms (Koffka,1935), is often related to how urban spaces invite users to mentally and physically engage with them. This might involve open-ended or semi-enclosed spaces that suggest boundaries without fully enclosing them, allowing urban dwellers to perceive the space as complete.

(4) Law of Continuity asserts that our perception tends to follow smooth, continuous lines and patterns rather than fragmented or discontinuous segments. Designers often use continuous lines, curves, and shapes to create a sense of flow and coherence (Koffka,1935). This principle is implemented by aligning pathways and the orientation of structures to guide movement through urban space. For instance, a series of aligned street lamps or a continuous row of trees can create a visual and physical connection that encourages people to move through the space in a particular direction, enhancing the overall experience of the place.

(5) Law of Proximity mainly indicates that when the position of objects or elements is close to one another, they are more likely to be perceived as a collective group rather than as individual, unrelated items. When we see a cluster of objects or shapes that have spatial proximity, our brains automatically group them into a single unit or pattern within a composition (Koffka,1935).

(6) Law of Symmetry points out the fact that the human brain tends to perceive symmetrical images or forms as being more attractive, organized, and cohesive than asymmetrical ones (Koffka,1935). In design and art, proportionality and cohesion

achieved through symmetry help form a visual structure that is pleasing and easy to navigate.

(7) Law of Similarity elaborates that the human mind tends to grouping elements that share common characteristics such as shape, color, or size. By employing pattern recognition to identify homogeneity among design elements, designers ensure consistency and effective organization through clustering, creating a cohesive and unified visual experience (Koffka,1935).

2.1.1 Creative Place-Making

Creative placemaking is a practice that utilizes arts, culture, and innovation to advance community interests and shape place identity (Bonenberg and Kozień-Woźniak, 2021). It involves various stakeholders (Zitcer, 2020) and aims to address community issues by integrating artistic creativity and fostering partnerships across sectors (Redaelli, 2019). This approach focuses on storytelling, local problem-solving, and sustainable development (Tan and Tan, 2023), going beyond urban revitalization to address social inequity through artist-led civic initiatives (Webb, 2022). Influenced by participants' legal consciousness and engagement with authorities (Layard and Milling, 2015), creative place-making facilitates sustainable urban regeneration by emphasizing social attributes, individual creativity, making practices, and co-creation to consider social assets and place-specific values (Ramli and Ujang, 2020; Mengi, 2020).

Creative place-making discourse suggests that murals, sculptures, and installations can cultivate a feeling of community, improve public spaces, and encourage social engagement (Furtado & Payne, 2022; Perkins et al., 2023). The concept has transitioned from emphasizing individual creativity to embracing creative districts and collaborative partnerships (Redaelli, 2019), projects typically involve

partnerships between artists, community members, and various sectors to tackle local challenges and define the character of places (Zitcer, 2020; Thomas et al., 2015).

The distinction between creative place-making and traditional place-making lies in its emphasis on artistic and cultural engagement as central components of the process. Creative place-making places a particular emphasis on artistic and cultural interventions. It employs artistic strategies and cultural programming to enhance the character and identity of a place. While traditional place-making focuses on physical space and urban design, creative place-making incorporates the roles of artists and cultural organizations to foster community engagement, cultural expression, and social change. While traditional place-making may include elements of art and culture, these are often supplementary rather than integral to the process. On the other hand, creative place-making is central to its practice of the incorporation of arts on the physical and infrastructural improvements of cities. Artists and cultural practitioners are actively involved in the planning, design, and management processes, making the artistic and cultural dimensions foundational to the approach. Creative place-making may explore unconventional uses of public spaces through artistic means, transforming ordinary areas into unique and meaningful places that reflect community values and identities. (Courage and McKeown, 2019).

2.1.2 Urban Tapestry

'Tapestry' is defined as *''something that is made of many different parts''*, by the Cambridge Dictionary**.** Urban tapestry, in this context, refers to the intricate and multifaceted nature of a city's structure and identity. It refers to the intricate and diverse composition of elements that make up a city, including its cultural, social, historical, and physical aspects. It encapsulates the idea of a city as a woven fabric of stories, experiences, and interactions among its inhabitants and the built environment. This metaphor highlights the interconnectedness and complexity of

urban life, emphasizing the importance of understanding the city as a dynamic and multifaceted entity (Bassett, n.d.).

Urban tapestry makes intangible stories, processes, values, and cultural imprints visible in the urban environments (Hassan et. al., 2022). By showcasing personal and collective stories, urban tapestry highlights the cultural diversity and history of the city. It aims to foster a deeper understanding of the city's identity and serves as a celebration of the city's heritage (Sasso, 2002). Also, several scholars have used tapestry as a metaphor and approach to illuminate the human aspects of places (Hassan et. al., 2022; Tucci et al., 2011; Lane, 2003; Freeman, 1987; Wolf, 1963; Kenny, 1962).

Within the realm of urban place-making, ‘urban tapestry’ can be seen as a work in progress, evolving over time. Urban place-making itself is a dynamic and ongoing process that grows with the community, adapting to new challenges and opportunities, and continuously adding new ‘layers’ into the urban fabric. Urban tapestry emphasizes the idea that cities are composed of multiple layers, each contributing to the overall complexity and richness of the urban environment. Accordingly, places are shaped by the layers of experiences, histories, languages, and perceptions that resonate differently with each visitor, evoking a diverse range of memories and expectations (Hassan et al., 2022; Attwa et al., 2022; Casey, 1996). Temporary artworks, such as murals, installations, and sculptures, play a crucial role in enriching urban tapestry, introducing new, temporary layers that interact with the existing urban fabric. These artworks also stimulate the exploration and reimagining of streetscapes (Miranda et al., 2020). Overall, there is a strong connection between temporariness and urban tapestry.

Creating navigable and memorable urban spaces is essential in urban place-making. The principles of imageability and legibility, along with the concept of urban tapestry, are instrumental in guiding the arrangement of various elements, both temporary and permanent. By integrating these principles, urban spaces can be

designed to form a cohesive and engaging urban tapestry that enhances spatial relations and overall user experience.

2.2 Public Art

''Public art needs to be seen as a function not of art, but of urbanism.'' (Deutsche, 1996).

Public art refers to artworks that are situated outside of traditional museum or gallery settings. In public art, artwork types may include murals, monuments, architecture itself, paintings, sculptures, ceramics, surface, installations and interactive methods (Public Art Archive, 2023), and includes a range of activities such as functional, decorative, iconic, interpretive, integrated, temporary installations (Azhari et al., 2014). In terms of place-making, the discourse of public art offers valuable insights into the relationship between place, art, and nature.

In the contemporary discourse, public art is defined not by size or material but by its location. Essentially, public art is characterized as art that is freely accessible to a community (Gorichanaz, 2020). Public art must meet at least one of the following criteria (Cartiere and Zebracki, 2015):

- Being located in a place that is freely accessible or visible to the public (in public);
- Relating to or impacting the community or individuals (public interest);
- Being maintained for or utilized by the community or individuals (public place);
- Being funded by public resources (publicly funded).

Above criteria also applies to environmental art, especially when such artworks are placed in publicly accessible spaces or have a meaningful impact on the community.

While this study focuses on the contributions of environmental art and its sub-categories, many public art projects also function as environmental art. Being aware of differences in descriptions between public art and environmental art, this research will gather nature and ecology-related open-air projects under the name 'Environmental Art'.

When considering environmental art as a strategy for urban place-making, contemporary public art programs and frameworks offer valuable models for integrating art into urban development. These examples demonstrate how art can evolve from being a mere object to a comprehensive urban-scale strategy.

Environmental art that operates as public art maximizes accessibility and engagement by placing art in universally accessible locations and offering free experiences. It enhances engagement through interactive and educational elements, community involvement, cultural relevance, and high visibility. This integration ensures that environmental messages reach and resonate with a diverse audience, fostering a greater public understanding of and connection to ecological issues. Situated in common areas such as parks, streets, and plazas, 'environmental' public art is readily accessible to a diverse audience. Art trails are also outshined for recycling and reintroducing underutilized or neglected routes or paths in a specific area. Presence of such works in public locations ensures that it reaches various people, including those who might not typically visit galleries or museums.

2.3 Environmental Art

The emergence of environmental art can be traced back to the environmental movements of the 1960s in the USA, which arose in response to widespread

environmental degradation. It should be noted that environmental art is an encompassing term, and it includes land art, eco-art and eco-public art.

Environmental artworks transcend traditional gallery settings and they are located outdoor in the open space (Ball et al., 2011). Environmental art is a genre of art that engages with and reflects on the natural environment, often aiming to raise awareness about ecological issues, enhances our relationship with nature, and promotes environmental stewardship (Thornes, 2008). Environmental art is conveyed through a wide range of media and methods, from temporary installations, sculptures and performance art to photography and multimedia works. Environmental art assumes multiple roles, such as promoting environmental education (Marks et al., 2017), inspiring eco-friendly behavior (Marks et al., 2016), and conveying messages about climate change (Thornes, 2008). Environmental art often utilizes open spaces in both urban and rural settings as its 'canvas,' integrating artistic expression with the natural and built environment (Kwon, 2002).

Environmental art involves integrating nature into the artwork, resulting in a distinctive aesthetic object (Nannicelli, 2018). Scholars have explored how environmental art, especially through land art and garden designs, reflected the interaction between humans and nature, with a significant focus within environmental aesthetics (Brady, 2006). Impact of environmental art in fostering environmental literacy and promoting a deeper connection to nature is worth mentioning (Iannelli, 2022).

Environmental art integrates artistic, scientific, and technological elements in addressing environmental issues such as climate change and pollution (Gao, 2023). It involves projects aimed at fostering respect for nature, educating society about environmental problems and their solutions, and restoring damaged areas through artistic means (Çakıroğlu, 2022; Uysal, 2009: 18). The role of environmental art in environmental education is significant, as it enhances environmental awareness and fosters a deeper connection with nature (Papavasileiou, 2020). Integration of art and

environmental education contributes to fostering a deeper connection with nature and promoting conservation efforts (Papavasileiou et al., 2020). Thus, environmental art can also be examined through the lens of eco-cultural restoration, as artists worldwide concerned with the environment have created interventions dependent on the restoration of ecosystems (Ball, 2011). Through these interventions, not only environmental issues are addressed, but also active interventions to prevent degradation and promote environmental well-being are made.

Environmental art design, as a newly developing concept that incorporates environmental art into design of spaces, is based on the ecological sensitivity and provides important strategies for improving the quality of urban physical environments (Jiang 2022). These works mainly emphasize ecosystem restoration and environmental awareness (Ball et al., 2011). In the modern era, the concept of environmental art design has been redefined to align with changing societal needs and perspectives (Shi, 2019).

Environmental art also interacts with local communities, policy makers, and environmental organizations to raise awareness, lead to dialogue, and inspire action (Iannelli, 2022). Environmental art can bring greater economic, cultural, and social benefits for both urban and natural environments when thoroughly integrated and collaboratively implemented (Hu, 2023).

In the literature, environmental art is divided into several sub-categories, and briefly addressing these is valuable for bringing various emphases to the forefront. For example, land art directly interacts with natural landscapes and is significant in scale, often involving expansive interventions that reshape the environment. Eco-art, particularly prominent in the 1990s, is closely associated with the Anthropocene concept, focusing on humanity's role in environmental destruction. This sub-category engages with the impact of human activities on nature, often using art to critique and reflect on these issues. Eco-public art highlights the power of public spaces to deliver messages, emphasizing the reciprocal relationship between art and

public spaces. It seeks to showcase how public spaces and art mutually enrich each other, with art amplifying the significance of these spaces and the spaces, in turn, enhancing the impact of environmental art. While these forms are fundamentally rooted in environmental art, each emphasizes distinct aspects of the nature-human relationship, leading to differentiation in the nature-related messages they convey. Nonetheless, within the scope of this thesis, all examples will be analyzed under the overarching category of environmental art.

2.3.1 Land Art

Land art, or 'earth art', emerged in the 1960s as artists moved from traditional galleries to explore various sites, including urban, rural, and post-industrial environments (Selanon & Cui, 2020). Characterized by its large-scale and site-specific nature, land art utilizes natural elements in outdoor settings and actively interacts with landscapes, incorporating nature as material, subject, and setting (Alsebani, 2021; Elmaleh, 2002; Cucuzzella et al., 2020; Brady, 2016). Mostly, materials are drawn from the landscape.

In the context of land art's unique perspective as well as its distinctive characteristic upon the issue of '*scale*', it can be said that land art contrasts sharply with traditional art forms. As a distinctive quality, land art often operates on a monumental scale, requiring expansive natural settings and encouraging viewers to experience art within the context of the landscape. Scale is examined as a crucial element in understanding and creating land art (Volvey, 2007; Gould, 2018). Firstly, land art's monumental scale compels a reconsideration of human presence within the broader context of nature. Scholars highlight how land artists manipulate scale to alter perceptions of place, emphasizing the interplay between natural and human-made environments (Boettger, 2002). Scholars have noted how artists such as Robert Smithson employed scale to challenge perceptions and blur the lines between human and non-human elements (Maimon, 2024). However, recent debate shows that land

art begins to adopt a domestic and quotidian scale compared to more monumental artworks (Sleeman, 2009).

Land art's immense scale often makes it difficult to appreciate from a close distance; viewers must step back or even move to higher vantage points to fully grasp the artwork's scope and detail. Unlike public art, which integrates seamlessly into the daily lives of urban dwellers, land art requires a journey to remote locations, demanding viewers to immerse themselves in the natural environment to experience the art. This necessity to travel and engage with the landscape sets land art apart, as it does not simply 'pop' into one's daily routine but rather calls for deliberate and contemplative interaction.

Distinctively, land art does not just occupy a space; it actively engages with the site's physical characteristics, history, and ecology, creating a dynamic dialogue where the site becomes both the canvas and a collaborator in the artwork. This interaction emphasizes the artwork's dependence on the specific location, making the site essential to the meaning and experience of the piece. The interaction is not just about placing art in a location but about altering, responding to, and dialoguing with the site, making the environment a co-creator in the artistic process (Hogue, 2004).

Land art explores innovative approaches to connecting to, and interacting with natural processes such as growth, decay, and entropy, with a specific emphasis on the complex qualities of nature (Brady, 2016). Hence, it can be said that land art highly engages with the concept of 'temporariness' while it engages with natural landscape, bringing forth the medium of 'photography' as a distinctive quality in its own discourse. Photography plays a crucial role in capturing and conveying the works of land art, considering the temporary nature of artworks (Najafi and Abbas, 2014).

This art form has also engaged with the politics of land use, revealing the social significance of hidden features in the land (Scott, 2019). It has evolved with

contemporary artists engaging with a range of land-use issues, from environmental justice to economic isolation (Swenson, 2010). The nuanced nature of opposition to specific land developments is also another topic of interest, especially evaluating the ethical and aesthetic aspects of land art. Thus, the significance of land art extends beyond artistic expression, with implications for environmental awareness, natural resource management, and even policy perspectives on land use and forestry (Ohrel, 2019).

Serving as a foundational platform, land art presents a new meaning and a new vision towards art and nature relationship (Gerekli, 2009, p:23). This art form reflects the need to connect with the environment and the concerns about the impact of technology on nature (Elmaleh, 2002). Land art is becoming more interesting and provocative subject in contemporary art that is challenging for a specific engagement in various natural spaces (Sandeva and Despot, 2015). The integration of land art into various disciplines has been recognized as a valuable tool to foster a deeper connection with nature (Kayacilar and Karaca, 2020). Land art's focus on the relationship between art and nature has led to its contribution to urban place-making and nature conservation (Elmaleh, 2002).

2.3.2 Eco-Art and Ecological Art

Ecological art and eco-art, emerging in the 1990s, mark a significant shift from the environmental art of the 1960s, focusing on human responsibility for the environmental crisis (Kagan, 2014; Brady, 2016). Both movements emphasize ecology, ecological restoration, and environmental activism over aesthetics (Dandaron, 2024). In this thesis, they are both referred to as ‘eco-art’.

The concept of the ‘Anthropocene’ highlights human impact on ecosystems and the need for awareness (Çakıroğlu, 2022). In this context, eco-art addresses global warming and climate change by focusing on the human-nature relationship

(Çakıroğlu, 2022). Effective eco-art bridges art and science, enhancing communication about ecosystem conditions (Heineman, 2010) and fostering a deeper understanding of nature (Şeren & Gül, 2022). For this reason, eco-art focuses on urban areas and environments affected by human impact (Güneş, 2019). It integrates living ecosystems into art, often emphasizing ecological restoration (Curtis, 2009). These artworks contribute to environmental restoration and remediation, aiming to raise awareness and address ecological issues through aesthetically pleasing outdoor urban pieces (Douce, 2004). Eco-art also criticizes existing systems and proposes alternative ways of coexisting with nature (Colavecchio, 2014).

Unlike mere representation, eco-art aims to establish direct relationships within urban ecosystems, involving humans, animals, plants, and landscapes. In the context of eco-art, the use of renewable local resources is a way of integrating a direct relationship to the local nature (Liburd and Derkzen, 2009). Eco-art creates artworks that engage with environmental forces such as wind, water, or sunlight, leading to sensory experiences (Kagan, 2014).

Eco-art raises awareness on environmental issues (Çakıroğlu, 2022) with impactful, human-scale installations. These artworks, though often small, have a strong emotional impact (Cheetham, 2018) and they enrich public spaces (Cucuzzella, 2019). Eco-artworks, as public monuments, evoke the history of natural environments in urban locations, contributing to the city's identity (Güneş, 2019; Antmen, 2009). They transform society and nature through collaboration and address local environmental concerns with innovative solutions (Olivier, 2007; Paek, 2018). This blend of aesthetics and functionality highlights the eco-art movement’s goal of creating meaningful impacts on local environments (Heineman, 2010).

2.3.3 Eco-Public Art

Eco-public art, a recently developed term, combines eco-art and public art. It builds on eco-art's methods for ecosystem protection and restoration, adapting them to urban contexts. This concept merges artistic ideas with eco-friendly practices to enhance environmental awareness and improve human-nature relationships through visual art and immersive experiences (Azhari et al., 2014; Robinson, 2008). It aims to promote environmental consciousness, engage the public, and foster community dialogue and action on ecological issues.

According to this newly developing movement, the implementation of public art programs to foster environmental awareness must thoughtfully incorporate eco-art principles, such as sustainable material choices, temporal elements, functionality, and the overarching concept of sustainability (Azhari et. al., 2014). Eco-public art criteria, then, must prioritize ecological principles, including the use of recyclable materials, consideration of product life cycles, incorporation of post-consumer recycled materials, non-toxicity, energy efficiency, responsible sourcing of raw materials, and the use of sustainable materials (Azhari et. al., 2014; Robinson, 2008).

In 2017, a back lane revitalization project was documented in an 'Eco Public Art Place-Making Framework' for local authorities and consultants to reference and adopt (Zakariya and Azhari, 2017). This project highlighted how eco-public art could be effectively used to transform underutilized public spaces. It is suggested that eco-public art has been widely used in many countries, such as the USA, Australia, China, Japan, Singapore, and Malaysia, to breathe new life into neglected areas (Zakariya and Azhari, 2017).

Eco Public Art Placemaking Framework can serve as a guide for local authorities in planning and implementing public art as part of their efforts to revitalize public spaces. By integrating public art into these spaces, local governments can transform underutilized areas into vibrant, functional spaces that benefit the community. The

study underscores the crucial role of stakeholders, including local authorities, organizers, and artists, in the place-making process, emphasizing that eco-public art projects rely on active collaboration and input from all involved parties (Zakariya and Azhari, 2017). This stakeholder involvement is key to creating meaningful and engaging public spaces that reflect the needs and desires of the community.

Recent studies and redevelopment projects show that transforming neglected spaces, such as alleyways and transportation lines, has enhanced public comfort, provided better pedestrian amenities in urban areas, served as green lungs for cities, offered flexible spaces, and increased public environmental awareness (Zakariya and Azhari, 2017; Mohd Tawil et al., 2013; Lorinc, 2014; Fialko and Hampton, 2013). Developing green and eco-friendly public space projects, while also raising public appreciation and awareness of the environment, is underlined as a growing global concern in the context of eco-public art.

Eco-public art is also defined as a performed entity on the street, in the public square or next to endangered ecological sites (Wang, 2023). The methodology in applying eco-public art involves using natural materials such as earth, water, stones, and plants, along with direct elements of nature like rivers, beaches, wind, and sunlight (Wang, 2023). The aim is to inform, engage, and activate the public on environmental protection and ecological literacy. These efforts strive to advance the discourse on ecosystem diversity and promote a non-exploitative human-nature relationship (Wang, 2023).

2.4 Environmental Artworks in the Urban Context

The above-mentioned art movements related to nature are described separately in the literature. Although they are differentiated in the literature, their common qualities can be characterized as their site-specific nature, incorporating sustainable practices such as using recyclable and eco-friendly materials, and often utilizing outdoor and

large-scale settings. Most importantly, they all deliver nature-related messages. Each movement seeks to foster a deeper connection between humans and nature, promoting environmental awareness by addressing ecological issues through artistic interventions. In the scope of this research, they will all be elaborated under the general title of 'Environmental Art'.

Within this context, artworks often function as central elements or disruptors, actively engaging with their surroundings to encourage reflection and dialogue. They are positioned between buildings, on streets or public spaces. The interaction between art and the urban environment reveals how urban areas can be transformed through art, facilitating connections to nature even in urban settings. By examining elements such as materials, color, form, and temporality, these artworks demonstrate how they can connect urban life with natural elements through the process of spatial relations.

2.4.1 Kolonihavehus, New York

Kolonihavehus is a public artwork by the artist Tom Fruin, and its exact location is Empire Fulton Ferry, Brooklyn, New York. Kolonihavehus is a small garden hut designed to give small free space to urban dwellers who feel exhausted or locked up in the constant rush of urban life (Günel, 2017).

The artwork has been exhibited in a rotating series of prominent locations, including the Royal Danish Library in Copenhagen (2010), Empire Fulton Ferry in New York (2011), the Venice Biennale in Italy (2012), and Pier 17 in Manhattan's Seaport District (2022). The broader context of Empire Fulton Ferry (Figure 2.1) highlights the site as a vista point for the Brooklyn Bridge, making it a significant part of the city's image and a key meeting point that integrates green and blue infrastructure.

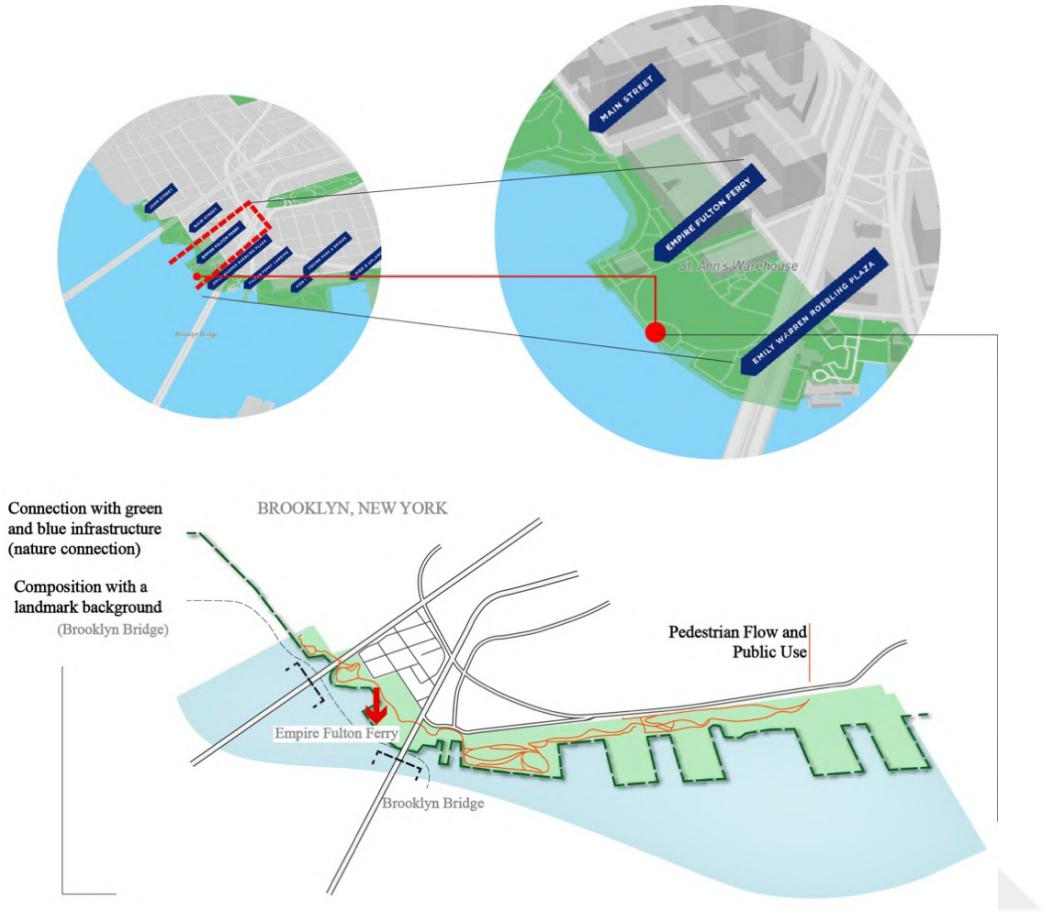

Figure 2.1. Location of Kolonihavehus in Empire Fulton Ferry, considering its implications as a public node within the broader context of the site. (Above diagram is created by the author, top two maps are accessed from Brooklyn Bridge Park Official Website: *https://brooklynbridgepark.org/places-to-see/empire-fulton-ferry/*, in August 2024).

The artwork, made from plexiglass squares and a steel frame, generates visual and light effects akin to stained glass (Figure 2.2). Beyond the artist's intent and underlying message, incorporating recycled and reprocessed plexiglass and steel in this work establishes a significant link to nature. The plexiglass was collected from various locations around Copenhagen, including a closed plexiglass distributorship, a picture framing shop going out of business, the basement of the Danish State Art Workshops, and dumpsters outside the Danish Architecture Center (Fruin, n.d.).

Figure 2.2. *Kolonihavehus*, made from plexiglass and steel, designed to interact with the city's landmarks through its composition. (Günel, 2017; Source: *https://www.icmimarlikdergisi.com/2017/01/23/renklerin-yansimasi-kolonihavehus/*, Accessed in August 2024)

In this example, the use of vibrant and striking colors, creating unique interactions with light to attract attention, and maximizing exposure by positioning it in a highly public location are relevant to enhancing the visibility and impact of the artwork, thereby contributing significantly to effective place-making. This process highlights how the presence of this object in the urban environment can transform and enhance the perception of place. For instance, being the only element in the environment made of recycled materials raises awareness and serves an educational purpose. Simultaneously, its contrast positively affects the urban experience and enhances its aesthetic quality.

BEFORE THE ARTWORK

WITH THE ARTWORK

AFTER THE ARTWORK

Figure 2.3. The site of Kolonihavehus in Empire Fulton Ferry, along with its phases before, during, and after the installation of the artwork, highlights the dimension of 'temporariness'. (Source: Google Street Map, Accessed in August 2024)

Kolonihavehus can be examined in relation to the various dimensions of place-making process. Regarding the visual dimension, the artwork's strategic placement

within the public open space maximizes visibility and interaction, while its scale and proportion create a striking contrast against the surrounding environment, ensuring that it stands out as a visual landmark. The use of reflective surfaces further enhances its visual impact, as the structure captures and mirrors its surroundings, creating dynamic interactions between the artwork, light, and the natural environment. Additionally, the vibrant color displays, combined with changing light conditions, create an ever-shifting visual experience that draws attention and heightens the sensory engagement of the viewers.

From a social dimension, Figure 2.3 also illustrates how the artwork's temporary presence transforms the usage and function of the public open space. Before the artwork was installed, there was little engagement with the space, but during its presence, the site became a vibrant node of interaction and engagement. The artwork's striking appearance makes it a visual landmark, attracting people from a distance and encouraging them to gather and interact with both the artwork and the surrounding environment, including the water. The figure also shows that tables and other seating arrangements are set up around the artwork, facilitating public gathering and social interaction. Even after the temporary artwork's removal, the space continues to be used for temporary exhibitions and artworks, maintaining its role as an active and dynamic urban node. This transformation underscores the impact of temporary environmental art in activating urban spaces and fostering a dynamic, participatory experience for the community, which also gives reference to temporal dimension in the field of urban place-making.

Key insights from this artwork include *functioning as an urban node and landmark*, incorporating *temporariness* and *dynamic* urban space, the innovative use of *recycled materials*, *form* (of a house), *reflective* surface, *vibrant and striking colors*, a unique *engagement with light*, *interactive experience* and a *composition* that incorporates one of the city's *landmarks*. This example demonstrates how enhancing public space and urban experience, re-imagining urban areas, and encouraging

interaction can be achieved through establishing spatial relationships between environmental artwork and its site.

2.4.2 Ice Watch, London

'Ice Watch' was installed in London outside the Tate Modern, a major contemporary art museum located on the South Bank of the River Thames (Figure 2.4). The installation was situated in this prominent public space to maximize visibility and impact, leveraging its powerful spatial context, particularly the water connection and the strategic location with a view of the city.

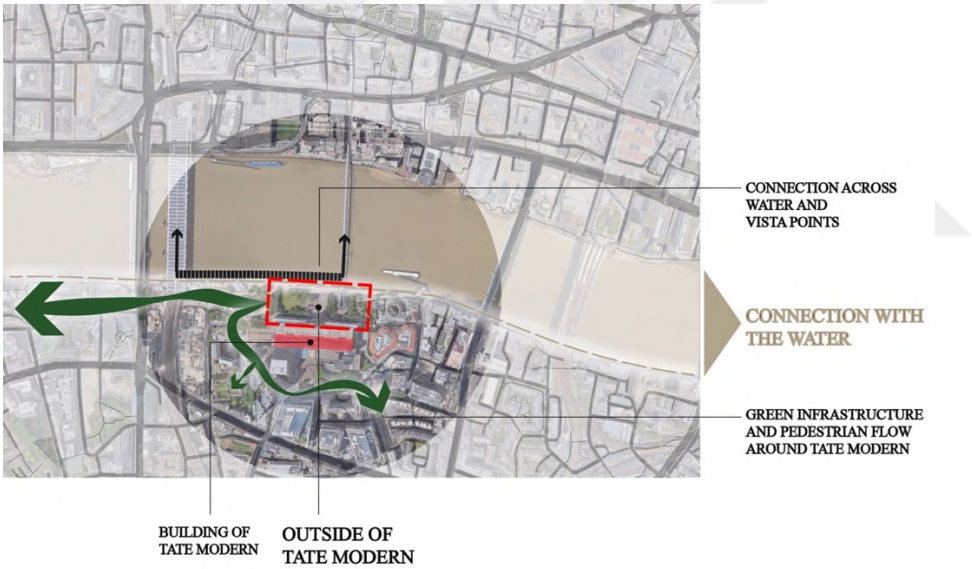

Figure 2.4. Broader context of the artwork 'Ice Watch' outside Tate Modern. (Created by the Author)

The installation basically aims to raise awareness about climate change, emphasizing the urgency and scale of the environmental changes taking place in the Arctic. It offers a direct and tangible experience of the melting Arctic ice. By placing large

blocks of ice in an urban setting (Figure 2.5), the artwork disrupts the everyday visual landscape, encouraging people to stop, observe, and engage with the space in new ways. Amid today's rushed urban life, pausing to observe is increasingly rare, yet it is essential for fostering a rich and meaningful urban experience.

For this project, twelve massive ice blocks, originating from the Greenland ice sheet, were transported to London and arranged in a clock formation in a prominent public area. Figure 2.6 shows that in some artworks, such as this example, creating art is almost like a site construction, as in urban planning and design.

Figure 2.5. Bankside, outside Tate Modern, London. (Source: Studio Olafur Eliasson Official Website, *https://olafureliasson.net/artwork/ice-watch-2014/*, Accessed in August 2024)

This example effectively communicates that, although not immediately visible, the melting of ice due to climate change is an ongoing reality. In conveying this nature-related message, the spatial relationships play a pivotal role, shaping how the

audience perceives and engages with the ongoing impact of climate change. This example particularly emphasizes tangible and sensory experiences that urban life typically neglects but actually could, and should, offer.

Figure 2.6. Installing ice blocks for ‘Ice Watch’. (Photo: Jørgen Chemnitz; Source: *https://nunatsiaq.com/stories/article/65674artist_uses_80_tonnes_of_greenland_ice_to_make_one_big_statement/*, Accessed in August 2024)

From a morphological perspective, the imageability of the space, another key concept by Lynch, is elevated by the massive scale of the ice blocks. Their substantial size and unique material make the artwork both physically prominent and visually distinguishable within the urban layout.

Considering the perceptual dimension, the striking visual contrast between the natural ice and the surrounding built environment enhances the mental imagery of the place, making the installation a memorable landmark and the site a distinct node within the city. This direct use of natural elements disrupts conventional urban

patterns, allowing the artwork to stand out as a significant reference point in the city's mental map. The predictable melting process of the ice also aligns with the Law of Prägnanz, as it introduces a clear, natural progression that users can follow.

The temporal rhythm created by the melting ice connects the artwork to broader environmental processes, creating a dynamic and evolving visual narrative that influences both the visual perception and the temporal experience of the space. It provides a direct connection to environmental cycles and natural processes, introducing a layer of ecological awareness into the urban environment.

In the functional dimension, the artwork emphasizes multifunctionality, where the space serves not only as an installation site but also as an area of discussion and reflection on climate change.

Key insights from this artwork are *temporality*, visual impact by *striking visual contrast* in the surrounding urban space, incorporation of a *natural process*, such as melting, not only connects the artwork to *environmental cycles* but also introduces an element of *unpredictability* and *transformation,* a *tangible attachment* and *sensory experience* where people walk around, touch, hear the sounds of cracking and closely observe the melting.

2.4.3 Freestanding Waterfall, Versailles and New York

The ‘Freestanding Waterfall’ is an art installation created by the artist Olafur Eliasson. It was located in several locations in New York City in 2006, and in the park of the Palace of Versailles in France in 2016, as a temporary installation. This work features a towering, man-made waterfall, which stands independently without a visible source of water.

By introducing a nature element such as a waterfall into an urban space, the ‘Freestanding Waterfall’ bridges the gap between natural and built environments.

This direct display of nature helps counteract the sense of disconnection that many people feel in densely built areas. It offers a tangible and engaging reminder of the natural world, promoting a sense of calm and well-being amidst the urban hustle.

Figure 2.7. Olafur Eliasson's art installation in Versailles resembling a waterfall, as an example to environmental art. (Source: Google Images, Accessed in August 2024)

The waterfall is an impressive, large-scale installation, standing out dramatically within the gardens of Versailles (Figure 2.7). Its grand scale captures attention and creates a sense of awe, aligning with the grandeur of the palace surroundings. Tall, vertical nature of the waterfall contrasts with the horizontal expanse of the gardens, adding a dynamic visual element to the landscape. The water and mist from the

waterfall interact with the light, reflecting and refracting the surroundings, creating a constantly changing visual experience. In terms of innovative design, the waterfall's construction involves advanced engineering to create a self-contained water system that continuously recirculates the water.

Figure 2.8. Artwork in Brooklyn Bridge, creating the image of a 'waterfall' within the cityscape. (Source: Google Images, Accessed in August 2024)

The gardens of Versailles were meticulously designed with various intricate water features, such as fountains, pools, and canals. Historically, water has always been a central theme in these gardens. The sophisticated engineering of the fountains showcased the technical expertise of the era, a concept to which the artist alludes. This ongoing engagement reaffirms the gardens as a dynamic, evolving space that continues to captivate and engage contemporary audiences.

The temporary and artificial nature of the waterfall reflects on the human desire to recreate and manipulate natural elements, prompting reflection on our impact on ecosystems and the way urban environments can integrate or oppose to natural phenomena. In Versailles, the waterfall contrasts with the highly controlled and symmetrical gardens, while in New York (Figure 2.8), it stands as an unexpected element amid the urban skyline, evoking questions of sustainability and the place of nature in the heart of cities.

Insights from this artwork include installation with a *technical system*, *large scale*, *rhythm* and *flow* of the water, *dynamic* visual image in the city, *temporariness* in the urban settings, serving as a *landmark* by installation of a *striking, unusual* element, increased *aesthetic quality* and urban *image* with *memorable composition, nature resemblance* by a *symbolic* image of a waterfall.

2.4.4 On Water, Münster

'On Water' was a part of Skulptur Projekte Münster 2017, which was a prominent international art exhibition held in Münster, Germany (Skulptur Projekte Archiv, *https://www.skulptur-projekte-archiv.de/en-us/2017/projects/182/*, Accessed in August 2024). In this project, the artist Ayşe Erkmen utilized Münster's inner harbor as the site, constructing a pier just below the water's surface to connect the lively north pier with the industrialized south pier. It is noteworthy to state that one of the organizations that provides financial support for the project was SAHA Association. Organizations like SAHA offer a model for financially supporting artist-led environmental art initiatives, as well as bringing these projects to the public's attention, which plays a crucial role in fostering creative projects that address environmental and urban issues.

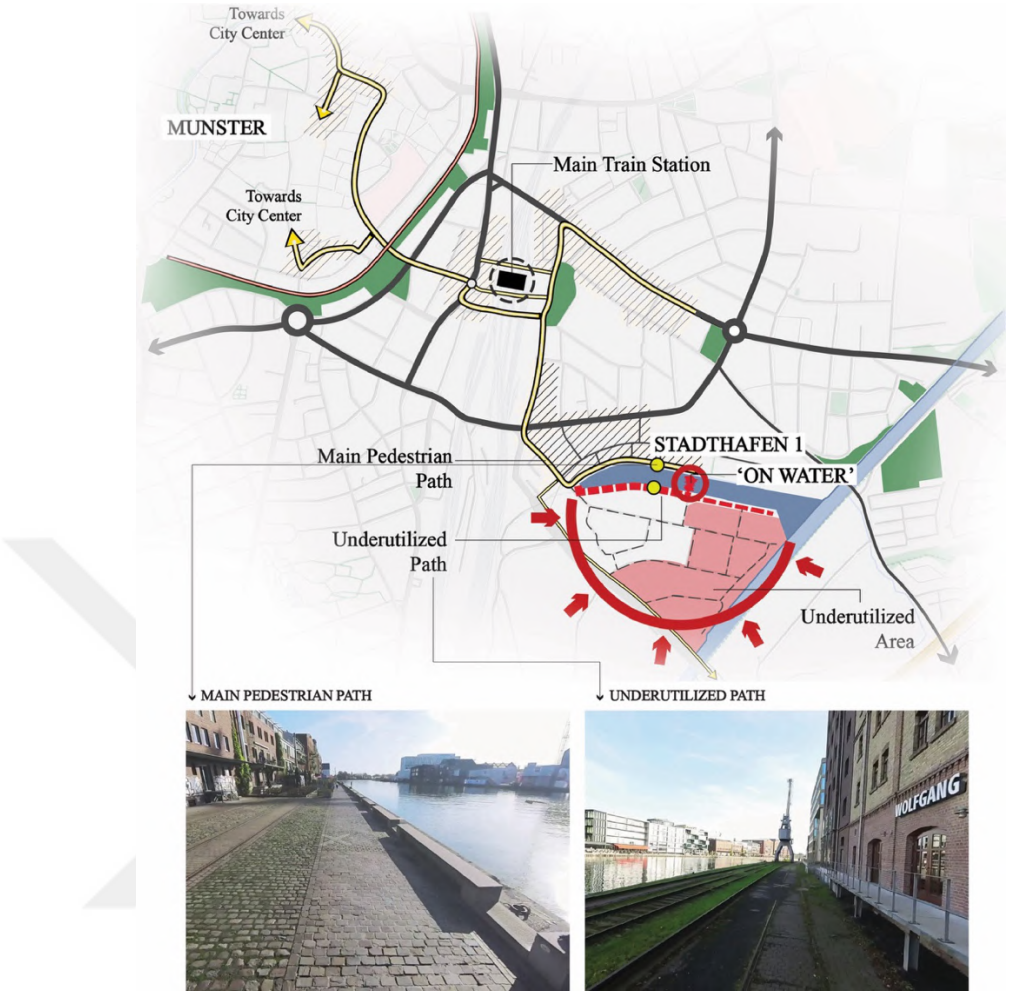

Figure 2.9. The location of Stadthafen 1, Münster, in which 'On Water' was situated; showing both sides of the inner harbour 'Stadthafen 1'. (By Author, Images attained from Open Street Map, Accessed in August 2024)

Stadthafen 1 in Münster is situated within a broader context of industrial and commercial development. Historically, the area was part of Münster's port district, serving as a hub for industrial activities. In recent years, efforts have been made to revitalize the site, focusing on transforming it into a mixed-use space, enhancing its connectivity to the city, and adapting its historical industrial character to modern urban needs. Stadthafen 1 in Münster presents a striking contrast between its two sides. One side is vibrant and well-developed, featuring designed pavements,

landscaped areas, and active use, creating an inviting public space. In contrast, the other side is underutilized and illegible, lacking clear pathways and amenities, resulting in a less accessible and engaging environment (Source: The planning procedures outlined in *https://www.stadt-muenster.de/fileadmin/user_upload/stadt-muenster/61_stadtplanung/pdf/stadtraum/stadthafen_Hafensuedseite_Dokumentation.pdf*, and *https://www.stadt-muenster.de/stadtplanung/stadthaefen*, Accessed in August 2024).

Figure 2.9 clearly shows that the artwork connects two sides of the harbour, and contributes to the vibrancy of the broader context, by reviving south pier which was an *underutilized path*.

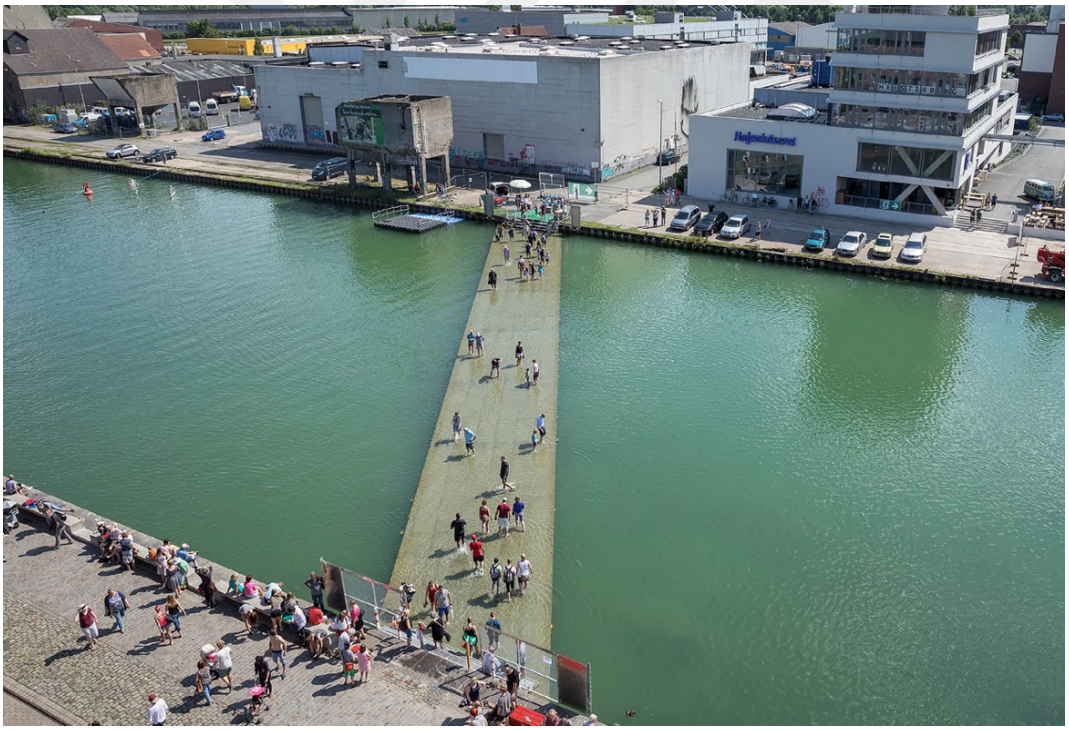

Figure 2.10. The art project 'On Water', introducing a new way of connecting both sides of a water body within the urban landscape. (Source: SAHA, *https://www.saha.org.tr/tr/projects/saha-skulptur-projekte-2017ye-davet-edilen-ayse-erkmenin-yeni-eserinin-uretimini-destekledi*, Accessed in August 2024)

Having explored the broader context of the artwork ‘On Water’, the focus turns to the artwork scale and its impact. By making visitors, who appear to walk on water, visible actors in the installation, sociological and urban planning issues are aimed to be highlighted: How are borders drawn on maps, and how is socio-cultural access designed on the drawing board? How can existing barriers be overcome, both physically and metaphorically? (SAHA, *https://www.saha.org.tr/tr/projects/saha-skulptur-projekte-2017ye-davet-edilen-ayse-erkmenin-yeni-eserinin-uretimini-destekledi,* Accessed in August 2024)

While river paths are often used as potential places to draw administrative borders, waterways and man-made canals serve as starting points and catalysts for urban development. In this project, the artist not only reflects this division but also builds a literal bridge. In other words, the project creatively redefines the concept of a path. The rarely used canal becomes a walkable connection between two urban areas previously separated by the harbor basin, making it accessible to Münster residents and visitors (Figure 2.10). Figure also displays the local ecosystem that thrives, with native vegetation and birds on the water (Figure 2.11).

Additionally, the artwork is constructed of sunken containers typically used for transporting goods on ships (SAHA, Accessed in August 2024). In other words, in this artwork, non-utilized industrial materials are reused, emphasizing the potential for reimagining and repurposing everyday materials within the urban context.

Here, we witness the transformation of an underutilized urban space into a vibrant area that invites public engagement and movement. Water, a natural element often seen as a barrier, is reimagined as a connector, enhancing mobility and interaction. These initiatives, led by visionary artists, challenge us to consider whether the use of art to reshape perceptions of space, particularly when it yields tangible ecological benefits, could be embraced as a strategic approach in urban place-making.

Figure 2.11. The illusional image the artwork creates, as if people are walking through the water. The image also displays the ecosystem of the area, with native vegetation and birds on the water. (Source: SAHA, *https://www.saha.org.tr/tr/projects/saha-skulptur-projekte-2017ye-davet-edilen-ayse-erkmenin-yeni-eserinin-uretimini-destekledi,* Accessed in August 2024)

In the context of morphological dimension, ‘On Water’ redefines the concept of an urban 'path', challenging the traditional urban edge typically associated with water features. The artwork acts as a fluid edge that reinterprets the spatial limits of the area. The floating path brings people closer to the water, creating a sense of intimacy and connection with a natural element. From the perspective of the perceptual dimension, it transforms the perception of the site by making the once disconnected area more psychologically accessible through its distinct and legible spatial form. Regarding visual dimension, the artwork creates a distinct figure against the water's surface, enhancing its visibility and significance within the urban space. Regarding social dimension, the presence of the artwork encourages interaction and activity in

what was previously an underutilized space. By making the once static waterbody a dynamic segment of the cityscape, it also reflects the shifting dynamics of urban spaces reflecting the temporal dimension.

One key nature-related message of 'On Water' is its demonstration of sustainable approaches to overcoming natural thresholds in urban settings. The installation illustrates how pursuing a middle ground between urban and natural elements is crucial for achieving a balanced integration.

Insights from this artwork include serving as a distinct '*path*', *the function as a connector* to an *underutilized area*, contributing to the *public interaction* while highlighting the site as a *dynamic* segment in the city. It ensures *continuity* while challenging the perception of water elements as *edges.*

2.4.5 The Gates, Central Park, New York

'The Gates' is a monumental work of environmental art and public art. It was created by artists Christo and Jeanne-Claude in February 2005 as a temporary artwork. It was located in Central Park, which serves as a large public park amidst the dense urban environment of New York City (Figure 2.12), providing recreational areas, scenic landscapes, and cultural amenities.

The artwork consisted of 7,503, 16-foot-high, saffron-colored fabric panels suspended along 23 miles of pathways (Figure 2.13). The installation's layout was carefully planned to ensure it passed only through sections of the park with minimal wildlife presence (Official Website of the New York City Department of Parks & Recreation, Accessed in 2024). Transforming the landscape into a dynamic, flowing work of art, the artwork interacted with the environment and influenced the movement of visitors. This temporary artwork was on display for 16 days before being disassembled and the materials recycled. The installation was free to all

visitors, who were able to continue using Central Park undisturbed throughout the entire process.

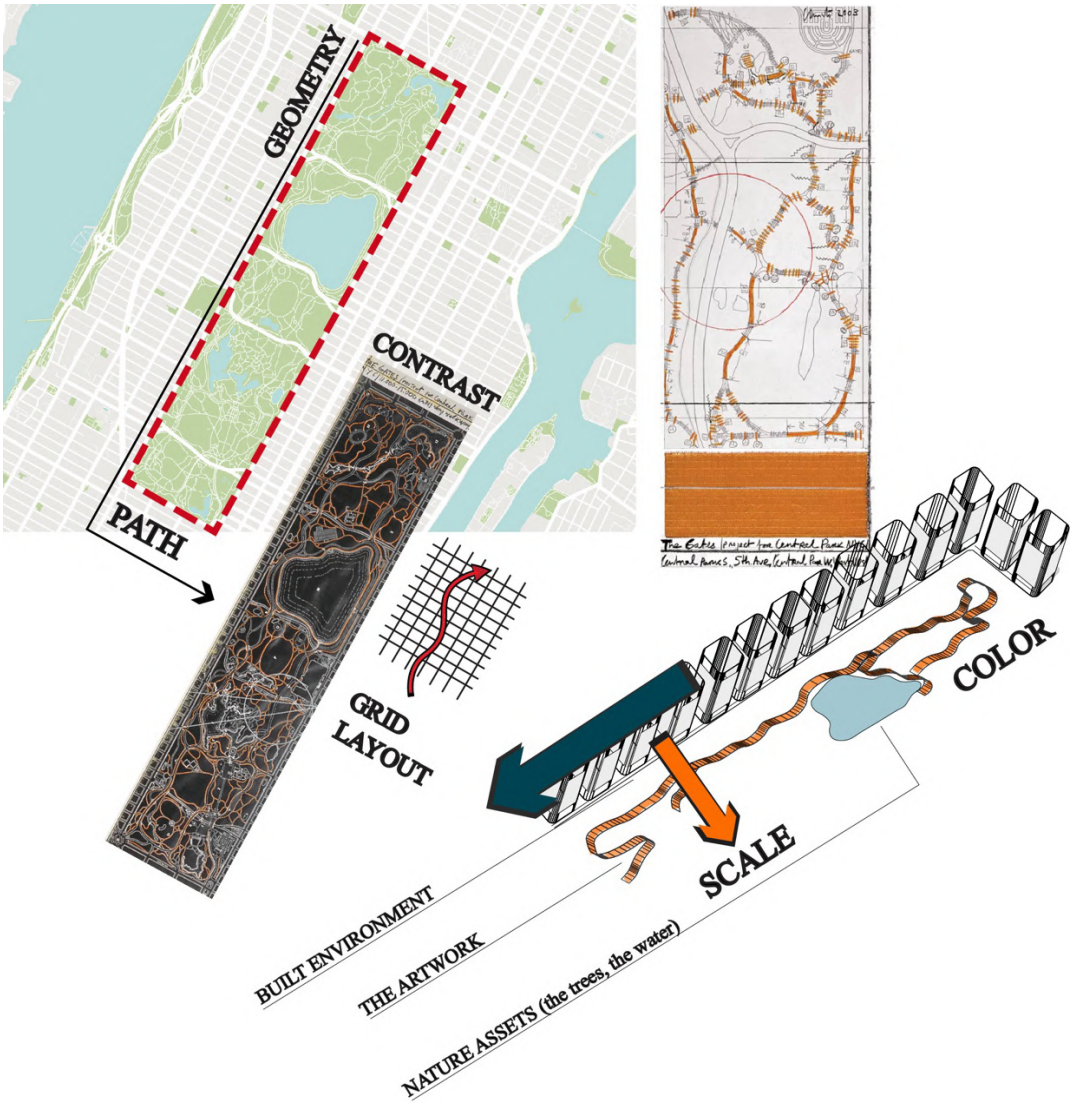

Figure 2.12. The urban context around the Central Park, where alignment of 'The Gates' can be seen, highlighting the interplay between the city's orderly grid layout and the organic paths of the park. (Created by the Author, Image Source: Christo and Jeanne-Claude Foundation, *https://christojeanneclaude.net/artworks/the-gates/*, Accessed in August 2024)

From a morphological dimension, ‘The Gates’ significantly impacted the spatial organization of Central Park, introducing a new layer of orientation and structure through its arrangement of vibrant gates. The installation worked within the grid layout of the park’s pathways while introducing a more organic flow through the placement of the gates along the natural contours of the landscape. This combination of geometric organization and organic path creation reflects a blend of rigidity and fluidity, enhancing the park’s spatial complexity without disrupting its existing infrastructure.

Figure 2.13. The fabric panels with a vibrant color and an uninterrupted flow. (Photo: Wolfgang Volz, 2005; Source: Christo and Jeanne-Claude Foundation, *https://christojeanneclaude.net/artworks/the-gates/*, Accessed in August 2024)

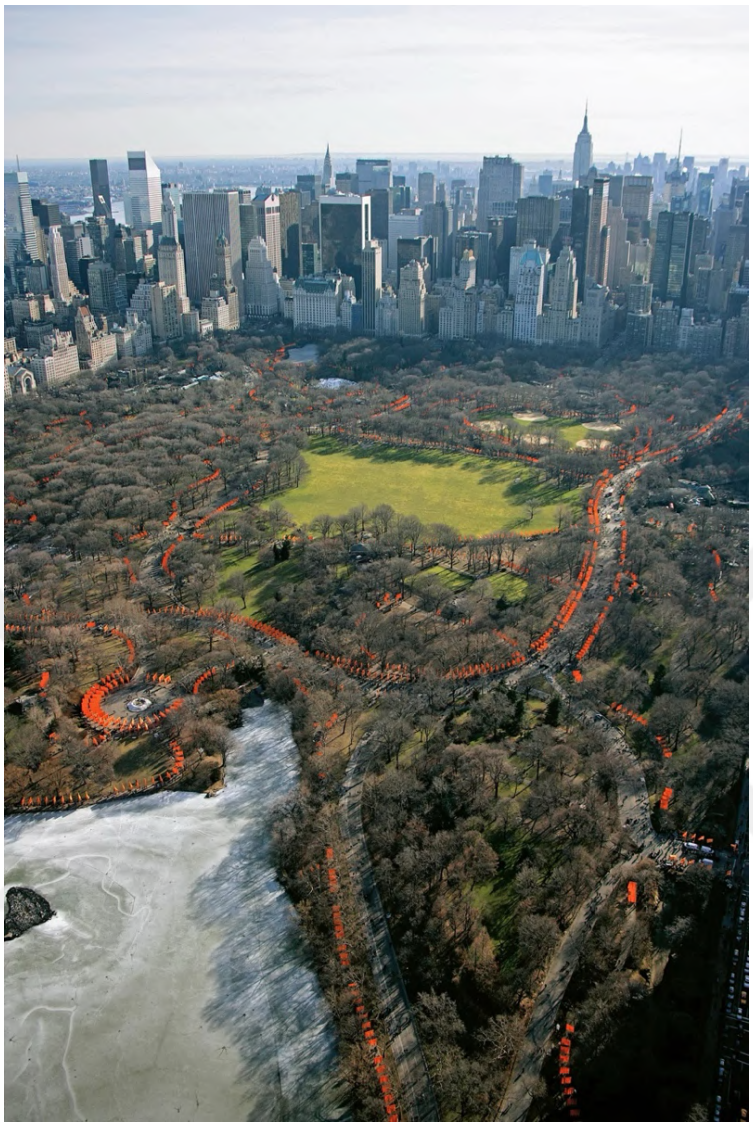

Figure 2.14. The path created by the artwork, resembling a flowing river with a striking color. (Photo: Wolfgang Volz, 2005; Source: Christo and Jeanne-Claude Foundation, *https://christojeanneclaude.net/artworks/the-gates/*, Accessed in August 2024)

Regarding the visual dimension in the place-making process, the artwork created the appearance of a golden, flowing river when viewed from the buildings surrounding Central Park, while those walking through the installation experienced the sensation of a fluid, golden ceiling overhead. With the additional factor that the exhibition was

held during the winter, the vibrant orange color of the gates stood out even more dramatically against the bare trees and snow-covered ground**,** creating a stark and eye-catching contrast in the otherwise muted winter landscape.

Figure 2.15. Varying contributions of ‘The Gates’ to urban tapestry, by extending its presence from the park to the main road, and creating a striking contrast with the winter landscape. (Photo: Wolfgang Volz, 2005; Source: Christo and Jeanne-Claude Foundation, *https://christojeanneclaude.net/artworks/the-gates/*, Accessed in August 2024)

The installation wasn’t only visible to park visitors but also to those observing from towering buildings**,** further extending its visual reach and impact on the city's urban image. The large scale of the installation drew attention as a prominent visual landmark, and created a memorable experience in the urban space. The use of scale ensured that the gates were large enough to make a visual impact but proportional to the human experience and the vastness of Central Park. All distinctive visual qualities, such as color, scale, and fluidity, separate the artwork from its context, illustrating the figure-ground principle.

Regarding the functional dimension, the artwork aligned with human needs for exploration and reflection, encouraging individuals to engage with Central Park in new and innovative ways. The pathways established by the installation provided an alternative route through the park, inviting visitors to explore familiar spaces with a renewed sense of curiosity. The gates' design also considered practical elements by ensuring that the installation did not disrupt areas with high wildlife concentrations, respecting the ecological function of the park. Additionally, the involvement of local workers highlighted a collaborative approach to urban art projects. By engaging with the community through employment and participation, the project built stronger ties between the local population (Figure 2.16). The project was entirely funded by the artists, was fabricated and assembled in local factories and installed by local workers, providing employment for thousands of New York City residents. This approach not only enhanced the project’s effectiveness but also significantly strengthened the locality by integrating local labor and resources throughout its development. Therefore, it went beyond the mere experience of the art; the construction process itself fostered an active interaction by employing locals, offering economic benefits, and enriching the community culturally. This engagement through the installation process, economic contribution, and public accessibility demonstrates the multifunctionality of the place-making process of this environmental artwork. This process, driven by the initiatives of the local population and artists, also aligns with the principles of creative place-making.

Figure 2.16. Opening day of ‘The Gates’. The engagement, the reactions and the scale can be perceived from the photo. (Photo: Wolfgang Volz, 2005; Source: Christo and Jeanne-Claude Foundation, *https://christojeanneclaude.net/artworks/the-gates/*, Accessed in August 2024)

In terms of the temporal dimension, the artwork's temporary presence added a distinct layer to the park’s identity, changing the way visitors experienced the space during its display. This temporary alteration is significant to urban tapestry as it highlights how short-term interventions can dynamically reshape perceptions of public spaces, constantly integrating new elements into the existing urban fabric. The temporal progression as visitors moved through the park, experiencing shifts in light, weather, and perspectives also add to the temporal dimension.

By merging geometry, contrast, scale, color, and the grid layout of the site with the organic flow of the paths, ‘The Gates’ created a visually and functionally cohesive installation that both highlighted and enhanced the existing structure of Central Park. Its success lay in balancing these elements to reinforce the park’s identity while offering a new, temporary experience that altered the perception of the space. Gates often act as frames, orienting views and focusing attention on particular elements beyond them, such as landscapes or structures. This framing can affect imageability and legibility, guiding how the space is perceived and interpreted by urban dwellers.

The rhythmic repetition of the gates mirrors patterns found in nature, such as the progression of trees or waves, offering a sense of continuity and flow that resembles nature. It also aligns with the cycles of growth and change in the natural world, reinforcing the idea that nature is ever-evolving, and so too should our relationship with it.

Through the process of the artwork’s message delivery, insights include use of *expansive scale*, *striking and vibrant colors*, *visual contrast*, *repetitive order*, *invitation* and *path-making*, *framing* and *orientation*, *environmentally conscious construction* practices, the use of *ecologically sustainable materials*, *sensitivity* to the site (e.g., avoiding disturbances like digging), active *community engagement*, and the concept of *temporariness.*

2.4.6 Venice Biennale

The Venice Biennale is organized in several different ways and focuses on various disciplines. Among its focuses, the 'art' and 'architecture' biennales utilize urban open spaces for various installations, exhibitions, setups, and pavilions.

18th International Architecture Exhibition in Venice (2023), which was a part of the Venice Biennale, chose the main concept as the reuse and recycling of materials. By promoting the use of recycled materials and sustainable design practices, the

biennale emphasizes the importance of environmentally conscious urban development.

The locations of the exhibitions, as shown in Figure 2.17, are strategically chosen. Aside from their historical significance, architectural beauty, and ability to accommodate large and diverse art exhibitions, their locations also create a sub-center for people to visit and experience the city's periphery.

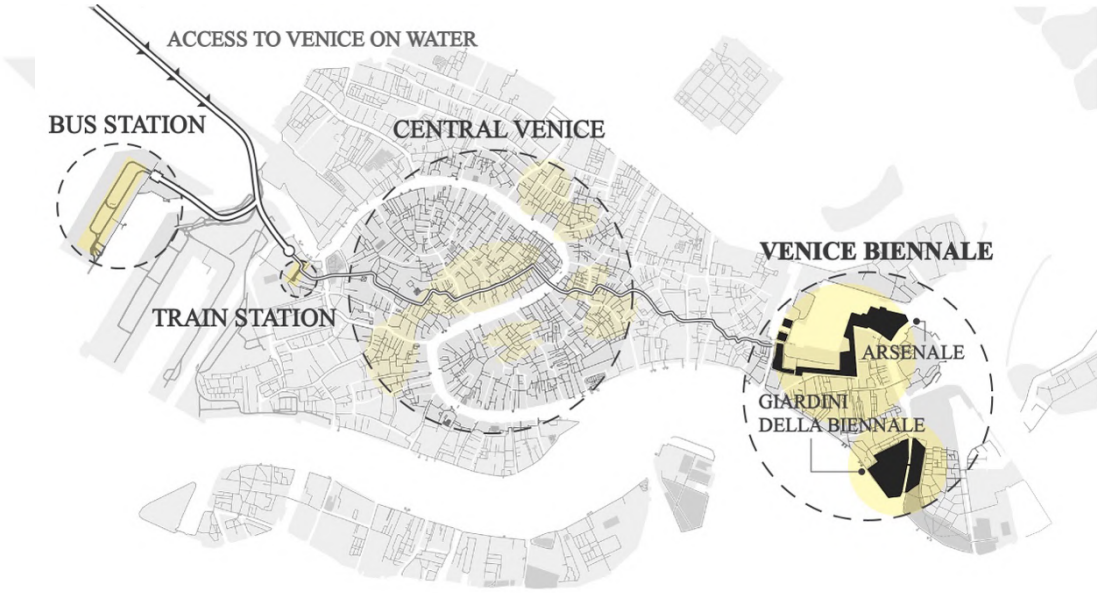

Figure 2.17. The locations of the exhibition areas for art and architecture in Venice, 'Giardini Della Biennale' and 'Arsenale' in Venice. (Created by the Author)

The Venice Biennale plays a significant role in creative place-making by prominently featuring artists as key stakeholders. It provides a global platform for artists to present works that engage deeply with Venice's urban and cultural context, fostering meaningful collaborations with local communities. The Biennale drives community development by attracting international visitors, which boosts the local economy and cultural tourism. Its exhibitions transform public spaces and enhance

the city’s cultural identity. Furthermore, the Biennale's influence extends beyond the event itself, shaping Venice’s cultural policies and urban planning by integrating art into the city's fabric. The spatial relations in the Biennale create a system of nature-related message delivery by continuously altering the perception and legibility of Venice’s urban space. By positioning artworks in dynamic and varied locations, such as along canals, within historic sites, or amidst green spaces, the Biennale shifts how these environments are experienced. This changing interaction between art and space affects how viewers interpret their surroundings, making the natural and urban elements more visible and engaging. The constant transformation of these spatial relationships enhances the legibility of environmental themes, allowing the audience to perceive and reflect on ecological issues in an engaging way.

Figure 2.18. A large quilt designed from recycled plastic containers used as water vessels, by Serge Attukwei Clottey. (Source: Hyperallergic, 2023; *https://hyperallergic.com/823867/an-urgent-vision-of-architecture-at-the-venice-biennale/*, Accessed in August 2024)

Regarding temporal dimension, many of the structures and installations were temporary in this open-air exhibition, demonstrating how temporary urban interventions can activate spaces and create dynamic urban environments. Through temporary installations and pavilions, the biennale transforms various parts of Venice into interactive and engaging public spaces, contributing to the functional dimension.

By featuring innovative projects that incorporate recycled materials and sustainable design, the biennale serves as a platform for sharing best practices in urban place-making. Installations in the biennale interact with their surrounding public squares or sites.

The installation is set in a space that blends semi-closed area with expansive public open space, including canals and passages. This combination creates a dynamic interaction between the artwork and its environment. The semi-closed space offers intimacy and enclosure, while the open areas provide a broader observation context. The artwork's form generates pockets of shade, affecting how visitors move and navigate around it.

'Kwaeɛ' emphasizes environmental themes by highlighting the significance of forests and natural ecosystems. Its design, incorporating natural materials, underscores the ecological impacts of urban development and prompts viewers to reflect on the relationship between nature and urban spaces. The artwork's innovative form and use of natural materials not only draw attention to these themes but also enhance the aesthetic diversity of Venice. By integrating with the urban environment in a visually striking manner, 'Kwaeɛ' enriches the city's aesthetic appeal and contributes to its cultural tapestry, adding layers of meaning to the urban space.

The artwork is set in a vast, open space with a partially visible cityscape and a background of a reflective water canal. The expansive surroundings magnify the artwork's prominence, as it stands solitary and unchallenged by nearby structures.

The installation's transient nature is underscored by its open design; rather than being enclosed by solid walls, it features an open form that allows it to interact fluidly with its environment. The dark color contrasts vividly with the open space and the shimmering canal, absorbing and reflecting light to highlight the installation's bold geometry.

Figure 2.19. ‘Kwaeɛ’ (which means ‘forest’), is a timber tower designed by the Ghanaian-British architect David Adjaye. (Source: Hyperallergic, 2023; *https://hyperallergic.com/823867/an-urgent-vision-of-architecture-at-the-venice-biennale/*, Accessed in August 2024)

This play of light and shadow enhances the artwork’s presence, making it a striking focal point against the expansive, uninterrupted background. The black color not only highlights the installation's form but also invites viewers to experience its evolving impact within the vast, dynamic setting.

Through the Venice Art Biennale in 2002, the pavilion ‘Of Whales’ exemplifies how art can highlight contemporary environmental concerns, including ocean conservation and the effects of human activities on marine ecosystems. This artwork resonates with global dialogues on sustainability and the imperative to safeguard natural environments.

‘Of Whales’ is an innovative film installation presented within a specially designed pavilion. Combining visual, auditory, and spatial elements creates a multi-sensory experience. Viewers are not just watching a film; they are enveloped in the sounds and sights of the ocean, which deepens their emotional and intellectual engagement. Sound plays a crucial role in ‘Of Whales’. The film's intricate sound design includes a rich tapestry of natural ocean sounds, whale songs, and an original musical score. These auditory elements work together to create a deeply immersive experience, drawing viewers into the film's narrative and emotional landscape.

Figure 2.20. A real-time video by multi-channel audio installation creating a multi-sensory experience about nature in the urban space. (Source: TBA21; *https://tba21.org/Of_Whales*, Accessed in August 2024)

In order to watch ‘Of Whales’ from the pavilion, urban dwellers have to position themselves at a vantage point where they can see the water, ideally in a semi-open space. This intentional design choice enhances the immersive experience of the film, connecting viewers physically and visually to the themes of the ocean and marine life depicted in the artwork. By situating the audience near water and within a semi-open environment, the pavilion creates a direct and tangible link between the film's narrative and the natural surroundings, deepening the impact of its environmental message.

From the morphological dimension, the Biennale site functions as a distinct district, serving as an art district during its alternating art and architecture exhibitions. Characterized by a specific theme, artistic style, and spatial configuration, the district is defined not only by its physical boundaries but also by its functional and thematic unity, contributing to the legibility of the broader urban fabric.

In the perceptual dimension, the formation of nodes at key intersections or gathering points, often coinciding with major installations or sculptures, gains importance. These nodes contribute to the imageability of the space, as they help urban dwellers orient themselves within the exhibition. The creation of a multi-sensory experiences through the integration of different materials, colors, and forms enhances perceptual richness, making the space more engaging and memorable.

Considering the visual dimension, the artworks within the Venice Biennale often contrast sharply with their surroundings, creating distinct figure-ground relationships. For example, sculptures or installations may use bright colors or innovative materials that stand out against the historic Venetian architecture. The geometric form and large scale of the pieces contribute to their visual impact and legibility, ensuring they are easily recognizable from various vantage points. The open form and fluidity of certain installations create dynamic visual pathways, encouraging exploration and active engagement (Archdaily, *https://www.archdaily.com/1017116/learning-from-global-architecture-*

exhibitions-resource-efficiency-vernacular-intelligence-and-social-and-environmental-advocacy?ad_campaign=special-tag, Accessed in August 2024).

The Venice Biennale often delivers powerful messages about nature through the spatial relations creates within the context. Many of the environmental artworks address the urgent challenges of climate change, the fragility of ecosystems, and the need for sustainable relationships with the nature. These messages are mostly communicated not through the artwork itself, but through its position, composition, and integration within the spatial context.

Insights from this example include the *composition* of the artwork (figure-ground) and its background, the use of *striking* and *contrasting colors*, its *geometric form* and *large scale*, the effects of *semi-enclosure* and *transitions*, the *open form* and *fluidity*, the creation of a *multi-sensory* experience, *district* creation and its *connection* to the urban periphery on the urban scale, and its indirect nature connection through *resemblance* and *the use of media* on the *human scale artworks*.

2.4.7 Self-Similar, Abu Dhabi

This artwork was featured in the broader exhibition titled *Manar Abu Dhabi*; in which local authorities have remarked that, '*Our vibrant and dynamic city serves as the canvas*' (ArchDaily, Accessed on August 2024).

The temporary sand installation comprises 19 concentric circles that seamlessly transition into 448 pyramids and mounds, forming an intricate and captivating mandala pattern (Figure 2.21). By illuminating the natural environment, the artwork seeks to forge a profound connection between humans and nature, offering a unique grounding experience. The exhibition encourages visitors to interact with the artworks while being situated within the surrounding natural landscape, fostering a deeper awareness of their environment and enhancing their spatial understanding.

Figure 2.21. The artwork’s location in a wider context and intricate and radiant geometric patterns. (Photo: Lance Gerber; Colossal Official Website: *https://www.thisiscolossal.com/2023/11/jim-denevan-self-similar/*, Accessed in August 2024)

In morphological dimension, the artwork’s fractal, self-similar pattern (Figure 2.21) disrupts the city's linear grid, introducing a new spatial rhythm and altering perceptions of continuity, while its proximity to the natural landscape near the urban

center fosters an enhanced interaction between the urban environment and nature. Its large scale establishes it as a dominant feature, creating a hierarchical relationship that enhances its prominence and impact within the urban context.

In perceptual dimension, it is evident that the figure-ground relationship is strong due to the contrasting geometric patterns and natural sand material, making the artwork a distinct focal point. Its repetitive, self-similar layout aligns with the Law of Prägnanz, simplifying perception despite its complexity. The semi-enclosed fractal pattern engages viewers' minds to complete the forms, following the Law of Closure and enhancing coherence. The continuous, flowing lines of the artwork adhere to the Law of Continuity, guiding the viewer’s eye and creating visual cohesion. Additionally, the fractal design employs the Laws of Proximity and

Similarity by grouping similar forms, which reinforces the artwork’s identity and impact on spatial perception. Positioned strategically, the artwork serves as a landmark that influences circulation and orientation, with its continuous pattern guiding movement and interaction.

Regarding visual dimension, the artwork’s large scale and geometric form create a strong visual impact, integrating into the urban edge while remaining prominent. Visitors can encounter striking visuals either at the central area or by climbing the two observation mounds. Starting from a small, detailed center, the design gradually expands outward, creating an illusion of depth. From a single perspective, the artwork generates infinite visual images. The use of sand and fractal patterns adds visual richness and depth. Its rhythmic, fractal design contrasts with the city grid, contributing to the spatial dynamics of the area.

This example, similar to the previous ones, evokes a nature-related image through its spatial configuration. The use of sand and the fractal, self-similar pattern convey themes of natural processes and patterns. The material and design reflect natural forms and cycles, suggesting a connection to natural environments despite the urban

setting. The geometric complexity and repetition in the artwork evoke natural phenomena like fractals found in nature, subtly reinforcing the idea that nature's patterns and processes can be mirrored in urban spaces.

Insights from this artwork include *expansive scale* that creates a *striking contrast*, *geometric, self-similar pattern* stands out as a complex visual element, using sand as a *natural material*, *fractal layout*, a *repetitive order*.

2.4.8 Passages Insolites (Unusual Passageways), Canada

Passages Insolites (Unusual Passageways) is a 4 km public art circuit located in Québec City's historic Petit Champlain and Saint-Roch districts. The event showcases 14 artworks created by 40 artists and architecture collectives from both local and international backgrounds. These artworks challenge the concept of 'Unusual Passages' by introducing unexpected elements into familiar pathways, prompting contemplation of significant societal issues and our relationship with the world.

The route created by several public artworks are called as ''The main circuit'' in Passages Insolites. According to the information in the press release for Passages Insolites 2021, a yellow line painted on the road leads visitors along a 5 km circuit showcasing unique artworks (Figure 2.22). Visitors are expected to be intrigued, surprised, and delighted, and to be offered a fresh perspective. This art walk is described as safe, family-friendly activity. An interactive map of the circuit and a downloadable PDF are available online for the public. The press release also puts a great emphasis on public artworks' temporariness.

Each year, around 20 distinctive and surprising works by local and global artists bring a touch to the urban experience, transforming how the components of urban space, such as the streets or the green or blue infrastructure, are perceived. Regarding visual dimension, Figure 2.23 displays the contrast created by the artwork, which

symbolically places a private element, such as a bed, in a public space. This juxtaposition creates a complex meaning and perception, drawing the attention of urban dwellers around it.

Figure 2.22. Interactive map for Passages Insolites 2019 as an example. (Source: ArchiPanic: *https://www.archipanic.com/passages-insolites-2019/*, Accessed in August 2024)

From the perceptual perspective, this art trail, as an urban strategy, encourages walkability, which is a fundamental aspect of sustainable urban design. By distributing art installations throughout the city, the trail motivates people to walk, explore, and experience the city on foot. This not only promotes healthier lifestyles but also reduces reliance on motor vehicles, contributing to environmental sustainability.

Regarding the temporal dimension, the temporary nature of some installations in Passages Insolites allows for flexibility in urban space usage. This aligns with contemporary urban place-making and design practices that advocate for adaptable

and multi-functional urban spaces. Temporary art installations can test new ideas and uses for space without long-term commitments, allowing planners to experiment and innovate.

Figure 2.23. An example of an artwork which connects urban dwellers with water. (Source: Huf Magazine: *https://hufmagazine.com/exmuro/*, Accessed in August 2024)

Within the functional dimension, the artworks can serve as functional nodes within the urban environment, strategically placed where paths intersect or activities concentrate. By creating focal points along the trail, these artworks enhance the usability of the public space, facilitating movement and interaction. They contribute to the functional organization of the area by providing clear reference points and facilitating the flow of pedestrians. This strategic placement improves the efficiency of navigation and supports connection with natural elements such as water bodies

(Figure 2.24), aligning with broader design considerations for urban functionality and user engagement.

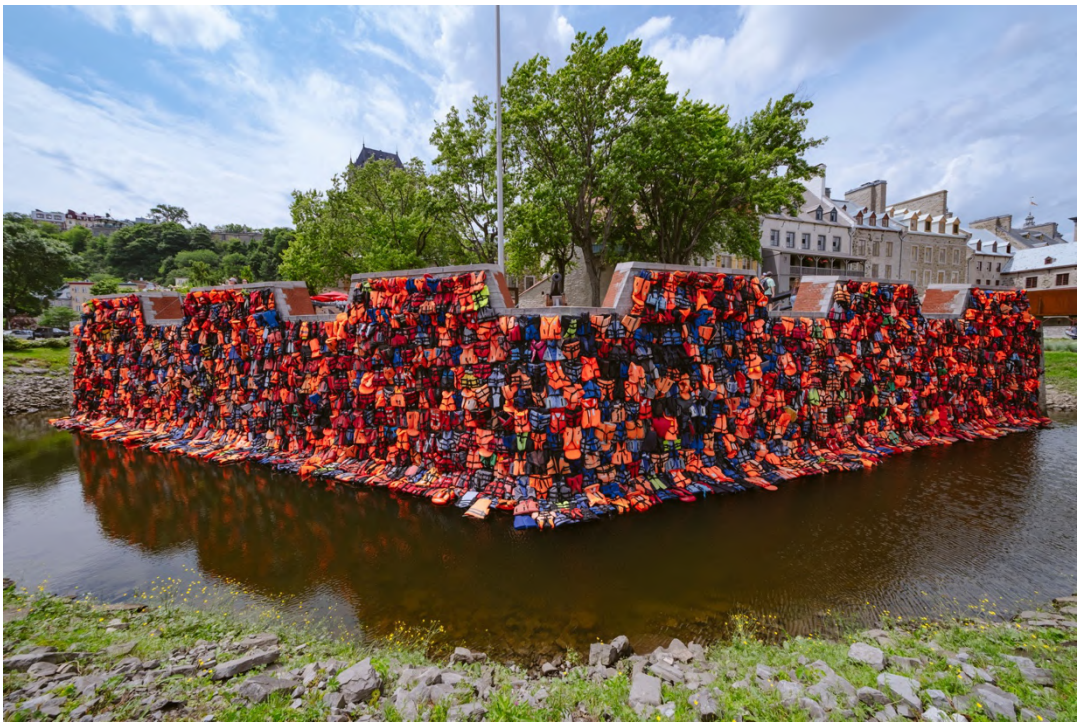

Figure 2.24. Example of an artwork along the trail, which connects urban dwellers with a water body. (Source: Huf Magazine: *https://hufmagazine.com/exmuro/*, Accessed in August 2024)

The environmental artworks on the trail can convey messages through their spatial relationships, such as their location (e.g., on water), their movements (movement in water; Figure 2.23), and their composition with surrounding urban elements. Without these spatial relationships, the artworks alone would not be conveying a meaningful message.

Insights from this artwork include design of an *art trail*, creating *exploration* and a *curated journey* across the city, *interactive mapping* facilitating through digital or

physical maps that *guide* users through the art trail, *symbolism* and *contextual contrast*, such as placing a bed in a canal that creates a *striking contrast* with its surroundings. The artworks in ‘Passages Insolites’ are *proportionally scaled* to fit the dimensions of urban streets and squares, yet they often stand out due to their '*unexpectedness*'.

2.4.9 Ekebergparken Sculpture Park, Oslo

‘Ekebergparken Sculpture Park’ (Oslo, Norway) features sculptures that are thoughtfully placed within the natural landscape, encouraging visitors to appreciate and engage with surrounding ecosystem, while reflecting on the relationship between art, nature, and educative experience. The park is set in a historical and ecologically significant area that has been carefully restored and preserved, with art playing a crucial role in this process. The restoration efforts at Ekebergparken have focused on reviving the natural landscape, which had suffered from neglect and urban encroachment. The integration of art into this revitalized landscape has helped to draw attention to the ecological value of the area, highlighting the importance of preserving and enhancing natural habitats within urban settings.

Group walks are regularly organized as an activity, allowing visitors to explore the park collectively while engaging with its sculptures and natural surroundings. The sculptures, thoughtfully placed throughout the park, encourage exploration and discovery, drawing visitors deeper into the natural landscape. They are often designed to complement and interact with the natural environment (Figure 2.25). Many of these artworks are created using sustainable materials and methods, reinforcing the park's commitment to environmental stewardship.

Additionally, the presence of art in the park helps to attract visitors, raising awareness about the importance of ecological conservation. Educational programs and guided tours often emphasize the park's ecological restoration efforts, teaching

visitors about the local flora and fauna and the steps taken to rehabilitate the landscape. This educational component fosters a deeper appreciation for the environment and encourages visitors to support and participate in conservation efforts. By placing art within a restored natural setting, Ekebergparken demonstrates how environmental art and ecological restoration can go hand in hand.

Figure 2.25. Artwork in Ekebergparken Sculpture Park, providing a way of engagement with the forest. (Source: Wallpaper, *https://www.wallpaper.com/art/oslos-revitalised-ekebergparken-opens-with-a-new-sculpture-trail*, Accessed in August 2024)

The park's layout leverages continuity through pathways that flow naturally with the contours of the landscape (Figure 2.26), encouraging movement and providing smooth transitions between different areas. The alignment of artworks along these paths, like a series of connected points, guides the visitors' visual and physical journey, creating a cohesive spatial experience (Law of Continuity, Koffka, 1935).

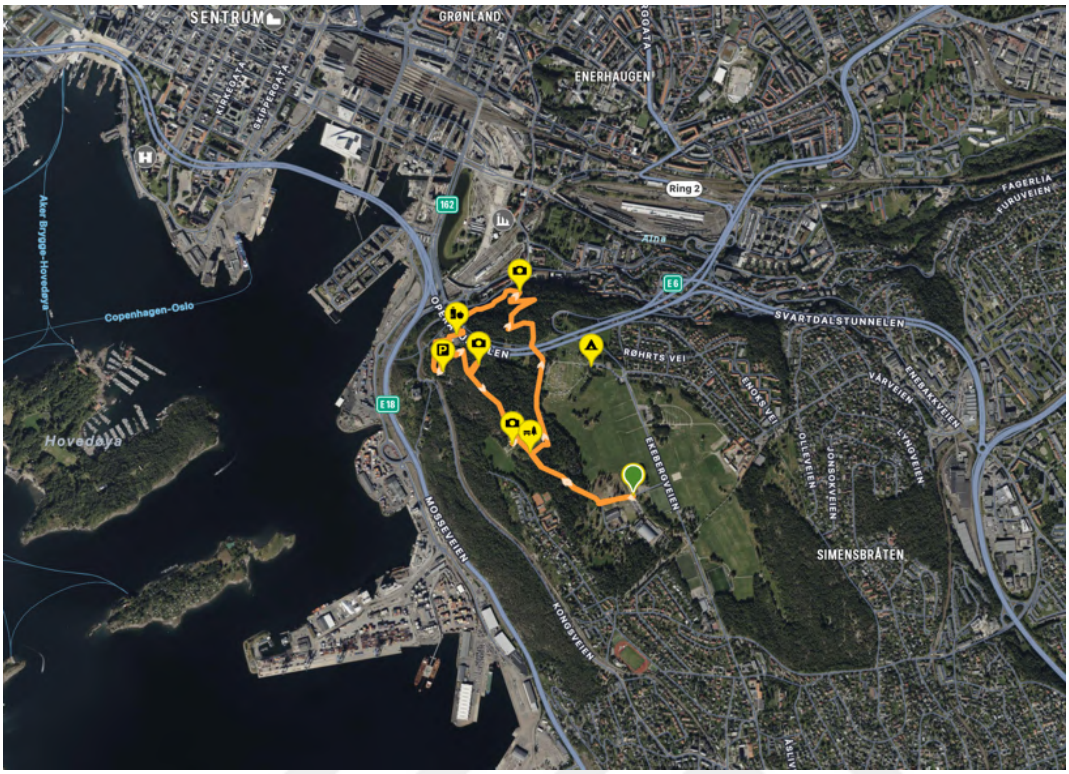

Figure 2.26. Map of Sculpture Trail in Ekebergparken, indicating its proximity to urban space. (Source: Wikiloc: *https://www.wikiloc.com/walking-trails/ekebergparken-sculpture-park-14372369*, Accessed in August 2024)

Ekebergparken also contributes to the social dimension by providing spaces that encourage public interaction and activity. The park's layout, with open areas and nodes where paths converge, invites social gatherings, enhancing the vitality of the space.

The park's design, regarding the functional dimension, encourages walkability and interaction, fulfilling various human needs, including engagement with nature and art. The integration of educational signs and nature-friendly materials further supports the park's functionality by enhancing interaction with wildlife and promoting conservation awareness.

Insights from this example includes *attracting urban dwellers to natural landscapes* for a *direct connection*, the concept of '*urban sculpture park'*, an art path created by the strategically placed artworks, well-maintained pathways and clear signage guiding, enhancing *local wildlife paths*, *educational signs*, *observing* and *interacting* with *wildlife* safely, *nature-friendly materials*, *human-scale* artworks that do not disrupt the *dominancy* of nature, *emphasizing local plants and animals*, and *restoration* efforts that contribute to the *urban landscape* by adding ecological, aesthetic and functional *layers.*

2.4.10 The Waving Wall of Chalkwell, Essex

'The Waving Wall' of Chalkwell is located in Chalkwell Park, Essex, England. This public art installation is situated in a park area, providing a prominent space for the artwork and engaging with visitors.

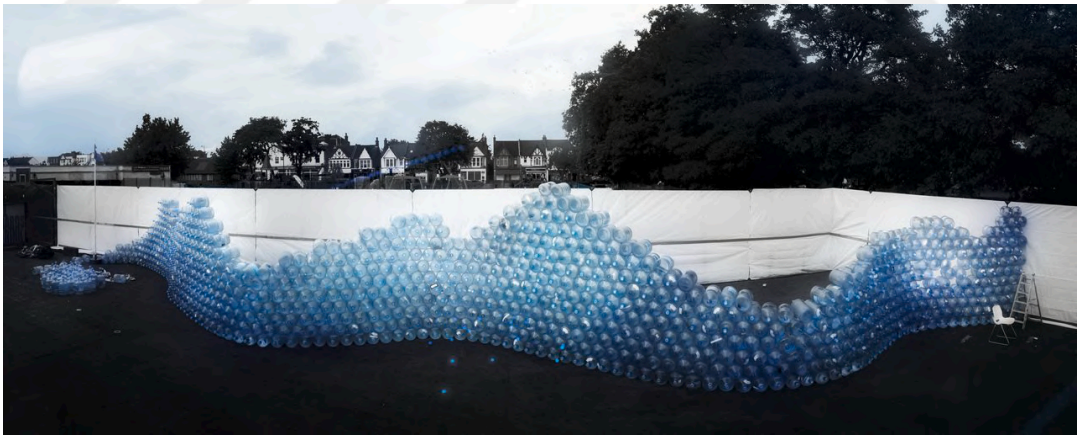

Figure 2.27. Water cooler bottles in the shape of a wave in suburban public space. (Source: Archdaily, 2011; *https://www.archdaily.com/161837/the-waving-wall-of-chalkwell-holdup-bloo-nation*, Accessed in August 2024)

In our daily urban lives, we are often distant from the processes that significantly impact nature and natural resources. Most urban residents are unaware that producing a standard cup of coffee requires 140 liters of water. The virtual water footprint accounts for the water used to grow and process the coffee beans, as well as the water involved in packaging, shipping, and distributing the coffee to supermarkets. 'The Waving Wall' visually illustrates the extensive journey of water and highlights the amount of water used in the production of various products, as well as the average water consumption of an individual. It is an art installation consisting of more than 1,200 19-litre water cooler bottles. It conveys the message that, in the near future, a significant portion of the world's population will face water-related vulnerabilities.

'The Waving Wall' plays with figure-ground relationships by using vibrant, reflective surfaces that create a stark contrast with its natural and urban surroundings. According to Gestalt's Law of Figure-Ground (Koffka, 1935), this distinction ensures the artwork stands out as a focal point within the environment. Its distinct form, materials, and temporary nature make it an effective point of reference within its district, ensuring it remains memorable and useful for orientation. The color and scale of the wall further heighten its visibility, reinforcing its role as a navigational anchor in the surrounding urban context. These aspects highlight the environmental artwork's impact on the perception and organization of the space

Insights from the artwork include *human scale*, *symbolic meaning* to convey a message, *a call for awareness*, *waving form* and *reflective surface* when considered in *figure-ground* relationship, and *temporariness.*

2.4.11 The Treehugger Project (Lonely Tree, Lonely People), Poland

'The Tree Hugger Project '(Poland) was featured for the UN Climate Conference Change which took place in Poznań, Poland in 2008. This art project, created by

Agnieszka Gradzik and Wiktor Szostalo, was a form of environmental art designed to help urban dwellers reconnect with nature on a deeply personal level. Although 'The Treehugger Project' primarily fostered passive engagement, its adaptability to various settings, such as local parks, schools, community gardens, or festivals, making it accessible and engaging for a broad audience.

Figure 2.28. Three huggers from natural materials. (Source: Inhabitat, 2009; *https://inhabitat.com/eco-art-tree-hugger-project/*, Accessed in August 2024)

The sculptures invited physical interaction, allowing people to hug them, which is considered to be deepening the 'emotional and sensory engagement' with the natural environment. This 'choice of natural materials' highlights the art's commitment to environmental sustainability and its integration with the natural landscape. Utilizing natural materials like twigs, branches, sticks, and vines, these whimsical sculptures

serve as a reminder of the integral connection urban dwellers have with the natural world.

The perceptual dimension is deeply influenced by how the artwork integrates with the city's identity and its psychological impact on the public. The project created a reflective and symbolic space that challenges conventional perceptions of urban environments. It invited users to engage emotionally with a natural element, enhancing their experience and interaction with the space. The project allowed observers to mentally complete the experience by integrating the symbolic and reflective aspects of the artwork with their own interpretations.

This environmental art featured nine figures standing in line (Figure 2.28) to hug the 'last tree,' symbolizing a tragic yet plausible scenario for many regions around the world if climate change is not addressed urgently. Clearly, it conveyed the message about the impact of climate change on the death of trees.

Insights from this artwork include *emotional attachment* towards natural assets, such as a tree, creation of *symbolic and reflective places*, *temporariness* in the urban space, and *natural material*.

2.4.12 1 Heart 1 Tree Project by Naziha Mestaoui

Supported by the French Presidency of COP21, the City of Paris, the UN Climate Convention, and UNESCO, the ‘One Heart, One Tree’ project projected images onto Parisian monuments such as the Eiffel Tower and the Hôtel de Ville. The project was conceived by Paris-based artist Naziha Mestaoui.

Throughout the project, each participant used a heartbeat sensor on their smartphone to generate a unique digital tree, which was then projected onto the buildings, while listening to music by Philip Sheppard. Utilizing advanced technology and video-

mapping techniques, each personalized tree, along with the participant's name or a positive message, was projected onto a world monument.

Figure 2.29. A projection of vibrant images of growing trees on the Eiffel Tower as part of an environmental art initiative. (Source: *https://unfccc.int/media/518176/1-heart-1-tree-dossier-partenaires-en.pdf*, Accessed in August 2024)

The projection on the Eiffel Tower (Figure 2.29) transforms the landmark into a canvas for environmental art. With this powerful image, it is aimed to increase awareness about reforestation efforts, encouraging public engagement with climate action. The iconic structure becomes a symbol of the need for environmental stewardship. Each virtual tree that is projected, had a real-world impact: for every digital tree, a real tree was planted as part of the project's reforestation programs across five continents. To date, 55,000 trees have been planted, with participants from 135 countries.

The environmental artwork aimed to reconnect people with nature through technology. The artwork was created to inspire a shift in how people perceive nature. The artist also revealed that her inspiration stemmed from the relationship Amazon tribes have with nature. There are plans to expand this participatory art project to other cities worldwide.

Within the perceptual dimension, by projecting onto iconic landmarks, the ‘1 Heart 1 Tree’ Project enhances the visibility and significance of these structures. Furthermore, the projections create focal points where public interaction and engagement are concentrated. These nodes are strategically placed to attract attention and facilitate a concentrated public experience, enhancing the legibility and activity within those areas.

Regarding functional dimension, the placement of the artwork ensures that the artwork is encountered by a broad audience, facilitating easy interaction and engagement with the project as part of the users' movement through the city. The additional functions added to the Eiffel Tower, such as its involvement in art projects or temporary installations, contribute significantly to the urban tapestry and add new layers to the landmark's image. These enhancements transform the Eiffel Tower from a static monument into a dynamic cultural symbol that interacts with its urban context.

From a visual aspect, the projections offer a simple yet impactful visual experience, focusing on clear and organized patterns that reflect the environmental message. Also, within the context of temporal dimension, the temporality of the projections adds a dynamic element to the urban landscape, reflecting the ongoing changes and rhythms within the city.

Though this artwork may appear temporary, it highlighted the significance of the decisions today by involving many people in a real reforestation process, that had a lasting impact on many people and places. In the context of message delivery, the goal of this project was to foster a sense of responsibility in everyone to inspire our future, raise awareness about the climate challenge through innovation and citizen engagement, and promote a constructive and positive discourse through a unique, spectacular, and widely popular event (UNFCCC, 2015).

Key insights include engaging the public in environmental *awareness* and reforestation efforts through *interactive, large-scale* projections on *iconic urban landmark* and placement in *public spaces, public interaction*, *visual experience and dynamic symbol.*

2.5 Environmental Artworks in the Natural and Rural Context

Environmental artworks in natural and rural landscapes offer a direct nature connection for urban dwellers. The rural context provides a distinct perspective on spatial relationships, differing from the dense structure of urban environments. It emphasizes how open, expansive landscapes influence our understanding of scale, proportion, and the interaction between human-made interventions and natural elements. In the absence of urban constraints, artworks in rural settings engage more fluidly with their surroundings, allowing the natural landscape to actively participate in shaping the artwork's impact. This dynamic interaction between art and the environment offers valuable insights into how natural landscapes can serve as

effective canvases for art, particularly in terms of visual coherence, perception, and experience.

2.5.1 Riff, PD#18245, Flevoland

Flevoland is a province in the central Netherlands, notable for being one of the largest land reclamation projects in the world. Flevoland is approximately one hour away from Amsterdam by car or train. The province is easily accessible from Amsterdam or surrounding settlements in the region, making it a convenient destination for exploring its land art installations and experiencing the unique landscape created through the reclamation.

Figure 2.30. Riff, PD#18245 is located in Flevoland, approximately 82 kilometers (one hour) from Amsterdam. (Created by the Author)

Flevoland (Netherlands) demonstrate a unique history and geography within the region. It is home to a Land Art collection set entirely within polder landscapes, with

each artwork referencing the practice of land reclamation that has contributed significantly to the spatial extent of the Netherlands (Novak, 2023). Flevoland was created by closing off and partially draining the Zuiderzee, a wide sea inlet that posed a constant flood threat, representing the Netherlands' most extensive land reclamation project to date (Novak, 2023). This newly formed landscape provides a habitat for animals and mosses. Visitors can ascend the steps to view the juxtaposition of the old land near Elburg and the new, artificial landscape with its dikes, roads, and ditches (Land Art Flevoland Official Website, n.d.).

Built in 2018, 'Riff, PD#18245', stands as an example of environmental art due to its thoughtful site selection, ecological construction, and creation of a place that fosters co-existence among all living beings. The large scale of the artwork not only allows the artwork to serve as a striking visual landmark but also enables it to accommodate practical functions, such as providing shelter for animals and mosses. In terms of impact, the scale of 'Riff, PD#18245' as an elevated structure, with steps leading to a higher level in the landscape, offers a unique perspective that highlights the contrast between the old land near Elburg and the new, artificial polder landscape (Land Art Flevoland Official Website, n.d.). This immersive experience emphasizes the significance of land reclamation and the artificiality inherent in the region's geography, making the artwork a powerful commentary on human intervention in nature.

The process began with the installation of concrete piles, followed by the construction of a steel framework and concrete walls for a staircase leading to a platform (Land Art Flevoland, *https://www.landartflevoland.nl/en/*, Accessed in 2024). A large mound of soil, gathered from nearby agricultural land and the bottom of the Zuiderzee, was piled around this central structure. Sculptural forms were then carved into the mound, and concrete was poured into these voids to create an inverted, concrete sculpture. After the concrete set, the soil was dispersed back into the landscape, revealing the artwork, which hovers above the ground on partially

visible pillars (Land Art Flevoland, *https://www.landartflevoland.nl/en/*, Accessed in 2024).

Figure 2.31. Bob Gramsma's Land Art work titled 'Riff PD #18245', in Flevoland, Netherlands, demonstrating a landscape construction in a reclaimed area in the context of land art practice. (Photo: Andreas Galmarini; Source: Land Art Flevoland Official Website: *https://www.landartflevoland.nl/en/land-art/bob-gramsma-riff-pd-18245/*, Accessed in August 2024)

The primary materials include shotcrete (a type of sprayed concrete), steel, local soil, and reinforcement elements. The shotcrete forms the main body of the sculpture, which is a cast of a large cavity dug into a mound of soil. This soil, attained from the agricultural land and the bottom of the Zuiderzee, provides both the formwork and the material that shapes the sculpture's unique texture and appearance. Steel is used in the reinforcement structures, ensuring the stability and durability of the artwork. Considering the safety of both visiting animals and people, artists may initially opt

for more resilient materials, ensuring weather resistance and robustness, while still prioritizing environmental considerations (Novak, 2023).

This example may bring up a novel discussion on whether landscapes can also be constructed (Figure 2.32). Constructed on three pile foundations using a complex technique typically employed for bridges and boats, 'Riff, PD#18245' serves as both a sculptural object and a residual form. This inversion of earth and sky aims to provoke contemplation about our relationship with the landscape and the impact of human intervention on the natural world. By situating artworks in this context, artists contribute to the ongoing dialogue about environmental modification, the role of art in public spaces, and the relationship between humans and their surroundings.

Figure 2.32. The construction process of Riff, PD#18245, demonstrating the use of natural materials derived from the immediate landscape. (Source: Land Art Flevoland Official Website: *https://www.landartflevoland.nl/en/land-art/bob-gramsma-riff-pd-18245/*, Accessed in August 2024)

From a morphological dimension, the artwork's large, rock-like form dominates the open space, functioning as a landmark. As Lynch (1960) indicates, landmarks serve as key navigational tools in cities, and here, the artwork's distinct form and scale ensure it stands out as a visual and spatial reference point, aiding legibility in the landscape. Its elevated structure, supported by partially visible pillars, adds a new vertical dimension to the flat terrain, enhancing spatial organization.

In the perceptual dimension, its distinct, organic design and unexpected scale attract attention, making the space memorable and easy to identify. The integration of a semi-enclosed design aligns with Gestalt's Law of Closure (Koffka, 1935), where the mind perceives the incomplete form as a cohesive unit. This helps users perceive the area as a defined space within the broader environment, adding to its imageability, enhancing the psychological connection and ease of mental mapping of the space.

Regarding social dimension, the artwork contributes to the vitality of the public space by offering a dynamic, visually engaging element that encourages interaction. Its large scale and organic form provide a space for gathering, contemplation, or movement around the artwork.

In the functional dimension, the artwork serves multiple practical purposes beyond its artistic value. The artwork's large scale and elevated structure not only make it a significant visual feature but also accommodate practical functions such as providing shelter for animals and mosses. The design incorporates resilient materials like shotcrete and steel, ensuring durability and weather resistance, which is crucial for maintaining both the safety of visitors and the habitat for wildlife.

As a message, the process conveys how landscapes are altered and adapted for human purposes, while still retaining elements of their natural origins. By building such spatial relations, the artwork and the site draw attention to the physical and conceptual transformation of the landscape.

Insights from this artwork include *semi-enclosed shape*, *organic design*, the *unexpected and grand scale,* presenting a rock-like *form*, *figure-ground relationship* with a *striking and dominant* feature in the landscape, *transitional form* that is *fluid* and *evolving*, and *dynamic* environment.

2.5.2 The Dean's Forest Sculpture Trail, Gloucestershire

'The Dean's Forest Sculpture Trail' is an art installation located in the Forest of Dean, Gloucestershire, England. This trail is a prominent example of how environmental art can enhance natural landscapes and engage the public with nature.

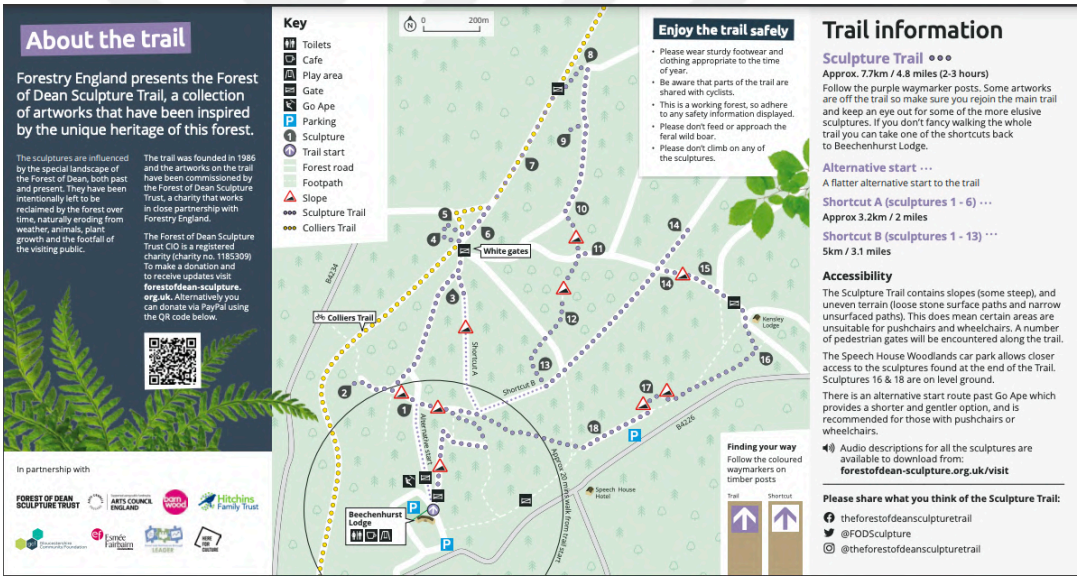

Figure 2.33. The map of The Dean's Forest Sculpture Trail. (Source: Forestry England Official Website: *https://www.forestryengland.uk/beechenhurst/arts-the-forest-dean-sculpture-trail-beechenhurst*, Accessed in August 2024)

The trail provides a walking route that guides visitors through the forest, allowing them to encounter the sculptures at various points along the way. This setup

encourages exploration and engagement, as visitors discover the artworks in a natural and immersive setting. By integrating art into a natural setting, the trail promotes a deeper connection between urban dwellers and nature, while also supporting local artists and fostering community involvement.

Figure 2.34. ‘Cathedral’, an artwork in the sculpture trail, uses vibrant colors and glass materials, with its window-like shape hanging among the trees, creating a visually striking and attractive display (Source: Google Images, Accessed in August 2024).

The artworks in ‘The Dean's Forest Sculpture Trail’ are designed to create an immersive visual experience, using distinctive forms, vibrant colors, and innovative materials to build an enchanting narrative. This interplay of artistic elements captivates visitors and enhances their appreciation of the surrounding environment. By integrating environmental art into the trail, ‘The Dean's Forest Sculpture Trail’

employs a strategic approach to attract urban dwellers to the natural landscapes situated near urban areas. The sculptures serve as powerful focal points that draw attention to the beauty and significance of the natural world. They act as both a visual and conceptual bridge, linking the urban environment with the nearby natural landscapes.

Figure 2.35. Another example artwork with vibrant colors and distinct forms in the sculpture trail. (Source: BBC News: *https://www.bbc.com/news/uk-england-gloucestershire-57512766*, Accessed in August 2024)

The trail's design enhances the aesthetic appeal of the forest by juxtaposing contemporary art with the serene background of nature. This integration creates a harmonious dialogue between the man-made and the natural, elevating the overall experience and transforming the forest into a vibrant cultural and ecological destination.

Considering the visual dimension, the sculptures' integration into the natural landscape reflects careful consideration of siting, massing, and proportion, as well as the use of reflective surface and play with light, which aligns with Lynch's emphasis on visual clarity and coherence. The placement and scale of the sculptures are designed to complement the surrounding environment, contributing to a harmonious visual composition.

Most importantly, the trail addresses various human needs by providing an interesting and engaging environment, contributing to the functional dimension in the place-making process. The sculptures' design caters to psychological and cognitive needs by offering a visually stimulating experience. The multifunctional aspects of the sculptures, such as interactive elements or symbolic forms, enhance the trail's functionality and user experience.

Insights from this example include attracting urban dwellers to natural landscape for a *direct nature connection*, the concept of '*sculpture trail'*, harmonious *placement, vibrant colors, symbolic forms* (such as a window), *glass and reflective surface* that change as the *natural light* changes.

2.5.3 Andrew Rogers Open Air Sculpture Park, Nevşehir

'Andrew Rogers' Open Air Sculpture Park' is a notable site in Nevşehir, Turkey, completed in 2007. The park stands on a valley along Nevşehir-Avanos Road (Figure 2.36), featuring 13 large-scale, outdoor sculptures that engage with the natural environment and the cultural heritage of the location. Known for his extensive 'Rhythms of Life' project, Rogers has created a series of geoglyphs and sculptures often in collaboration with, and by the physical help of, local communities.

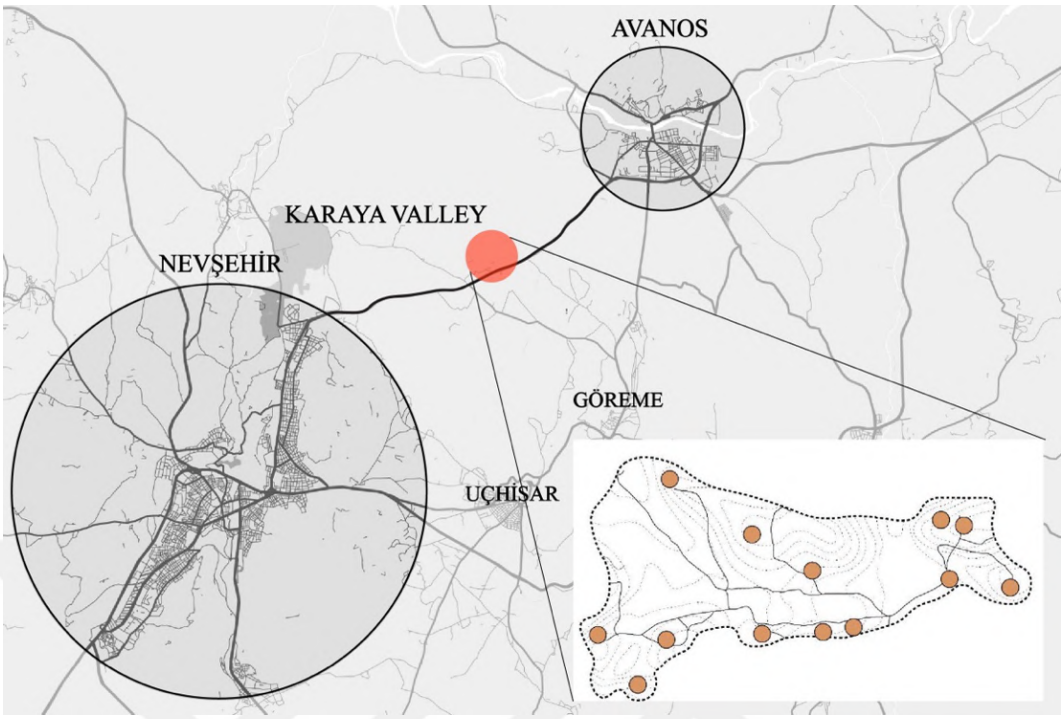

Figure 2.36. The location of Karaya Valley, where Andrew Rogers Open Air Sculpture Park is located, and the layout of the park with the art trail. (Created by the Author)

Regarding perceptual dimension, the artworks enhance the legibility of the landscape by serving as clear landmarks. Their monumental size, coupled with strategic positioning, makes them visible from a distance, aiding in spatial orientation and allowing viewers to form mental maps of the space, as described by Lynch. Gestalt's Law of Continuity is also evident in the alignment of sculptures along natural paths and contours, guiding visitors through the park. This continuous flow between art and environment creates a coherent experience, allowing individuals to engage with the space both visually and physically as they navigate the landscape.

Figure 2.37. The art trail in Andrew Rogers Open Air Sculpture Park. Arrows mark the location of each artwork. (Source: Unlimited Magazine, *https://www.unlimitedrag.com/post/bugunun-kapadokyasinda-inecek-var*, Accessed in August 2024)

The temporal dimension reflects the dynamic nature of the environment. Many of the artworks interact with the changing conditions of the site, adapting to variations in light, weather, and the passing seasons. As the environment shifts, the artworks respond, creating an evolving relationship with the landscape over time. This ongoing interaction highlights the temporal aspects of nature, encouraging visitors to contemplate the broader ecological cycles and the lasting impact of human activity on natural landscapes.

Regarding visual dimension, the Laws of Similarity and Proximity are evident, as the consistent use of natural materials and forms creates visual cohesion among the sculptures, linking them as part of a unified environment. Their prominent scale and rhythmic placement reinforce the overall organization of the space, allowing visitors to form clear mental maps. The rhythm created by the repetition of forms and the flow of movement through the park reflects the Law of Continuity, where paths and

artworks guide the observer seamlessly through the site. This thoughtful integration of visual elements contributes to the overall ambiance and ensures that the park resonates as a harmonious and vibrant outdoor space.

Figure 2.38. On the left, ‘Rhythms of Life’ is created from volcanic rock and is presented at an expansive scale within the natural landscape. On the right, ‘Time and Space’ is made from basalt. Its location highlights the contextual integration of the park and art trail with the surrounding rural villages. (Source: Andrew Rogers Official Website*: https://www.andrewrogers.org/land-art-series/turkey; Unlimited Magazine* and *https://www.unlimitedrag.com/post/bugunun-kapadokyasinda-inecek-var*, Accessed in August 2024)

It is highly relevant that natural materials attained from the surrounding environment are often employed, such as stones, earth, and vegetation, which helps to create a seamless integration with the landscape (Figure 2.38). The use of natural materials and organic shapes in Rogers' sculptures reinforces the idea that art can coexist with the environment in a symbiotic relationship, promoting a message for environmental stewardship and respect for the planet.

Moreover, artworks often incorporate themes of history and culture, connecting the natural environment with the human stories and heritage of the region. This adds a layer of cultural significance to the natural landscape, encouraging visitors to reflect on the historical and ecological narratives that shape the local environment.

It is noteworthy that the Karaya Valley where the sculpture park is located on, is not legally protected by conservation plans (Nevşehir Regional Council for the Conservation of Cultural Heritage, *https://korumakurullari.ktb.gov.tr/Eklenti/35969,kapadokya-bolgesi-i-ve-iii-derece-arkeolojik-sit-alanla-.pdf?0*, Accessed in August 2024). However, the park's existence effectively serves as an informal means of preservation. The unique characteristics of the valley remain intact, as the presence of the sculpture park deters any potential development or construction activities, thereby safeguarding the landscape in an unconventional yet impactful manner.

Insights from this example include *layers* of the city, as cultural, natural and geological and topographical, *landform interaction* such as hills, caves and valleys, *large-scale* artworks which enhance *visibility* from afar, serving as *landmark*, completely *natural materials*, *visual dominance* with artworks that can be seen from space, *reflection* of site-specific cultural or *symbolic* themes, and *resilience* to weather conditions, *trail* between the artworks.

2.6 Environmental Artworks in City Visions, Frameworks and Plans

In recent years, there emerged a global trend into embracing art as a central component of urban development vision. In other words, some cities have adopted frameworks and master plans where numerous artworks are used as elements of place-making in various public spaces, either temporarily or permanently, with an emphasis on collaboration between art and urban planning. This approach recognizes the transformative power of art to enhance public spaces, foster community

engagement, and drive economic growth. In other words, a significant trend has emerged towards integrating art into the urban fabric through collaborative projects, weaving artistic elements into the cityscape. This section specifically addresses creative place-making by emphasizing the collaboration between artists and government, as well as art-led community development.

Especially in the context of urban revitalization, such examples demonstrate how environmental art can convert neglected or underutilized areas into lively community centers. By employing sustainable materials and methods in their creations, artists help cities that embrace art as a core vision to raise awareness about environmental issues and promote nature conservation efforts. Such examples typically fall under the broader category of 'public art,' yet they are distinctly nature-related and embody the characteristics of environmental art.

2.6.1 The Underline Public Art and Cultural Master Plan, Miami

The Underline is a transformative public space initiative situated in Miami, designed to revitalize and activate the area beneath the Metrorail viaduct. This ambitious project aims to infuse vibrancy into the urban landscape by creating a multifaceted corridor that integrates green spaces, recreational facilities, and public art.

A local Miami resident first noticed the unique spatial qualities of the land beneath the Metrorail while recovering from an injury. Observing the shade provided by the structure, which made walking more comfortable in Miami's heat, and the openness of the area, a vision for the space emerged. These qualities, shade and openness, sparked the idea of transforming the corridor into a public space, where pedestrians, cyclists, and the community could come together, fostering new modes of movement and interaction in the city. Daly's vision gained traction through the establishment of the nonprofit organization Friends of the Underline. The project quickly gained support from the local community and stakeholders, including private donors and

businesses. This project is a prime example of a community-led initiative. The Underline was incorporated into Miami-Dade County's broader urban planning strategies, including transit-oriented development (TOD). James Corner Field Operations, the design firm behind New York's High Line, was brought in to create a comprehensive plan that incorporated walking and cycling paths, green spaces, and public art (The Underline Official Website, Accessed in August 2024). 'The Underline' project has a 'Public Art and Cultural Master Plan' that is designed to enhance and build upon the existing design framework and master plan by James Corner Field Operations. It can be taken as an example to integrate public art into the field or urban place-making (The Underline Official Website, *https://www.theunderline.org/art/*, Accessed in 2024).

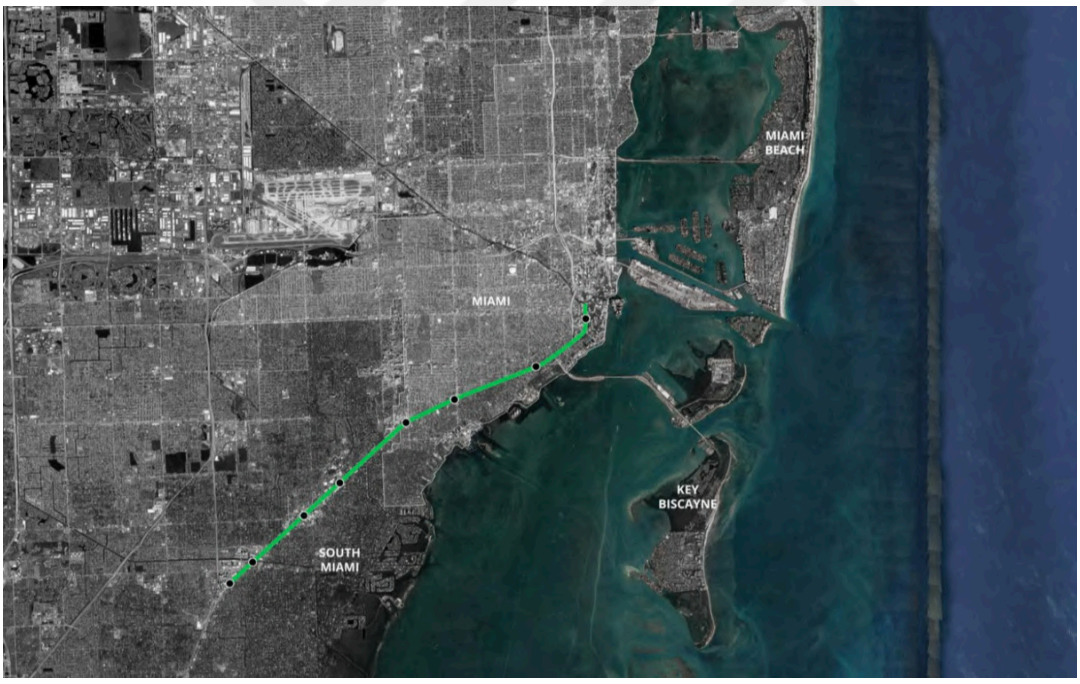

Figure 2.39. The axis on which The Underline is developed as a public space project. (Source: The Underline Public Art & Cultural Master Plan: *https://www.dropbox.com/s/374dvk9vqrrhzy7/053121%20The%20Underline%20Public%20Art%20%26%20Cultural%20Master%20Plan.pdf?e=2&dl=0*, Accessed in August 2024)

Through strategic urban planning and design, The Underline seeks to enhance connectivity, foster community engagement, rejuvenate the surrounding neighbourhoods, and, most importantly, integrate local natural elements as fundamental components of the public space's landscape (The Underline Official Website, Accessed in 2024).

Figure 2.40. The public realm The Underline creates (The Underline Official Website: *https://www.theunderline.org/*, Accessed in August 2024).

The Underline Public Art and Cultural Master Plan aims to create a continuous cultural experience along the entire 10-mile corridor, blending art with the natural and built environment. It sets guidelines for commissioning site-specific artworks, organizing cultural events, and ensuring that the public art aligns with the ecological and social goals of The Underline. In other words, the public art here is intentionally designed with ecological awareness, aligning with the focus of the Master Plan. By doing so, the artworks take on the role of environmental art, not only contributing to

the spatial configuration of the area but also enhancing the integration of natural elements. This approach improves the spatial clarity and establishes a nature-centric interaction within the urban landscape.

Once an underutilized railway corridor, The Underline has been transformed and revitalized through public art to deliver a powerful message. The integration of art into the site not only enhances its aesthetic appeal, but also serves to inspire and encourage similar revitalization projects. This approach highlights the potential of public art to bring new life into neglected areas and to advocate for thoughtful, ecologically mindful urban transformations.

The Underline Public Art & Cultural Master Plan states that 'A master plan is tailored to its specific location.'. It includes:

- Designated sites for public art installations
- Areas for community interaction and cultural activities
- Integration of landscape design with **environmental art** and technology
- Inspiration drawn from the surrounding natural and built environments
- Opportunities to connect people with their stories and with one another, reflecting the community's spirit (The Underline Public Art and Cultural Master Plan, *https://www.theunderline.org/art/*, Accessed in 2024).

Key insights as can be outlines for the future frameworks include *site specificity, community interaction*, *landscape design with environmental art* (merging landscape with art, using native plants and artful vegetation etc.), *inspiration* from surrounding natural landscape, opportunities to *connect,* community *spirit,* connection to public transportation system (Metro-line), public gathering, recycling of an underutilized, neglected path and ecological material use.

2.6.2 High Line, New York

The High Line was originally a freight rail line built in the 1930s, primarily serving the industrial needs of New York City. It is turned into a 2.3-km-long public park built on that elevated former freight rail line in Manhattan, and has become a celebrated urban renewal project since its opening in 2009 (De Block et al., 2019; Mills, 2009). Its transformation into a park is a prime example of adaptive reuse, turning an obsolete infrastructure into a valuable public asset.

Local residents Joshua David and Robert Hammond founded the 'Friends of the High Line' in 1999, a nonprofit organization aimed at saving the structure from demolition. They recognized its potential for reuse as an elevated park and public space. The group initiated public advocacy, media campaigns, and partnerships with local stakeholders to garner support for preserving the High Line. An international design competition to reimagine the space was held by the Friends of the High Line, and the winning design was created by landscape architecture firm James Corner Field Operations and architects Diller Scofidio + Renfro, with planting design by Piet Oudolf. Their vision integrated nature, art, and urban design, blending industrial elements with native plantings that echoed the wild plants that had taken over the disused tracks (The High Line Official Website, *https://www.thehighline.org/photos/historical/*, Accessed in August 2024). Local authorities, although initially uninvolved in the project, eventually incorporated the High Line into their economic development agenda while also actively supporting its preservation and opposing landowners who sought its demolition (The Official Website of the City of New York, *https://www.nyc.gov/office-of-the-mayor/news/331-12/mayor-bloomberg-speaker-quinn-friends-the-high-line-break-ground-the-third-final#/0*, Accessed in August 2024).

Figure 2.41. Route of The High Line in the city of New York shown as a red line. (Source: The Architectural Review, *https://www.architectural-review.com/essays/revisit/revisit-high*-line, Accessed in August 2024)

The High Line's redevelopment represents a broader trend in urban planning focused on revitalizing neglected or underutilized infrastructure. This approach has influenced numerous similar projects worldwide, promoting the reuse of industrial infrastructure for public spaces (De Block et al., 2019). The High Line's unique elevated perspective and carefully curated landscape have made it a distinctive urban experience, attracting millions of visitors annually (Wesselman, 2013; Cataldi et al., 2011).

High Line Art is dedicated to enhancing the presence of contemporary art in public spaces. It commissions and creates top-tier art projects on and around the High Line, fostering a dialogue crucial to urban life. Art installations are integrated throughout the park's design, including permanent works, temporary exhibitions, and performances, ensuring that art is an intrinsic part of the High Line experience.

The environmental artworks often reflect the changing seasons and the natural processes, as well as the historical layers of the site, creating a living, dynamic canvas. By positioning environmental artworks at key locations, the High Line encourages visual exploration and movement through the park. These artworks serve as landmarks that draw attention to specific views, plantings, or architectural features, framing the cityscape and natural elements in new ways. This spatial strategy promotes greater engagement with both the artwork and the surrounding environment. By using materials, forms, and themes tied to natural elements, such as wind, water, or native plants, the artworks create multi-sensory experiences that heighten the visitor's awareness of their surroundings. Environmental artworks on the High Line often convey messages about climate change, sustainability, or the relationship between humans and nature.

2.6.2.1 En Plein Air (2019) and Secondary Forest (2024)

By situating these artworks within an urban park, the High Line serves as a platform for educating visitors about ecological issues. This spatial strategy reflects the broader movement of reclaiming underutilized urban infrastructure for public use, where environmental artworks play a key role in transforming these spaces into vibrant, ecologically aware environments.

By placing curvilinear-shaped artwork that mimics natural forms and patterns in a public space, the work explores the relationship between the natural world and the built environment, emphasizing how both can coexist and influence one another. The inclination to place artworks outside was a reaction to the significant shifts in urban

life, where nature and cities reshaped each other due to the pressures of modernization. Artists took their studios outdoors, which focused on capturing nature and the transient effects of light.

'Secondary Forest', an evocative installation on the High Line, is composed of animal, human, and plant forms cast from aluminum, sprouting out from a steel grid armature (Figure 2.43). The artwork prompts viewers to reflect on the relationship between urbanization and nature. By presenting nature-inspired forms in an industrial context, it highlights the impact of human activity on the environment and the potential for nature to adapt and regenerate. It encourages viewers to think about how urban spaces can be designed to co-exist with and support natural ecosystems. Such encounters on an urban trail helps individuals form a personal connection with the themes of nature and urbanity.

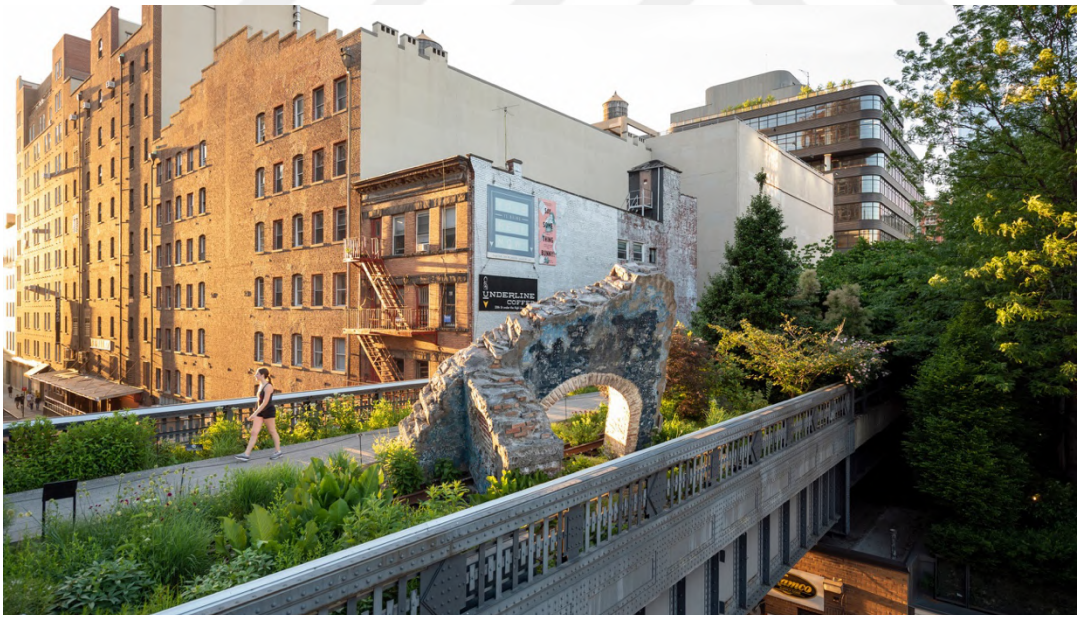

Figure 2.42. Artwork 'En Plein Air', On view April 2019 – March 2020. (Photo: Timothy Schenck; Source: *https://www.thehighline.org/art/*, Accessed in August 2024)

Figure 2.43. Secondary Forest (2024), composed of symbolic forms resembling living creatures and roots, with a strong emphasis on the ecology of nature. (Photo: Liz Ligon; Source: *https://www.thehighline.org/art/*, Accessed in August 2024)

In this case, the elevated trail acts as a linear pathway that guides movement while the artworks provide visual landmarks, enhancing legibility by being visually distinct from their surroundings. The Figure-Ground principle is evident here, as the artwork stands out clearly within the urban environment, enabling easy recognition as a focal point. This clear contrast allows users to navigate and experience the space more intuitively, creating a spatial relationship where nature and built form coexist.

Both ‘En Plein Air’ and ‘Secondary Forest’ utilize form and material to establish a strong figure-ground contrast (Koffka, 1935), contributing to perceptual and visual dimensions. ‘En Plein Air’, with its curvilinear shapes, mimics the organic patterns of nature, which also contrast with the straight, linear forms of the urban environment. In ‘Secondary Forest’, the use of reflective aluminum, shaped into natural forms such as animals, humans, and plants, contrasts with the rigid industrial steel grid structure on the High Line. The reflective properties of the material,

interacting with light, heighten the visual impact, creating a dynamic relationship between the artwork and its surroundings. These contrasts make the artworks visually legible and easily identifiable within its urban context, enhancing the imageability of the space. The Law of Proximity (Koffka, 1935) is evident in both works, as visitors perceive these clusters as integrated parts of the High Line's landscape, rather than isolated objects. This arrangement enhances the social dimension of the space, as it encourages interaction among visitors, offering gathering points where they can be delivered with a nature-related message by the environmental artwork.

2.6.2.2 The River That Flows Both Ways

Spencer Finch's 'The River That Flows Both Ways' (2009) is located on the High Line. It is designed specifically to enhance interaction with the nearby Hudson River, using colored glass panels to reflect the river's many hues and creating a dynamic visual connection between the park and the natural waterway. It is typically categorized as environmental art since it often engages with natural elements and landscapes, aiming to provoke thought about environmental issues or natural phenomena.

Located between 15th and 16th Streets, artwork is positioned along a tunnel-like former loading dock (Jaroff Studio, 2009), which seems to be a neglected, unemployed urban space in the heart of the city, alongside Hudson River. This artwork transformed a lifeless area into a space for everyday use (Figure 2.45 and Figure 2.46).

'The River That Flows Both Ways' refers to the natural phenomenon of the Hudson River flowing in two directions. The artwork captures the changing colors of the Hudson River over a 700-minute period. Finch photographed the river every minute for 11 hours, capturing the subtle variations in color and light (Jaroff Studio, 2009).

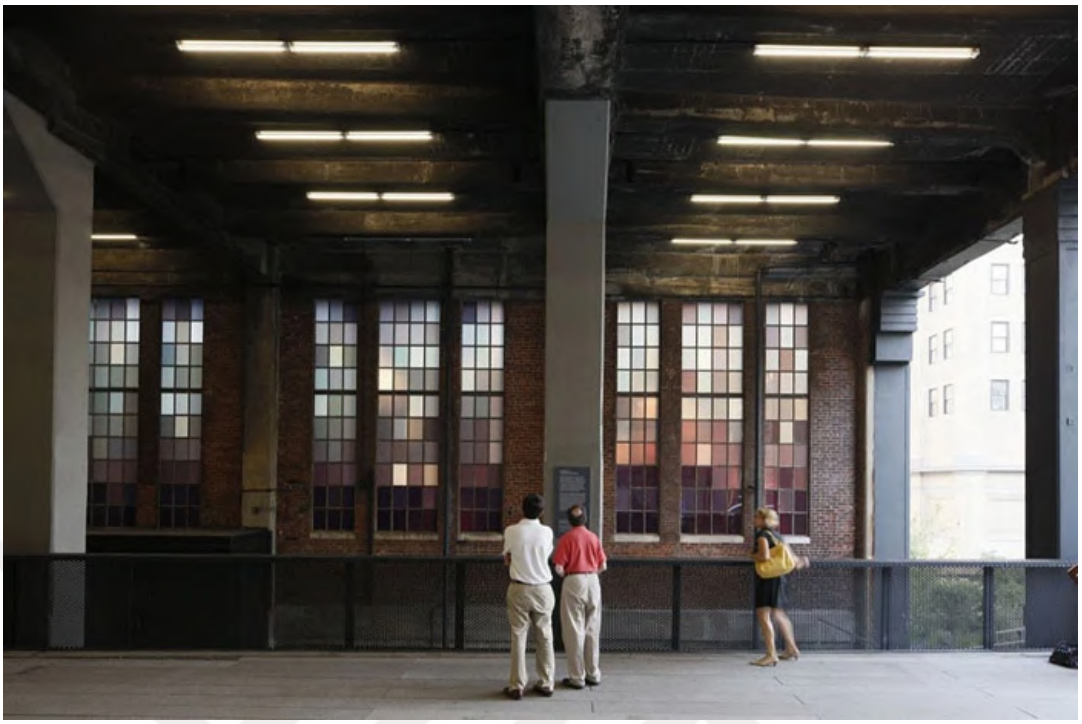

Figure 2.44. The glasses through the passage, as an example of the integration of environmental components in nature into urban public space. (Source: Jaroff Studio: *https://jaroff.com/press/blog-post-title-three-bd6cn*, Accessed in August 2024)

By translating these photographs into colored glass panes, Finch represents the river's dynamic nature and the constant change inherent in natural bodies of water. This theme of transformation mirrors the environmental processes of the river. This automatically creates a dynamic interaction with the park's environment, drawing attention to how a river can take on many different colors. The installation contributes to the overall aesthetic and experiential quality of the High Line, as it invites viewers to consider their own interactions with natural and urban landscapes and to experience the park in new and imaginative ways. The artwork highlights the intersection between urban environments and natural landscapes, encouraging viewers to reflect on this relationship.

Regarding temporal dimension, the continuous arrangement of glass panes follows a smooth, uninterrupted pattern, encouraging urban dwellers to follow the flow of changing colors, just as one might follow a flowing river. The Law of Continuity is relevant here, as this continuity enhances the legibility of the artwork, making it easier for viewers to mentally and visually process the gradual changes over time, contributing to a clear perception of temporal dynamics. The artwork utilizes light-sensitive materials (glass panels) which respond to environmental changes, particularly light and color variations over time, embodying the passage of time as a dynamic urban element.

Figure 2.45. After rendering of the artwork, indicating its initial condition as an underutilized space before the artistic intervention. (The New York Times, Art & Design: *https://www.nytimes.com/2009/05/22/arts/design/22voge.html*, Accessed in August 2024)

Figure 2.46. The same site in 2011, illustrating the almost complete recycling of the space. (Source: Google Street View, 2011, Accessed in August 2024)

Figure 2.47. The public realm and public use around the artwork. Arrows are employed to mark the artwork within the space. (Source: Google Street View, 2011, Accessed in August 2024)

In the perceptual dimension, the environmental artwork acts as a node, a concentration of activity or visual attention, where paths of movement intersect, offering a focal point that is easy to navigate and engage with.

From a functional perspective, this artwork significantly transforms the public space by creating an engaging and visually compelling environment that draws consistent foot traffic. Its design integrates seamlessly with the surroundings, contributing to the area's vibrancy and encouraging frequent visits from the community. The installation has prompted additional features, such as the placement of tables along the pathway, which not only enhances its functionality but also fosters social interaction and communal activities (Figure 2.47). By embedding itself within the daily life of the public space, the artwork goes beyond traditional public art to embody principles of environmental art. It improves the quality of the space, while also raising awareness about natural processes.

Insights include *temporariness*, *reflecting* glass panels as material, *color* and *light* integration, *large-scale*, *node* creation, *visual rhythm*, *dynamic* urban space, *vibrancy*, *recycling an underused space* and increasing *public use* and *engagement*.

2.6.2.3 Still Life with a Landscape (Model for a Habitat)

'Still Life with a Landscape (Model for a Habitat)' by the artist Sarah Sze was initially on temporary display at the High Line in New York before being permanently moved to Ekebergparken in Norway. The artwork illustrates ecological stewardship and provides an innovative way to interact with local habitat. The steel and wood structure supports the flourishing of birds and insects, drawing viewers into an environment that fosters a dialogue with nature (The High Line Art, *https://www.thehighline.org/art/projects/sarahsze/*, Accessed in August 2024).

Figure 2.48. ‘Still Life with Landscape (Model for a Habitat)’, an environmental artwork that creates a medium for urban dwellers and animals in the urban space (*June 8, 2011 - June 6, 2012*), (Source: Tanya Bonakdar Gallery, 2012; *https://www.tanyabonakdargallery.com/exhibitions/276-sarah-sze-still-life-with-landscape-model-for-highline-new-york/*, Accessed in August 2024)

‘Still Life with a Landscape’ functions as a habitat for birds and insects, fostering a direct ecosystem relationship and encouraging viewers to engage with and reflect on their environment within an urban public space (La Farge, 2011).

In terms of material selection, the artist seeks to repurpose urban waste materials such as paper, cardboard, wood, glass, plastic, metal, and rubber into artworks that not only influence but also shape the spaces they inhabit, serving as sites of ecological stewardship and coexistence.

This artwork possesses remarkable architectural qualities (Figure 2.48), serving as an ideal bird feeder while framing several iconic buildings with its grid-like steel girder design: the London Towers, General Theological Seminary, the Empire State

Building, and the Guardian Angel Church. Most notably, it brings birds up close. Even New York's pigeons, typically content on ordinary lampposts, have been drawn to the artwork, along with sparrows, mourning doves, and other avian visitors (Figure 2.49) (La Farge, 2012).

Figure 2.49. The birds are feeding on the environmental artwork. (Source: Tanya Bonakdar Gallery; *https://www.tanyabonakdargallery.com/exhibitions/276-sarah-sze-still-life-with-landscape-model-for-highline-new-york/*, Accessed in August 2024)

In terms of visual dimension, especially figure-ground perception, the artwork stands in clear contrast to its surrounding environment, particularly because of the use of recycled materials that are transformed into visually striking forms. This clear distinction between the background (urban context) and the figure (the artwork)

enhances its perceptual clarity, allowing it to stand out as a distinct and memorable element in the urban landscape.

The functional aspect of this environmental artwork is crucial in transforming an otherwise passive public space into an interactive experience. By providing spaces for birds to nest and humans to sit, it blends ecological function with urban engagement, emphasizing the role of art as a multifunctional urban element. This reflects the Law of Closure, where the incomplete forms created by the suspended platforms and geometric shapes are mentally completed by users, suggesting boundaries and functions without fully defining them. This ambiguity invites ongoing participation and interaction, further integrating the artwork into the urban ecosystem.

Representing a temporal dimension, the artwork evolves over time as both an ecological habitat and a human gathering space, embodying the dynamic temporal rhythms of urban life.

Insights from this artwork include *ecological integration*, transforming urban *waste materials* that highlights the potential of *recycling*, *interactive experience*, *geometric* design in *shape*, *functional relationship* and *temporariness* in the urban public space.

2.6.3 Art Exhibitions in Madison Square Park, New York

Madison Square Park in New York functions as a public garden, urban forest, wildlife sanctuary, art exhibition space, and a playful retreat for children and pets, making it one of New York City's most extraordinary and inviting locations (Madison Square Park Conservancy Official Website, *https://madisonsquarepark.org/park/about-the-park/*, Accessed in August 2024). It serves as a dynamic canvas for temporary art installations, continually transforming its landscape with a rotating selection of contemporary works. This strategic temporariness is integral to the park's identity, ensuring that each visit offers a fresh

and engaging experience. Artworks in Madison Square Park come and go with a deliberate sense of transience, reflecting the park's commitment to providing a vibrant and evolving cultural space. From striking sculptures to immersive installations, the park embraces a variety of artistic expressions, enriching the urban environment with creativity and innovation.

Figure 2.50. Location of Madison Square Park. (New York City Department of Parks & Recreation Official Website, *https://www.nycgovparks.org/parks/madison-square-park*, Accessed in August 2024)

Art exhibitions in Madison Square Park were initiated by the Madison Square Park Conservancy, a nonprofit organization established in 2002 to oversee the maintenance and cultural programming of the park. The Madison Square Park Conservancy consists of a group of mostly local community members who sought to revitalize the park and create a space offering both recreational and cultural experiences for the public. Since its founding, the Conservancy has played a central role in curating and commissioning temporary art installations, turning Madison

Square Park into a significant site for environmental and public art in New York City.

Figure 2.51. ‘To Let the Sky Know/Dejar que el cielo sepa (2024)’, bursting with color in the middle of Madison Square Park (Source: Colossal Official Website, *https://www.thisiscolossal.com/2024/01/tulle-installation-ana-maria-hernando/*, Accessed in August 2024)

The rotation and temporariness of art installations in Madison Square Park significantly enhance the dynamism of the space and strengthen people's connection to nature. By constantly introducing new artworks, the park maintains an element of surprise and novelty, making each visit unique and encouraging frequent returns. This continuous renewal contrasts with static urban environments, creating a lively and stimulating destination. The interactive nature of many installations invites

deeper engagement, allowing visitors to connect more profoundly with their surroundings and the themes explored by the art. Reflecting the natural cycles of growth, decay, and renewal, the planned temporariness mirrors the temporary qualities of nature, fostering mindfulness and presence. Additionally, contemporary artworks often address environmental issues and the human-nature relationship, prompting visitors to consider these themes in the context of their urban environment and promoting greater ecological awareness.

Figure 2.51 indicate an example of a very recent environmental artwork (2024) that particularly incorporate visual and perceptual dimensions in urban design. Aligning with the Gestalt's Law of Figure-Ground, the bright hues and unique design ensure that the artwork stands out from its context, serving as a visual landmark that guides attention. The consistent use of color and pattern in the artwork supports the Law of Similarity. By employing repetitive visual elements, the artwork achieves a unified and organized appearance. Its location contributes to the park's navigational and observational dynamics, as it creates a central visual element around which observations may cluster.

'Ghost Forest' (Figure 2.52) illuminates the devastating effects of climate change. By bringing such an ecological issue into an urban setting, it was aimed to raise awareness and provoke dialogue on environmental degradation. Commissioned by the Madison Square Park Conservancy, 49 Atlantic white cedar trees were transported from the coastal Pine Barrens of New Jersey to Manhattan. These trees were cleared from a habitat where saltwater intrusion- which is poisonous to trees- had occurred as a consequence of climate change, to make space for restoration projects. By re-locating leafless, dead trees in a vibrant, green urban park, a striking visual contrast has been created, symbolizing the fragility of natural ecosystems. 'Ghost Forest' is essentially a reconstructed area of disrupted nature. Accompanying the installation were various programs and materials aimed at educating the public about the causes and consequences of forest degradation. This example serves as a

powerful illustration of direct intervention in urban natural processes, making the effects of environmental degradation tangible and immediate for urban dwellers (Dezeen, *https://www.dezeen.com/2021/05/13/maya-lin-ghost-forest-downtown-manhattan/*, Accessed in August 2024).

Figure 2.52. ‘Ghost Forest’ featuring lifeless trees set within the vibrant setting of Madison Square Park. (Source: Dezeen, *https://www.dezeen.com/2021/05/13/maya-lin-ghost-forest-downtown-manhattan/*, Accessed in August 2024)

The installation serves as a node where activity and observation concentrate. ‘Ghost Forest’ draws attention and generates interaction, acting as a central point around which park visitors may gather and engage with the installation. Urban dwellers use the area with the dead trees to sit, picnic, and relax, transforming the space into both

an interactive focal point and a casual gathering spot. This dual function of the node enhances the social vibrancy of the park by inviting informal uses alongside its primary visual and educational impact. According to Koffka (1935), the principle of figure-ground involves creating a clear distinction between different elements to highlight focal points. In this context, the lush urban greenery forms the background, allowing the stark, barren trees to stand out as a striking visual landmark. This contrast guides the observer's attention to the installation. Regarding the functional dimension, the installation addresses human engagement by visually representing the impact of climate change and fostering awareness about environmental degradation. Carmona and Tiesdell (2007) highlight the importance of aligning design with human needs and cognitive responses. ‘Ghost Forest’ engages visitors through its striking visual presentation and accompanying educational programs, enhancing the functional aspect of the park as a space for public learning and interaction.

Teresita Fernández’s artwork, ‘Fata Morgana’, features 500 feet of golden, mirror-like discs that form canopies above the pathways around the park’s central Oval Lawn. Named after a mirage that appears on the horizon, this installation creates a shimmering, horizontal layer that transforms the visitor experience. The discs float above the winding walkways, creating a bright and engaging passage for people to walk through. The metal discs, decorated with intricate patterns similar to leaves, produce abstract flickering effects as sunlight filters through them. This creates a golden glow that enhances the paths and casts a beautiful light on everyone who walks by.

The artwork's interaction with natural light and weather conditions brings an element of change and dynamism to the park. It includes elements that create shaded areas beneath and around the installation. Its reflective and transparent surfaces can cast shadows and provide shelter from direct sunlight, making the park more comfortable for visitors, especially on hot and sunny days. The artwork's reflective materials and

design may reduce the perceived heat in the area, contributing to a more pleasant and inviting atmosphere.

Figure 2.53. ‘Fata Morgana’ by Teresita Fernández's, an artwork almost like an urban design component in Madison Square Park. (Photo: Elizabeth Bernstein; Source: Madison Square Park Conservancy Official Website, *https://madisonsquarepark.org/*, Accessed in August 2024)

‘Fata Morgana’ is strategically placed along the paths of the park, enhancing the legibility of these routes. The golden, mirror-like discs form a canopy that makes the walkways visually distinct, aligning with Lynch’s concept of paths as primary elements in the organization of urban space. By creating a focal point along these paths, the artwork functions as a visual guide, helping to orient park visitors as they navigate the space. ‘Fata Morgana’ significantly enhances the walkability of

Madison Square Park by improving both the physical comfort and the experiential quality of its pathways. The installation's function for shade is a key aspect, contributing directly to a more developed walking environment with a relief from direct sunlight. This shading effect not only cools the space beneath but also makes walking through the park more comfortable, particularly on sunny days, addressing the functional dimension of urban design (Carmona and Tiesdell, 2007). The vibrancy of the artwork is heightened by its dynamic interaction with changing weather and light. As sunlight passes through the intricate, leaf-like patterns of the discs, it creates abstract flickering effects, enriching the park's visual dimension. Visually, the golden color interacts dynamically with natural light, reflecting and diffusing sunlight in a way that casts a soft, warm glow This reflective quality brings a sense of vibrancy and movement, particularly as the color shifts throughout the day in response to changing light conditions, contributing to the park's temporal dimension.

The nature-related message of 'Ghost Forest' emphasizes the vulnerability of natural ecosystems and serves as a stark reminder of the ongoing degradation of forests due to human activity and environmental neglect. The dying trees, once vibrant and alive, visually narrate the effects of climate change, and its stark, literal presentation of a 'ghostly' forest contrasts with the living park, evoking a sense of loss and urging action. Additionally, a key aspect of environmental art is its ability to interact with natural forces, and 'Fata Morgana' does this through its dynamic relationship with sunlight and weather conditions. It also changes the way visitors perceive and move through the space, using design and materiality to heighten the sensory experience of being in the park. This transformation aligns with the goals of environmental art, which seeks to reshape how people engage with their surroundings. Overall, rotating temporary environmental art installations in Madison Square Park powerfully enhance nature-related messaging, fostering a deeper connection and awareness among visitors through their transformative interplay with the park's spatial and visual dynamics.

Key insights from Madison Square Park's rotating and temporary environmental artworks, particularly considering 'Ghost Forest' by Maya Lin and 'Fata Morgana' by Teresita Fernández, revolve around their engagement with *environmental awareness*, *urban experience*, and their contributions to the *dynamics* of urban space, *walkability*, *shade* and *comfort, interaction* with sunlight and weather, *landmarks* and *nodes*, fostering *emotional and cognitive connections* to broader ecological issues, *visual contrast* and *vibrancy,* and *temporariness*.

2.7 Inferences from the Examples

Each example provided in the previous sections communicates nature-related messages through the spatial relations created within their site. Spatial dynamics created through the presence or integration of environmental artworks not only influence the visual and physical experience of the urban dweller but also play a crucial role in conveying environmental messages and fostering a deeper connection to nature. Based on the results of the literature review and the insights gained from analyzing practical examples, a comprehensive table has been developed. This table evaluates the artworks across various scales and contexts, examining their role in urban place-making and their effectiveness in fostering nature connection. The evaluation includes such considerations as scale, materiality, (sometimes symbolic) proximity to natural elements, and user engagement, nature connection, vibrant environments offering a holistic perspective on how environmental art contributes to urban design.

Study shows that environmental art not only serves as a visual element but also actively enhances the ecological and social fabric of urban spaces as a functional element as well. By integrating natural materials and addressing environmental issues, these artworks engage with both the physical environment and the community, highlighting the shared responsibility for urban ecosystems. Ultimately, these insights will inform best practices for leveraging environmental art as a tool

for urban place-making, guiding future projects and interventions aimed at strengthening the relationship between urban dwellers and nature.

Table 2.1 Qualities of the artworks, relevance with urban place-making and relation to building nature connection.

Context	**Artwork** **Qualities of the Artwork**	**Place** **Spatial Relations**	**Nature** **Message Delivery: Nature Connection**
Artworks in the Urban Context			
Kolonihavehus, New York	-Reflective surfaces and dynamic interactions with light -Vibrant and striking colors -Form (of a house) -Use of recycled material	-Temporariness and dynamic urban space -Encouraging social gathering and interaction -House-like form and scale: Figure-Ground -Social interaction and engagement -Relaxation and curiosity -Sensory Engagement -Turning an underutilized space into a node of activity	-Use of recycled material that promote eco-conscious practices -Meeting with the green and blue infrastructure of the city; creating a link between art and the natural elements of the city - Reflective surfaces capture the natural environment, highlighting the relationship between urban spaces and natural light
Ice Watch, London	- Natural material (ice) in contrast to the built environment: Visual Contrast -Temporality -Unpredictability and transformation	-Temporary installation -Visually distinguishable landmark (Gestalt principles: Figure-ground) -Serving as a node in the urban mental map (Lynch) -Surprising and engaging public space -Striking visual impact -Tangible and sensory experience -Rhythm through the melting process	- Creating a tangible and sensory experience related to climate change -Incorporation of natural process (melting of glaciers) - Awareness on natural cycles disrupted by human impact - Evokes the fragility of nature - Ice melting creates a dynamic, evolving connection to nature, emphasizing its temporal dimension

Table 2.1 (continued)

Freestanding Waterfall, New York and Versailles	- Advanced engineering with a technical system -Large scale -Rhythm and flow -Unusual element -Multisensory experience -Visual Contrast -Dynamic urban image	-A dynamic landscape - A memorable and temporary landmark: figure-ground relationship (Gestalt) -A new layer on urban image -Memorable Composition -Rhythm and flow in static urban environment	-Indirect nature connection with nature resemblance and symbolic image -Connecting the viewer with the rhythms of nature
On Water, Münster	-Re-used material -Continuous linear form -Function as a path -Temporary	- Reshaping the mental image of the site (Lynch). -Uses the water as a connector (not a separator) -An experimental approach to a pedestrian path - Uninterrupted movement and mobility -Promotes public interaction, dynamic social space	-A new way of engaging with a water body in the urban context -Recycling underused urban space -Connection with native vegetation and water ecosystem -Symbolizing the fluidity of the urban/natural divide -Reconnecting urban dwellers to the river.
The Gates, Central Park, New York	-Temporary -Expansive scale -Function as a path -Similarity and Proximity between panels -Vibrant Color and Contrast (Figure-Ground) -Pattern (River-like) -Recycled Material -Created to blend geometry with the park's organic layout	-The visual legibility -A new layer of spatial organization -Enhances the legibility of the grid layout by combining it with the park's organic contours -Creating a rhythmic spatial flow through pathways (Lynch) -A temporary but memorable intervention in the urban fabric -Encourages new explorations and pathways through the park -The monumental scale of the gates provides a strong visual landmark -Repetitive structure and bold color provide a visual coherence and rhythm -Community involvement through local employment	-River-like pattern for building indirect nature connection with nature resemblance -Emphasis on recycling materials and sustainable design -Respecting the park's ecological functions (e.g., avoiding disturbances like digging) -Mirrors natural cycles through its repetitive patterns, visually resonating with nature's rhythms -By navigating the installation, visitors are invited to engage with the natural and designed environment in a new way -Symbolizing temporality in nature's constant evolution

Table 2.1 (continued)

Venice Biennale	-Use of Recycled Materials -Temporary Installations -Diverse media -Striking color and bold geometry -Open and fluid forms in installations -Semi-enclosure and transition -Multi-sensory experience -Rotating exhibitions	-Creation of urban nodes at major gathering points -District creation (Biennale as art district) -Creating shaded areas and directing pedestrian flow Stands out in the open landscape (Figure-ground) -Connection between the periphery of Venice and the city center -Composition with background (Figure-ground) -Creating dynamic environments and encouraging interaction in open-air exhibitions	-Engagement with water -A platform for nature-related dialogues -Deepens emotional and intellectual engagement with nature -Indirect nature connection with nature resemblance (through artworks' shapes and forms, multi-sensory media etc.) -Promotes awareness of the importance of recycling for sustainable futures
Self-Similar, Abu Dhabi	-Expansive scale -Striking contrast -Geometric complexity -Natural material (Sand) -Fractal layout -Repetitive, self-similar pattern -Closure -Continuity -Proximity -Similarity -Illusional image	-Observation mounds offer different perspectives, creating infinite visuals from a single vantage point - The fractal design introduces a new spatial rhythm and guides movement - The rhythmic, flowing design contrasts with the city's grid	-The sand material and fractal pattern evoke natural cycles and patterns -Engagement with a natural landscape near urban center
Passages Insolites, Canada	-Interactive art trail -Symbolism and contextual contrast, unexpectedness -Proportionally scaled -Temporariness	-Art trail and walkability: Encouraging pedestrians to follow the path -Exploration and a curated journey across the city -Introduction of unexpected objects shifting how the public perceives urban components like streets, canals, and squares. -Interactive mapping	-Messages are conveyed through the location and composition of the artwork, often using symbolism -Reflections on how we occupy and engage with space in relation to nature -Connection with water

Table 2.1 (continued)

Ekebergparken Sculpture Park, Oslo	-Nature-friendly materials -Human-scale -Sculpture -Law of Continuity (Koffka, 1935), Flow, Movement	-Urban Sculpture Park and trail (Path) -Group walks and tours -Physical journey and an educational experience -Restoration efforts -Urban landscape with ecological and functional layers -Enhancing legibility of the park's layout (Kevin Lynch) -Social space and public gatherings where paths converge into nodes	-Attracting urban dwellers to natural landscapes for a direct connection -Observing and interacting with wildlife -Dominancy of nature -Use of sustainable materials -Ecological restoration and conservation efforts
The Waving Wall of Chalkwell, Essex	-Recycled material -Contrast -Human scale -Symbolic Meaning -Temporariness -Reflective Surface -Figure-ground relationship	-Residential District -Dynamic visual experience -A memorable navigational anchor -Fluidity and transience	-Encourages interaction and environmental education -A metaphor for the fragility of water resources, gives the message for the urgency of addressing water-related vulnerabilities -Reminder for the disconnection from natural processes
The Treehugger Project, Poland	-Natural material -Striking form -Temporariness -Emotional and sensory engagement with nature	-Tangible and playful experience in urban space -Creation of symbolic and reflective places -A focal point that enhances the imageability of the space -Figure-ground principle (Koffka, 1935) to create a visual distinction -Transforms the urban setting into a contemplative place	-Physical connection to a natural asset -An emotional and urgent message about climate change -Emphasizing vulnerability of trees and ecosystems in the face of environmental threats.
1 Heart 1 Tree Project, Paris	-Use of advanced technology (video mapping, heartbeat sensors) -Reflection on urban landmark -Sensory drivers (sounds etc.)	-Creating concentrated nodes of interaction -Encouraging public space gathering -Transforming urban landmark into an interactive space -Increasing legibility by creating new layers within the urban landscape	-A long-term impact to nature (by planting initiatives) -Tangible outcomes of collective action -Promotes ecological awareness and responsibility

Table 2.1 (continued)

Artworks in the Natural and Rural Context			
Riff, PD#18245	-Semi-enclosed shape -Organic design -Unexpected, grand scale -Rock-like form -Figure-ground relationship -Transitional form (light, air etc.) -Fluid and evolving	-Reclaimed area -Dynamic environment -Visual landmark in the flat polder landscape -A space that invites interaction and movement -Integration of local materials (directly from the landscape) contributing to the urban tapestry	-Direct connection with natural landscape and nature elements -Emphasizing the constructed nature of the reclaimed land -Coexistence of humans, animals, and plants
The Dean's Forest Sculpture Trail	-Harmonious placement -Vibrant colors -Symbolic forms -Glass as material -Reflective Surface -Integrating natural light	-Sculpture Trail -Visual landmarks within the forest, enhancing the imageability -Attracting attention and guiding visitors -Interaction between light and form -Juxtaposition of art and nature -Cognitive connections	-Direct connection with a forest, attracting urban dwellers to the nature -Interplay with natural elements such as light -Perspective and discovery on seeing nature in new ways
Andrew Rogers Open Air Sculpture Park	-Large scale -Permanent -Monumental -Nature elements (rocks, soil, branches, stones, etc.) as material -Visual dominance -Resilience to weather conditions	-Layers of the city -Landform interaction -Visibility from afar, serving as landmarks in the city-scale -Enriches the landscape between Nevşehir city center and Avanos -Reflection of site-specific themes - The Law of Continuity is applied through the sculptures' alignment along natural path (trail) - Law of Prägnanz (good form), where simple, yet strong, forms dominate the field	-Contributes to the conservation efforts to the valley it is situated in -Integration with natural, geological and topographical forms and images

Table 2.1 (continued)

Artworks in City Visions and Plans			
The Underline Public Art and Cultural Master Plan, Miami	-Urban path -Recycling and revitalizing an underutilized corridor -Blending of landscape design with environmental art -Using native plants and ecological materials	-Public space -Public gathering -Connection to public transportation system (Metro-line), enhancing legibility and connectivity (Lynch's concept of paths) -Sense of movement and flow, supporting urban vibrancy and connectivity -Corridor definition -The Law of Prägnanz and The Law of Continuity contributing to easy navigation and clear layout	-Combination of native plants and environmental art forms -Ecological material use -Recycling of an underutilized, neglected path - Inspiration from surrounding natural landscape
High Line, New York, Example 1 (Sculpture) *En Plein Air (2019) and Secondary Forest (2024)*	-Animal, human, plant, rock forms, Organic shapes -Mimic natural patterns, Curvilinear shapes	-Encouraging movement and exploration -The natural figures standing out as a landmark (Lynch) -Orientation along the High Line's path -The perception of the artworks as clear, identifiable nodes (Lynch) -Juxtaposition of natural forms and urban structures	-Engaging with the environmental themes of adaptation, growth, and the interconnectedness of ecosystems, making nature a more legible part of the urban experience -Nature can flourish alongside human-made environments
High Line, New York, Example 2 (Intervention) *The River That Flows Both Ways*	-Glass panels as material -Light and color integration -Visual link	-On a formerly neglected site -Increasing public use and engagement, guiding movement, the space's function as a node (Lynch) -The consistent spacing and shape of the glass panes create a rhythmic pattern along the path (Law of Similarity) -Encouraging viewers to perceive the changing colors as part of a continuous natural cycle, enhancing the space's temporal dimension	-Reflecting the dynamic nature of the river -Recycling an underutilized space

Table 2.1 (continued)

High Line, New York, Example 3 (Installation) *Still Life with a Landscape*	-Transforming urban waste materials -Interactive experience -Functional relationship (as animal feeder) -Open and grid-like structure -Temporary	-On a public space -Attracting animals and creates a hybrid urban space (alternative ways of co-existence) -Functioning as both a habitat and a human space -Relationship between ecological and human activities (node) -Visually distinct and memorable	-Direct ecological integration -Emphasis on re-use, recycling -Feeding birds and insects, a close relationship with animals in the urban public space
Madison Square Park Public Art Program, New York	-Natural material and reflective material -Relocation of trees -Striking visual contrast -Color and pattern -Dynamic canvas for temporary art installations	-Enhancing the cultural and visual appeal of the park -Providing diverse artistic experiences in a central urban location -Engaging the public with rotating exhibitions -Interactive experiences, dynamic space -A learning space and a social focal point	-Emphasis on global issues as forest degradation -Effects of climate change etc. -Symbolizing the vulnerability of natural ecosystems -Creating a cooling effect and providing shade

The table indicates three aspects: (1) Artwork, in which qualities of the artwork is provided; (2) Place, in which spatial relations are examined and (3) Nature, in which nature-related message delivery is observed.

These processes can vary from one context to another, which in turn shape the way messages are conveyed through these interactions. For instance, in an urban context, nature may be represented symbolically, and the use of recycled materials could contribute to a message of environmental conservation. In such cases, the Gestalt's Law of Continuity and the Law of Similarity may operate on a cognitive rather than visual level, as urban dwellers mentally complete and interpret the intended environmental message.

Artworks in the Urban Context: These projects show how environmental art can gather attention on nature-related issues such as ecological awareness, sustainability, importance of nature conservation by attracting urban dwellers through the spatial relations created by the artwork and site, including the visual impact and interactive experiences. Artworks in cities often address issues such as disconnection from nature, the use of ecologically sustainable materials and the impact of climate change, demonstrating how the spatial context can enhance or alter the delivery and reception of artistic messages. This interplay highlights the role of environmental art in navigating and reimagining the urban landscape, contributing to the broader process of place-making within a densely built environment.

For example, Kolonihavehus in New York utilizes vibrant colors and reflective surfaces to attract the public to itself, creates social interaction and curiosity as a contribution to place-making and indicate the integration of recycled materials to daily, human-scale, individual constructions. Ice Watch in London uses the strategy of temporary presence in urban public space, to foster awareness about climate change and the sensory engagement it provides creates an input to the field of place-making. The Gates in Central Park, New York, and Freestanding Waterfall in New York and Versailles demonstrate how large-scale, temporary installations can redefine urban landscapes and create visual landmarks to give a message and foster nature connection, while On Water in Münster and The Waving Wall of Chalkwell explore the integration of recycled materials and reflective surfaces to connect with nature symbolically and experientially. Overall, in the urban context, (1) artworks utilize specific design techniques to generate a vibrant atmosphere, a dynamic and engaging environment aiming to (2) convey nature-related messages or foster an indirect connection to and experience of nature through designs that mimic natural forms and processes.

Artworks in the Natural and Rural Context: Projects like Riff, PD#18245 and The Dean's Forest Sculpture Trail show how environmental art can enhance direct

connections to natural landscapes, integrating with forest environments and promoting interaction with natural elements. Andrew Rogers Open Air Sculpture Park illustrates how monumental sculptures can contribute to conservation efforts and reflect the natural and geological themes of their surroundings. In this title, urban dwellers are (1) drawn to natural landscapes within the city and (2) encouraged to engage and communicate directly with natural components.

Artworks in City Visions and Plans: Initiatives such as The Underline Public Art and Cultural Master Plan and High Line Project and Madison Square Park in New York exemplify how environmental art can be integrated into urban infrastructure and multi-functionality of public spaces, enhancing overall connectivity in the city while raising ecological awareness. All examples highlight a shift towards embedding art as a core element in urban development, influencing both planning strategies and design visions.

As a result, urban spaces thoughtfully integrated with environmental art have the potential to create innovative avenues for communicating nature-related messages about natural processes, nature degradation, as well as the impacts of climate change. Different contexts indicate variations in spatial relationships, and consequently, different ways of communicating a message. It is important to identify a common framework upon which a broad set of environmental art examples is built. For instance, certain recurring concepts emerge from these spatial relationships, such as the creation of ‘dynamic,’ ‘engaging,’ and ‘vibrant’ environments, and their impact on ‘experience,’ ‘perception,’ ‘connection,’ and ‘awareness’ in the process of delivering nature-related messages.

2.8 Results of Literature Review

By interweaving these theoretical perspectives, the review aims to illuminate how environmental artworks do more than merely existing on space; they actively shape

and are shaped by their spatial contexts. This dynamic interaction highlights the reciprocal relationship between environmental art and the temporary environment it creates, influencing both the perception of the space and the engagement of the public.

The research explored urban place-making and its connection with 'creative place-making,' which integrates the art-urban relationship, alongside the concept of 'urban tapestry,' acknowledging that urban space consists of various layers and components. In the place-making process, environmental artworks play a crucial role in transforming spaces into places that are vibrant, engaging, and dynamic. Artworks that evoke nature and establish both direct and indirect nature connection enrich a place's identity, strengthen community ties, and shape a city's character and image through their innovative design features.

The reviewed literature and practical examples illustrate how environmental art intersects with creative place-making principles and the concept of urban tapestry, reinforcing its role as a transformative element in urban environments. Creative place-making highlighted the role of artists and local communities in urban planning and design, while urban tapestry emphasized the multiple layers of relationships within spaces. Specific examples from three different contexts are examined, particularly focusing on the initiative and collective efforts of artists and citizens as a connection to creative place-making. These examples are also consistently linked to urban design dimensions, with a detailed analysis of the various layers in relation to urban tapestry. Additionally, the notion of urban tapestry is closely intertwined with the concept of 'temporariness,' which consistently emerged throughout the analyses. The contribution of these installations existed for limited periods is to illustrate how art can temporarily transform and reimagine urban spaces.

Ultimately, examples of spatial relations environmental artworks create across urban and rural contexts, as well as city visions, plans and frameworks directly shape how they deliver their messages about nature. To relate to urban place-making, the thesis

addresses urban design dimensions and employs tools from Gestalt Principles and Kevin Lynch's set of notions to measure spatial relations. In urban settings, they challenge and provoke by contrasting with the built environment, making viewers reconsider their relationship with nature in a structured, human-dominated space. In rural settings, they immerse and integrate, using expansive landscapes to foster a deeper, more personal connection to the natural world. In city visions, plans and frameworks, spatial relations in places such as underutilized trails or public parks take on an even more deliberate and educational role, carefully positioning the artwork within ecologically managed environments to emphasize nature-related efforts and integration.

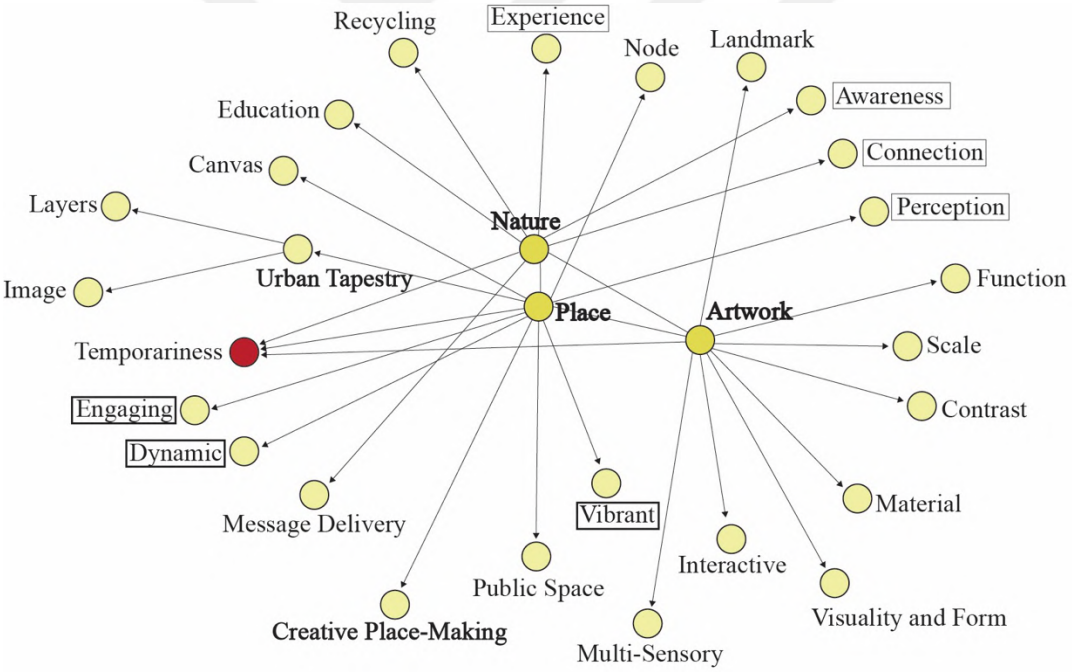

Figure 2.54. Key insights from the literature review and practical examples. (Create by the Author)

Figure 2.54 demonstrates the key insights from literature review, that summarize the related concepts to three main components in this study, which are nature, artwork and place. All three (nature-place-artwork) encompass the notion of 'temporariness'. Environmental art initiatives primarily put forward concepts as experience, awareness, connection, and perception, all of which relate to the cognitive processes of urban dwellers. Additionally, the concluding diagram of key insights highlights how these artworks foster engaging, dynamic, and vibrant environments, which are intrinsically linked to spatial processes.

One of the primary insights derived from this literature review is that environmental art processes can be undertaken through both artist-led or local initiatives as well as collaborative efforts with government entities. Additionally, the analysis of spatial relationships has identified a set of concepts, some pertinent to the specific spatial context and others to the artwork itself. Furthermore, the review revealed that a diverse array of design tools exists for the effective communication of nature-related messages. The discovery of diverse design tools for conveying nature-related messages suggests that environmental art is not a one-size-fits-all approach but rather a field rich with innovative possibilities. These tools can range from spatial arrangements and material choices to interactive elements and temporal aspects, all of which contribute to a more profound connection between people and nature.

In conclusion, the examination of spatial relations in environmental art highlights its crucial role in communicating nature-related messages. Through the analysis of metrics such as awareness, connection, perception, and experience, it becomes evident that environmental artworks significantly contribute to creating vibrant, dynamic, and engaging environments. Chapter 3 will shift from measuring spatial relations to articulating a set of conceptual constructions, exploring how these insights establish a solid foundation for strategically employing environmental art in urban place-making across various scales, aligning with environmental objectives in ecologically-conscious spaces.

CHAPTER 3

URBAN PLACE-MAKING FOR NATURE CONNECTION

In Chapter 2, the analysis revealed that spatial relationships across different contexts frequently result in the creation of ‘dynamic,’ ‘engaging,’ and ‘vibrant’ environments, which significantly influence ‘experience,’ ‘perception,’ ‘connection,’ and ‘awareness’ in the delivery of nature-related messages. To achieve seamless mental and visual continuity in the integration of environmental art within the field of urban place-making, it is crucial to implement a planning process that spans from a city-wide vision to site-specific environmental artworks.

The findings from the literature review highlighted the need to articulate a set of concepts across three scales. Both urban and natural contexts within the examples pointed to the significance of the 'meso-scale,' where the site itself plays a pivotal role in shaping the spatial relationships and message delivery of environmental artworks. This scale encompasses dynamic, engaging, and vibrant spaces. The broader 'macro-scale' refers to city-wide strategies, as identified within the framework context in Chapter 2. Lastly, the specific qualities of the artwork, such as its color, form, and temporality, correspond to the 'micro-scale.'

The rationale for focusing on these three scales in this chapter arises from the completion of spatial relationship analysis and the subsequent aim of establishing a comprehensive framework for environmental art. By addressing these scales, the intention is to provide a thorough conceptual foundation for understanding how environmental artworks interact with their context, influence spatial experiences, and communicate nature-related messages. This multi-scalar approach enables a more holistic examination of environmental art within urban design and place-making strategies.

The movement of environmental artworks in and out of urban spaces is a deeply transformative concept. This dynamic interplay between environmental art and urban environment challenges traditional notions of permanence and invites a more fluid and responsive approach to design.

The environmental artworks are not merely decorative elements but they can operate as a development vision, an intervention, a strategy or a way of communication. To explore the integration of environmental art into urban place-making, the components and set of concepts at each scale are aimed to be gathered within a clear structure in this chapter. By addressing three scales collectively, this chapter underscores how spatial considerations at every level contribute to the integration of environmental art into urban place-making with respect to urban design dimensions, urban tapestry and creative place-making.

3.1 Environmental Art in Three Scales

Understanding environmental art across these three scales is crucial for urban place-making, because it highlights the diverse ways in which art can influence and shape the urban environment. By examining different strategies and impacts at each scale, urban designers and planners can better harness the potential of environmental art as a tool for creating sustainable, vibrant, and resilient cities. Whether through large-scale city initiatives, site-specific projects, or individual art objects, environmental art provides a versatile and powerful means of enhancing urban spaces, promoting environmental awareness, and fostering a deeper connection between people and the places they inhabit. In each three scales, direct and indirect nature connection could be built.

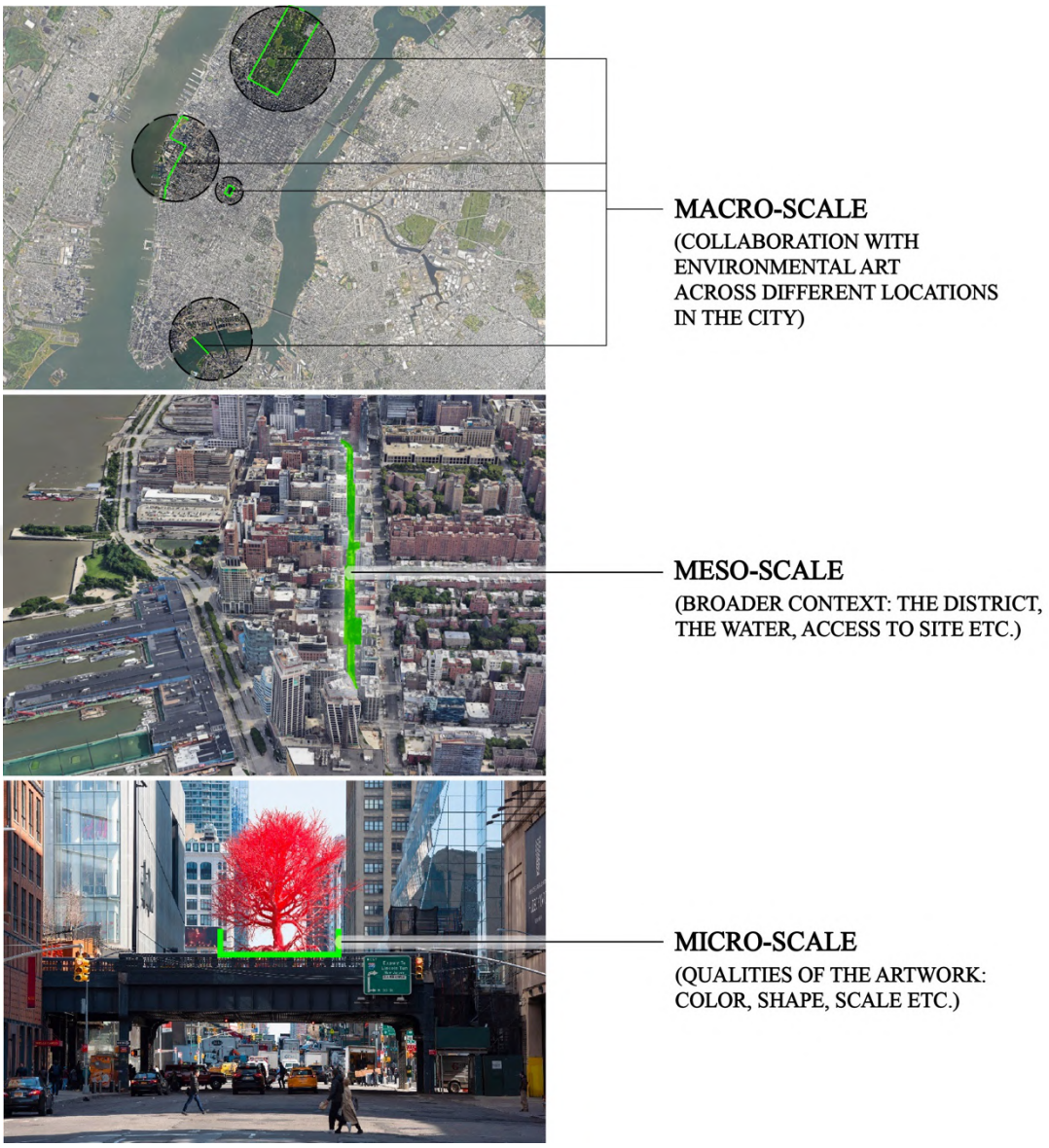

Figure 3.1. Example illustration for three scales. (Created by the Author; First and second images are obtained from Google Earth; third image is obtained from The High Line Official Website: *https://www.thehighline.org/*, Accessed in August 2024).

Table 3.1 Scales, Strategies and Impacts in Environmental Art

Macro Scale (City)	
Overview	City-wide influence and integration into urban design, collaboration and creative place-making
Key Strategies	- City-wide public art programs - Frameworks - Masterplans - Sculpture Art Trail (in the rural context) - Public Art Trail (in the urban context)
Impact	- Integration into urban planning policies - Enhances city-wide ecological stewardship - Shapes urban identity and image - Enhanced environmental awareness - Ecological restoration
Meso-Scale (Site)	
Overview	-Focus on specific urban districts or zones -Strategic site selection -Adding layers to urban tapestry
Key Sites	Direct Nature Connection **Rural and Natural Landscape** -Green Infrastructure (Forests, Parks, Trees, etc.) -Blue Infrastructure (Sea, Shores, Canals, etc.) -Reclaimed Sites -Landforms (Hills, Valleys etc.)
	Indirect Nature Connection **Urban Space** -Streets -Public Squares -Public Parks -Landmark entities (Bridges, Towers, etc.)
Impact	-Landmark and Node creation -District Definition -Temporariness -Natural Process -Urban Tapestry and Layers

Table 3.1 (continued)

Micro Scale (Artwork)	
Overview	Individual artworks and site-specific installations
Key Features/ Qualities	Direct and Indirect Nature Connection - Contextual Integration (Layout, Path, Geometry, Order, Background, Composition) - Scale and Proportion - Functional Relationship (Dynamic, Interactive etc.) - Visuality and Form (Using forms in nature such as waves, fractals etc.) - Material and Temporality (Recycled and natural materials, - Incorporating natural processes such as aging, decay, healing, growing, seasonal changes, etc.) - Movement and Rhythm
Impact	- Dynamic interplay - Image and aesthetics - Visual contrast - Sensory engagement - Documentation (Photography and Video) - Quality of space - Nature Resemblance

At the **macro (city) scale**, environmental art is integrated into urban design through city-wide public art programs and the development of frameworks and masterplans. These strategies ensure that art is included in various urban contexts and contributes to the city's overall identity. Sculpture art trails in rural areas connect artworks to enhance cultural landscapes and link rural environments with artistic expression. In urban contexts, the use of environmental art in the public art trails encourage exploration and engagement with the city's environmental narrative. The impact of these initiatives includes integration into urban planning policies, promoting

ecological stewardship, and enhancing environmental awareness. They help shape the city's identity and image and can contribute to ecological restoration by revitalizing degraded areas.

At the **meso (site) scale**, environmental art focuses on specific urban districts or zones. Strategic site selection is used to create direct or indirect connections with nature. Creating a ‘direct’ nature connection, environmental artworks can be integrated into rural and natural landscapes, such as forests, parks, and shores, or into green and blue infrastructure like trees, parks, seas, and canals. Reclaimed sites and natural landforms, such as hills and valleys, are also considered for artistic interventions.

‘Indirect’ nature connections involve placing art in urban spaces such as streets, public squares, and parks. It also refers to mimicking natural patterns or forms within the urban environment, resembling nature in these settings. The impact includes creating landmarks and nodes that define districts and enhance their identity. Environmental art contributes to the character of urban zones, reflects the transient nature of urban spaces, and emphasizes natural processes such as growth and decay. It adds layers to the urban tapestry, enriching the visual and experiential quality of urban areas.

At the **micro (artwork) scale**, individual artworks and site-specific installations interact closely with their immediate environment. Artworks are designed to fit seamlessly into their surroundings, considering layout, path, geometry, and composition. The scale and proportion of the artwork relative to its surroundings affect its visibility and impact. Functional relationships include dynamic and interactive elements that engage viewers. Artworks often use forms inspired by nature, such as waves and fractals, and incorporate materials that reflect natural processes, like recycled or temporally changing materials. The design of the artwork creates a dynamic interplay with the environment, influencing the spatial experience.

Visual contrast, sensory engagement, and documentation through photography and video contribute to the overall impact of the artwork.

3.2 Macro-Scale Strategies

At the macro scale, environmental art is integrated into urban design through broad, city-wide frameworks and strategies that influence and shape the urban environment. These strategies encompass comprehensive art programs, frameworks, and master plans, as well as art trails that span entire cities or regions. This integration emphasizes the role of environmental art in urban identity, ecological stewardship, and nature connection. The macro scale aligns with urban design dimensions by incorporating environmental art into city-wide planning and policy-making processes, thereby contributing to urban identity, supporting ecological goals, and enhancing connections to nature. This alignment ensures that artistic interventions are integrated with broader urban development objectives, fostering a cohesive approach that enhances both the spatial organization and ecological aspects of the urban environment.

3.2.1 City-wide Art Programs

City-wide public art programs are expansive initiatives designed to integrate art into the urban environment at a broad scale. These programs often aim to enhance the city's visual image, promote community engagement, and foster art-led community interaction. They typically involve collaborations between municipal authorities, artists, community organizations, and other stakeholders. City-wide art programs seek to embed art into various urban contexts, creating a rich and cohesive art experience across the city. They may include permanent installations, temporary artworks, and interactive projects, strategically planned to align with urban development goals, cultural heritage, and community needs.

These programs are integral to creative place-making, as they transform urban spaces by incorporating art that aligns with the city's cultural and developmental objectives. By embedding art into different urban contexts, city-wide programs contribute to a unified city aesthetic and foster a sense of continuity across various neighbourhoods. This approach bridges diverse urban environments and strengthens the urban tapestry, enhancing the overall coherence of the city's public spaces.

The integration of public art also intersects with several urban design dimensions, including morphological, perceptual, social, visual, functional, and temporal aspects. Morphologically, art interventions reshape and define urban spaces, influencing their physical layout. Perceptually, they enhance the sensory experience of urban environments, contributing to the city's visual and aesthetic qualities. Socially, public art fosters community engagement and interaction, while functionally, it revitalizes underutilized areas, improving their usability and appeal. Temporally, art programs can introduce dynamic and evolving elements to urban spaces, reflecting changes over time.

A valuable example is Melbourne's Public Art Strategy (2021-2031), which provides a comprehensive framework for integrating art into the city's public spaces with a focus on enhancing cultural, social, economic, governance, and environmental outcomes (City of Melbourne, 2021). This strategy aims to create a unified city aesthetic and enrich the urban environment, aligning with urban design dimensions and goals. The framework emphasizes the role of public art in transforming urban spaces, with transparent guidelines for planning, commissioning, and maintaining artworks. By aligning public art investments with the city's vision, the strategy contributes to both the aesthetic and functional aspects of Melbourne's urban design, reflecting principles of creative place-making and enhancing the city's overall spatial and experiential qualities.

Table 3.2. Melbourne's Public Art Strategy desired outcomes

Outcome Type	Key Outcomes
Cultural and Social	Stimulating creativity and enriching spatial experiences.
	Generating knowledge, ideas, and insights through community engagement.
	Increasing appreciation of natural landscapes integration to daily cycle of urban life.
Visual	A consistent and recognizable visual identity across the city.
	Visual links between different urban areas through strategic placement of artworks.
	Focal nodes or paths that contribute to the city's identity and orientation.
Economic	Drawing investment into the city by enhancing its cultural appeal and making it a more attractive destination for tourists.
	Developing employment-enhancing skills and contributing to local economic growth.
Governance	Aligning public art initiatives with broader urban development policies, ensuring that art contributes to the city's strategic goals and governance frameworks.
	Enhancing civic pride and inspiring a positive community future.
Environmental	Increasing public understanding of environmental issues through natural themes and ecological messages.
	Encouraging responsible environmental practices and stewardship by highlighting ecological concerns and sustainability through artistic interventions.

Investment strategies are focused on targeting resources where they will have the greatest effect, aiming to transform public spaces significantly. The strategy also highlights the importance of fostering successful collaborations with external partners, such as artists, developers, and investors, by setting clear expectations and approaches for these partnerships (City of Melbourne, 2021).

Overall, Melbourne's Public Art Strategy aims to stimulate creativity, enhance aesthetic experiences, and generate knowledge. It seeks to improve social wellbeing, foster civic pride, and contribute to local economic growth. Additionally, the strategy promotes environmental stewardship by improving spatial coherence and increasing engagement with the natural world.

3.2.2 Frameworks and Master Plans

Developing comprehensive frameworks and master plans for environmental art helps to establish long-term visions and guidelines for integrating art into urban spaces. These plans outline the principles for selecting and placing artworks, ensuring that they align with broader urban design goals, such as enhancing ecological connectivity, promoting sustainability, and reflecting local cultural identities. Eco-art nodes in South Florida and The City of Melbourne's Creative Spaces Program could be relevant examples to city-wide art-led frameworks.

In South Florida, 'eco-art nodes' for example, exemplify how art can intersect with environmental and ecological considerations. These designated areas highlight the region's natural features, such as wetlands and coastal ecosystems, through art installations that both celebrate and raise awareness about local ecological issues. They are designed to showcase local ecology, engage the public and promote education. Art installations in these nodes often focus on the unique biodiversity and natural landscapes of South Florida. For instance, the Everglades National Park features artworks that emphasize the importance of wetland conservation and the park's ecological richness. By incorporating natural materials and environmental themes, these artworks engage residents and visitors, fostering a deeper appreciation for the local environment. Eco-art nodes serve as educational platforms, offering insights into ecological issues and sustainable practices through interactive and visually impactful art.

Melbourne also provides a structured set of guidelines for incorporating art into public spaces, enhancing the city's cultural and environmental landscape. The framework, titled The City of Melbourne's Creative Spaces Program' also introduces 'Artscapes', guide the selection and placement of artworks, ensuring they align with urban design objectives and community values. This includes planning for art installations in residential, commercial, and recreational areas. The framework

ensures that the urban projects incorporate art that enhances the cultural and visual identity of Melbourne.

In conclusion, the integration of environmental art at the macro scale profoundly influences urban design and ecological stewardship. By embedding art into city-wide public programs, frameworks, and master plans, cities can institutionalize the role of art in shaping urban environments. This integration enhances city-wide ecological stewardship, promotes environmental awareness, and supports ecological restoration efforts. Additionally, environmental art contributes to shaping the urban identity and image, making cities more distinctive and engaging for both residents and visitors.

3.2.3 Art Trails

Urban art trails provide a systematic method for engaging with environmental art within city environments. These trails guide visitors through a sequence of artworks strategically situated throughout the city, emphasizing various aspects of urban ecology, history, and culture. They function as educational tools and cultural markers, enhancing the urban experience and fostering a stronger connection to the city's ecological and cultural elements. Art trails also revitalize neglected and underutilized pathways, transforming them into active routes that contribute to the city's overall spatial structure and experience. By introducing art to these areas, new spatial connections are established, which can increase public use and engagement with urban spaces.

In this strategy, the connection to nature is typically achieved through indirect methods. Artworks often use natural shapes, patterns, and materials to suggest natural elements. This approach reflects natural forms and processes, subtly integrating nature into the urban fabric. Strategic placement of artworks in contexts that complement their surroundings enhances their connection to nature. For instance, positioning sculptures in green spaces or near water features creates a

dialogue between the art and its environment. Material choices also reinforce this connection; using materials such as wood, stone, or recycled elements derived from natural sources helps establish a link to the natural world. Interactive elements, such as kinetic sculptures that respond to wind or water features that blend with natural ecosystems, further deepen the viewer's engagement with nature. Artworks exploring themes like ecosystems or environmental change promote awareness and appreciation of natural systems. By integrating these aspects, environmental art fosters an indirect but significant connection to nature, enriching the urban experience.

The U.S.A. exemplifies effective use of public art in city-wide strategies, particularly through the transformation of former railway corridors. Notable examples include the BeltLine in Atlanta, the High Line in New York, the Underline in Miami, and the Bloomingdale Trail (The 606) in Chicago. Additionally, The Goods Line in Sydney, Australia, demonstrates this approach. These initiatives combine linear parks with public art, creating dynamic art trails that enhance urban spaces. These projects align with urban design dimensions such as visual and functional aspects, by transforming linear pathways into engaging and functional urban routes.

3.2.3.1 Sculpture Art Trails (Rural Context)

Sculpture art trails in rural contexts can function as a city-wide strategy that connects urban and rural environments, establishing cultural and ecological links across broader regions. Although primarily located in rural areas, these trails are designed with city-wide objectives, integrating artistic expression with environmental and cultural narratives relevant to the region.

In the UK, sculpture art trails such as the Deans Forest Sculpture Trail, The Kielder Art & Architecture Trail, The Yorkshire Sculpture Park, and The Cass Sculpture Foundation illustrate this strategy. These trails enhance tourism by drawing visitors

to various locations, which supports the local economy. They contribute to regional branding by showcasing artistic and cultural initiatives. By incorporating local artists and engaging residents, these trails foster community involvement and regional pride. They also increase awareness of environmental issues and local history through interactive elements. Additionally, sculpture art trails play a role in the revitalization of rural areas by attracting visitors, improving the functionality of underutilized spaces, and promoting investment. This approach aligns with urban design dimensions such as functional and visual aspects, as the trails create structured pathways that integrate art with the rural environment, thereby enriching the overall regional experience. The trails add to the city's identity and create a more enriched and dynamic urban tapestry.

3.3 Meso-Scale Strategies

Meso-scale strategies involve evaluating artworks within their specific sites, which includes both urban and rural contexts. This scale emphasizes how artworks interact with and impact their surrounding environment, contributing to the creation of landmarks and nodes that serve as focal points within urban districts and rural areas. These art installations can transform ordinary spaces into distinctive destinations, shaping the unique character and identity of a district.

In urban contexts, artworks can enhance visual and functional attributes of public spaces, such as parks, plazas, and streets, by aligning with Lynch's concepts of "paths" and "nodes." These elements help users navigate and identify key locations within the urban environment. In rural contexts, artworks may integrate with natural landscapes, creating visual and functional connections to the surrounding environment.

At this scale, the integration of environmental art can foster both direct and indirect nature connections. In urban settings, artworks might incorporate natural forms and

themes to evoke a sense of nature, while in rural settings, they may directly interact with the natural landscape, reinforcing ecological and cultural narratives. This integration aligns with urban design dimensions such as morphological (layout and shape), visual (appearance and aesthetic), and functional (utility and interaction), while also incorporating Gestalt Principles by creating cohesive and recognizable patterns within the environment. These strategies contribute to the legibility and coherence of both urban and rural landscapes, enhancing the overall spatial experience.

3.3.1 Rural and Natural Sites

Sites with a direct connection to nature, such as green and blue infrastructure; forests, parks, trees, seas, shores, and canals, are selected for their inherent ecological attributes. Artworks positioned in these locations interact directly with the surrounding environment, thereby enhancing the site's ecological value. These installations can convert natural landscapes into landmarks and focal points, reinforcing the district's identity while facilitating a connection between people and the natural environment. Reclaimed sites and landforms like hills and valleys also offer opportunities to integrate art with the natural topography, creating distinctive destinations that underscore the interaction between art and nature.

Forests and woodlands provide an environment where art can complement the existing natural features. Artworks in these settings may be integrated with the natural fabric of the forest, such as sculptures that blend with trees or installations that utilize natural light filtering through the canopy. For instance, installations using materials like wood or leaves can align with the forest’s surroundings, offering educational insights into the forest ecosystem and encouraging exploration.

Urban parks and gardens, which combine natural and landscaped elements, offer spaces within cities for recreational and aesthetic enhancement. Artworks in these

areas can augment the visual appeal and create focal points along pathways or near water features, enhancing visitor engagement. For example, a series of sculptures along walking paths in a park can create a thematic route, promoting interaction with both the art and the natural environment. Art that responds to seasonal changes, such as flower gardens or foliage variations, can further integrate the artwork with the evolving landscape.

Coastal and shoreline areas are dynamic environments where art must account for factors like tides, erosion, and weather. Artworks in these settings may be designed to withstand saltwater and weather conditions, becoming prominent features along the coast. Examples include sea walls adorned with mosaics or sculptures reflecting wave movements. Such installations enhance the coastal landscape and contribute a cultural dimension to the natural coastal environment.

Reclaimed sites and landforms, such as former industrial areas, hills, or valleys, present opportunities for integrating art with the transformed topography. Art can highlight the unique characteristics of these sites and illustrate their transformation. In a reclaimed quarry, artworks may accentuate landscape contours or incorporate materials from the site. These installations can turn the area into a notable destination that reflects its industrial past while adapting to its new ecological context.

3.3.2 Urban Sites

Sites with an indirect connection to nature, such as streets, public squares, public parks, and landmark structures like bridges and towers, require tailored strategic approaches. In these urbanized environments, art functions to introduce natural themes or elements, subtly integrating ecological awareness into the city's infrastructure. These settings, characterized by their built environment, necessitate artworks that create visual and cultural nodes, enhancing the urban experience while promoting a connection to nature that may not be immediately evident.

In these contexts, site selection at the meso-scale ensures that artworks contribute to the aesthetic and cultural character of the area and support the district's identity. Whether through direct interactions with natural elements or by integrating nature-inspired themes into urban environments, these artworks help transform ordinary spaces into significant urban features.

Streets, as essential urban corridors, benefit from art that enhances their visual and functional characteristics. Artworks in these areas can serve as visual landmarks, foster community interaction, and reinforce the street's identity. Examples include murals or sculptural elements integrated with street furniture, which add visual interest and thematic coherence. Interactive installations, such as ground-level artworks, can also engage pedestrians and contribute to a dynamic streetscape.

Public squares, central to urban social and cultural activities, can be enhanced by artworks that serve as focal points and functional elements. Art installations in these spaces may include seating, shade structures, or interactive features, which integrate art with utility. Large-scale sculptures or installations that encourage visitor interaction can create a vibrant atmosphere, promoting social engagement and use of the square.

Public parks, while providing green spaces within urban areas, can also integrate art to enhance aesthetic appeal and thematic elements. Artworks that blend with park landscaping, such as sculptures along walking trails or near water features, can enrich the park’s character and encourage exploration. This integration enhances the park’s role in connecting visitors with both the art and the natural environment.

Landmark structures like bridges and towers offer unique opportunities for artistic integration. Artworks on bridges, such as light projections or decorative architectural elements, can enhance the structure's visual impact, especially at night. Similarly, murals or lighting designs on towers can contribute to the city’s skyline and identity.

Cultural districts, often central to civic activities, benefit from art that provides visual coherence and enriches the space. Interactive elements, such as water features or kinetic sculptures, offer aesthetic and functional benefits. Art reflecting local culture or history can deepen the connection between the space and its users, reinforcing the district's role as a community gathering area.

Canals and waterfronts present opportunities for art that interacts with the water, such as floating installations or reflective pieces. These artworks can enhance the aesthetic and functional aspects of water bodies while promoting ecological awareness. Floating sculptures or illuminated installations that interact with the water surface can create a visual impact, highlighting the importance of these often-underutilized spaces.

Meso-scale approach establishes the foundation where spatial relations are created, setting the stage for further exploration and interaction. It serves as a critical link to the micro-scale, where the delivery of nature-related messages becomes the focus (refer to Chapter 2 for 'spatial relations' and 'nature-related message delivery'). The meso-scale strategies create a context that supports and enhances the impact of more detailed and specific nature-related messages at the micro-scale.

3.4 Micro-Scale Strategies

The micro scale focuses on individual artworks and site-specific installations, examining how each piece is designed, placed, and materialized due to achieve the process of nature-related message delivery. Unlike broader urban strategies, this scale emphasizes the specific qualities of the artwork, such as its design, form, and material choices, to ensure it integrates effectively with its surroundings.

3.4.1 Contextual integration

In terms of contextual integration, the form of the artwork must be either complementary to or contrasting with its surroundings to establish a meaningful interaction with the environment. This interaction can be achieved through careful consideration of layout, geometry, and order, aligning with urban design dimensions and Gestalt Principles.

Layout refers to the artwork's overall arrangement within the space, including its orientation and positioning relative to other elements. In urban settings, a strategically planned layout ensures that the artwork aligns with existing spatial configurations, such as major sightlines, pedestrian pathways, or established axes. This integration aligns with Lynch's concepts of 'paths' and 'edges,' enhancing the artwork's coherence within the urban fabric. By following Gestalt's Law of Continuity and Proximity, the artwork can create a seamless visual transition and a more coherent integration with its surroundings.

Geometry involves the shapes and forms of the artwork. Geometric elements can either reflect or contrast with the patterns in the surrounding area. For example, an artwork might incorporate organic curves to harmonize with natural landscapes or mimic fractal patterns found in nature. Conversely, the use of contrasting geometric forms can create a deliberate visual disruption, applying the Gestalt's Law of Figure-Ground relationship to differentiate the artwork from its background and prompt viewers to re-evaluate their spatial perceptions. This approach supports the morphological dimension of urban design by either reinforcing or altering the existing spatial character of the environment.

Order encompasses the structure and organization of elements within the artwork, including principles of symmetry, balance, repetition, and hierarchy. An artwork that mirrors the ordered patterns of an urban environment, such as street grids, building facades, or symmetrical public spaces, can integrate seamlessly into the city's fabric.

This approach aligns with the morphological dimension of urban design by maintaining visual coherence and reinforcing established patterns. Alternatively, introducing asymmetry or irregularity can create a focal point that captures attention, aligning with Gestalt's Law of Similarity and Closure. This strategy, commonly used in environmental art, contrasts natural orders with urban layouts, thereby adding dynamic elements to the cityscape and inviting new interpretations of the space.

By integrating these elements, the artwork not only contributes to the visual and spatial coherence of the urban environment but also engages with the morphological dimensions of layout, order, and geometry, enhancing the overall spatial experience.

3.4.2 Scale and Proportion

The scale and proportion of artworks are essential in determining their interaction with the environment and their impact on the viewer's experience. The dimensions of an artwork relative to its site can greatly influence its effectiveness and visual appeal.

Scale refers to the overall size of the artwork in relation to the site. A large, imposing structure in a small plaza can create a dominant visual anchor, functioning as a focal point that draws attention. Such large-scale artworks often serve as urban landmarks, contributing significantly to the site's visual identity and character. This aligns with Lynch's concept of 'landmarks,' where the artwork establishes a strong visual reference point within the space, enhancing its prominence and defining the area's character.

Conversely, in a large, open space, a smaller or more delicate artwork may require precise design considerations to ensure it maintains its impact and engagement with the surroundings. The finer details of a small artwork might not be as apparent in expansive settings, necessitating careful planning to preserve its relevance and interaction with the space.

Proportion involves the relationship between the artwork's size and the dimensions of the site. Proper proportion ensures that the artwork complements the site's dimensions and intended use. For instance, a monumental sculpture in a busy urban square enhances visibility and asserts a significant presence, while a more modestly sized piece in a serene park can blend with the natural landscape, offering a subtle yet meaningful contribution.

Considerations of scale and proportion also encompass the artwork's interaction with human activity and movement. Artworks that incorporate functional elements such as seating, pathways, or interactive features enhance their relevance and utility within the space. This approach aligns with perceptual and visual dimensions, as artworks that are appropriately scaled in relation to human activity contribute to a cohesive and engaging spatial experience.

In summary, integrating scale and proportion effectively requires a detailed understanding of the site's spatial dynamics. By aligning the artwork's dimensions with the environment, the artwork can enhance the site's visual and perceptual experience, complementing and enriching the urban or rural context while establishing its distinctive presence.

3.4.3 Functional Relationship

The functional relationship between an artwork and its site can significantly enhance its impact and relevance. By integrating art into the functional aspects of a space, the artwork can actively contribute to the site's usability and daily interactions.

For instance, in a public square designed as a gathering place, incorporating functional elements into the artwork can enhance the site's utility. Artworks that include seating, such as sculptures designed as benches, or installations with areas for resting or play, not only provide aesthetic value but also enhance the practical use of the space. This integration aligns with the urban design dimension of

functionality, where the artwork contributes to the site's operational and social activities, making it a practical component of daily life.

Interactive elements in artworks can further this functional relationship. Artworks that invite engagement, such as kinetic sculptures that move with the wind or pieces that incorporate sound, create a dynamic interaction that encourages viewers to interact with the art. This aligns with Lynch's concept of 'paths' and 'nodes', where interactive elements contribute to the spatial experience and engage users in a way that enhances their connection to the space.

By aligning the artwork's design with the functional needs and activities of the site, the artwork can enhance its impact and relevance. This approach not only improves the site's visual appeal but also ensures that the art contributes to the functional dimension of the urban environment, integrating seamlessly with the site's daily use and activities. This strategy enriches both the practical and experiential quality of the space, ensuring that the artwork serves a meaningful role within the urban context.

3.4.4 Visuality and Form

The visuality and form of an artwork are pivotal in shaping its impact and contribution to the urban environment. These elements significantly influence how the artwork integrates into the cityscape and enhances place-making.

Artworks often incorporate symbolic meanings or resemble natural forms, which affects their interaction with the urban space. For example, artworks designed to mimic natural forms, such as leaf shapes, animal silhouettes, or fractal patterns, create visual harmony with their surroundings. This resemblance contributes to visual integration, aligning with Lynch's concept of 'imageability' by enhancing the aesthetic appeal and fostering a connection to nature within an urban setting. The familiarity of these natural elements invites viewers to engage with the space more intuitively, enhancing the perceptual dimension of the environment.

Color also plays a crucial role in visuality. Colors can evoke emotions, create focal points, and influence the overall mood of a space. Bright colors can serve as visual landmarks, drawing attention and creating dynamic interest, whereas more subdued tones can blend with the environment, contributing to visual coherence. This strategic use of color influences the visual dimension of the urban space by either enhancing the artwork's prominence or ensuring its subtle integration into the surrounding context.

Artworks contribute to place-making by altering the perception of urban spaces, making familiar environments appear novel and inviting new interpretations. For instance, a sculpture designed with natural forms can transform an ordinary street corner into a point of intrigue, aligning with Lynch's idea of 'nodes' and 'landmarks'. This transformation enriches the location’s identity and character, enhancing the overall social and perceptual experience of the space.

In summary, the visuality and form of an artwork significantly influence its integration into urban environments. By enhancing aesthetic appeal, incorporating symbolic or natural elements, and strategically using color, artworks play a key role in defining and enriching the urban image, affecting both the visual and perceptual dimensions of the cityscape.

3.4.5 Material and Temporariness

Material and temporariness are crucial in shaping how an artwork interacts with its environment and contributes to place-making. The choice of materials affects the artwork’s relation to ecological issues and its integration within the surrounding urban space. For example, natural or recycled materials can emphasize ecological connections and sustainability, aligning with Lynch’s concept of 'environmental fit'. Conversely, contemporary materials might contrast with historical or traditional settings, creating a visual dialogue about the interaction between new and old,

synthetic and natural. This contrast can enhance visual interest and provoke discussion about the evolving urban fabric.

The temporariness of an artwork, including its duration and the durability of materials, affects its impact on place-making. Temporary artworks introduce dynamic elements into urban spaces, reflecting Lynch's idea of 'changing character'. They create evolving urban experiences, highlighting the site's transformation over time. This temporariness allows for flexibility, enabling urban spaces to adapt and respond to current cultural and environmental contexts. The transient nature of these artworks injects dynamic energy into the environment, making it more responsive to contemporary trends and events.

Photography and video are essential for documenting artworks in terms of materiality and temporality. Given their temporary nature, these media capture the essence of artworks as they interact with their environment. Photography provides static records of key moments, while video captures the movement, light, and atmosphere associated with the artwork. This documentation preserves the artwork's temporal dimension, allowing future audiences to experience the ephemeral interactions between art and environment. As natural elements gradually reclaim the materials, these records ensure that the transient qualities of the artwork are retained, contributing to an ongoing understanding of its impact and relevance.

3.5 Concluding Remarks

This section has analyzed how environmental art contributes to urban place-making across three scales: macro, meso, and micro. Each scale presents specific strategies that illustrate the role of environmental art in linking urban environments with nature. All scales are interconnected through creative place-making by embedding environmental art as a design strategy and incorporating collaboration between artists and local residents into the planning and design processes. Additionally,

environmental art contributes to the urban tapestry at every level and provides a framework for effective delivery of nature-related messages through spatial relations.

At the macro-scale, city-wide art programs and frameworks establish foundational structures for incorporating environmental art into the urban environment. These strategies support expansive art initiatives, such as sculpture trails, that address the relationship between human activity and natural surroundings, contributing to a cohesive urban landscape on a broad scale.

At the meso-scale, the focus shifts to how art interacts with specific spatial contexts. In rural and natural landscapes, environmental art highlights and integrates with the environment's inherent features. In urban areas, art that engages with the built environment transforms spaces, making them more vibrant and connected to nature. This level emphasizes the importance of contextually appropriate art that aligns with the characteristics of each environment.

The micro-scale analysis examines individual artworks and their immediate impact. Key factors include contextual integration, scale and proportion, functional relationships, visuality, and form. Material choices and temporariness influence how artworks interact with their surroundings and their effectiveness in evoking responses. This analysis underscores how precise design decisions impact the role of environmental art in urban place-making.

In summary, the integration of environmental art across these scales demonstrates its potential to enhance urban spaces by connecting human activity with natural elements. Effective implementation of art at various levels, supported by creative place-making strategies and artist-resident collaboration, can enhance public spaces and strengthen the integration of these spaces within urban settings. This multi-scale approach also provides a roadmap for effectively conveying nature-related messages through spatial relations.

CHAPTER 4

CASE STUDY: FATA MORGANA, ORDU

4.1 Methodology

The study employs a single case study methodology to provide an in-depth understanding of how environmental art integrates into urban place-making frameworks. Specifically, it examines the 'Fata Morgana' open-air exhibition in Ordu, Turkey, by the artist Alper Aydın, exploring its impact on urban place-making and its implications for nature connection.

The choice of this method is justified by the significance of the case in shedding light on the relatively new phenomenon of incorporating environmental art into urban place-making in Turkey. Given that environmental art, especially land art, is not widely practiced in Turkey, this case study offers valuable insights, enhancing both theoretical and practical understanding and contributing to the advancement of the field within the Turkish context.

'Fata Morgana' is selected for its sophisticated approach to place-making and its strategic use of the natural landscape to convey powerful messages about nature and history. The site was chosen for its dual context: it includes a cultural district in Ordu Center and a natural conservation area in rural Ordu. This dual-context approach allows for a comprehensive examination of how public art can engage with both urban and natural environments, each presenting unique challenges and opportunities.

The integration of environmental art at the macro, meso, and micro scales demonstrates its relevance to various dimensions of urban design. Morphologically,

the layout and spatial arrangement of artworks utilize both urban and rural characteristics, transforming underutilized spaces into dynamic environments. Perceptually, the exhibition enhances visitors' sensory experiences, fostering a deeper engagement with the environment. Socially, it promotes community involvement and dialogue on sustainability and nature conservation. Visually, the artworks blend with the landscape, enriching the aesthetic experience. Functionally, the artworks serve both aesthetic and practical roles, contributing to the overall urban experience. Temporally, the exhibition highlights the impact of environmental changes, such as materials affected by floods, emphasizing the temporal aspect of human-nature interactions.

The exhibition also aligns with Kevin Lynch's place-making components by enhancing the site's identity and legibility through its integration with the landscape, thereby reinforcing imageability. The use of Gestalt Principles, such as proximity and continuity, creates a cohesive visual experience, enhancing viewers' perception and understanding of the exhibition as a unified whole.

Furthermore, 'Fata Morgana' exemplifies the role of artists as stakeholders and decision-makers in creative place-making. It emphasizes the importance of collaboration between artists and local residents in planning and design processes, offering insights into stakeholder engagement in urban design. In this context, an interview was conducted with Alper Aydın, the artist of this open-air exhibition, to gather information on the collaborations and implementation process. This interview provides insights into how these partnerships and procedural aspects contributed to the success of the exhibition.

The exhibition is closely linked to the Anthropocene by incorporating materials affected by environmental changes, such as trees brought by floods, which highlights the tangible effects of environmental changes on urban spaces. This approach aims to raise awareness among urban dwellers about their impact on nature.

A site visit was conducted to observe and experience the artworks within their broader environment. Observations focused on the spatial arrangement of the artworks, their qualities, and the exhibition's influence on the site's ambiance. Photographs were taken to document the exhibition's appearance, spatial arrangement, and interactions with the environment, providing visual data that supported the analysis of its aesthetic and functional impacts.

The findings from this study are supposed to contribute to the limited body of knowledge on environmental art in Turkey and offer practical insights for future urban design projects that seek to incorporate artistic elements into urban open spaces.

4.2 Introduction to the Case Study

'Fata Morgana' is Turkey's first land art exhibition. The exhibition was held between June 20 - September 10, 2023, for almost 3 months, at four main locations in Ordu: *Yason Burnu* (Cape Jason), *Taşbaşı Sanat Alanı* (Taşbaşı Art Space), *Yason Kilisesi* (Jason Church), and *Sülü Burnu* (Cape Sülü). 'Fata Morgana' aims to make these places more actively utilized. It seeks to draw greater public attention to these sites. By integrating large-scale artworks with these prominent areas, the exhibition enhances community engagement with Ordu's unique natural and cultural heritage.

Alper Aydın and his team describe the exhibition 'Fata Morgana' as covering roughly one hundred hectares, where the distances between the artworks not only shape the perception of each piece but also invite the audience to explore the landscape and experience its atmosphere. They emphasize that the exhibition is not just a spectacle but also a direct expression of the interaction between nature, the seas, volcanic rocks, and the region's history with the artworks (*Fata Morgana* Open Air Exhibition signage, 2023).

Additionally, the artist Alper Aydın's perspective on connecting with nature can be highlighted through his words:

> ''*One undeniable truth is that my body and life cannot be considered independently of nature. Over the years, influenced by the places I've lived, I have developed a more sensitive approach to nature and my surroundings. I now perceive each place not only through the present moment but with empathy for its history, locality, archaeology, geology, and, most importantly, the energy it generates. All these factors are crucial in making a work authentic; afterward, the work becomes tangible through technical aspects such as its practice, materials, and dimensions.*'' (Semercioğlu, 2023; *https://www.sanatatak.com/alper-aydin-fata-morgana-gercegin-doga-baglaminda-ne-oldugunu-bize-aktarir-1/*, Accessed in August 2024)

4.3 Process of the Exhibition

To begin with, for the exhibition, there is a dedicated team responsible for managing the financial aspects and overseeing the creative process. The project includes a project director, separate from the artist, as well as a funding director. Additionally, there is a comprehensive project file that outlines all aspects of the initiative. Additionally, during the artistic production phase, there are sub-workshops and a team of approximately 20 people involved (Interview with Alper Aydın, 2024).

The exhibition required financial support, as the artist's budget alone was insufficient to cover the expenses. Consequently, various institutions and organizations were approached for assistance. The primary sources of support came from businesses located in Ordu, including those around Cape Jason, as well as from foundations and associations (Interview with Alper Aydın, 2024).

It can be noted at this point that businesses or foundations tend to sponsor exhibitions or environmental art projects primarily if they are situated in central locations. This

tendency made finding sponsors particularly challenging. To make the exhibition feasible, a list of primary supporters, including collectors and sponsors, was created. Secondary supporters included the Oksijen YEG Association, a local development organization in Perşembe (the nearest village to Cape Jason), and the CultureCIVIC European Foundation. Tertiary support came from local hotels, such as Çambaşı Kayak Oteli (in Ordu's highlands) and Yason Blue Hotel, among others near Cape Jason. These hotels provided financial support and also offered accommodation for some guests (Interview with Alper Aydın, 2024).

Furthermore, local municipalities, including Ordu Metropolitan Municipality, covered the needs of the incoming press team (approximately 160 people) and important visitors from the art community, such as transportation, meals, and lodging. They also supported promotional efforts for the exhibition through billboards and other media within Ordu. The municipality also provided assistance with the placement and transportation of the projects, including vehicles and staff. They offered support with vehicles and generators. The municipal contribution was notably substantial, and SAHA Association covered the costs for printing the exhibition catalog (Interview with Alper Aydın, 2024).

The hotels suggested the exhibition to tourists, which significantly contributed to the exploration of the city. Additionally, the exhibition encouraged engagement with nature and received very positive feedback in terms of the 'experience' it provided. In the context of local administration, it was conveyed that while the city is small, the exhibition demonstrated how a small city can express itself on a global scale through art (Interview with Alper Aydın, 2024).

The artist now keeps the art installations produced for the exhibition in their own garden, in case they might be exhibited in another show in the future, maybe in Anatolia or Istanbul (Interview with Alper Aydın, 2024).

At the beginning of the process, the artist presented the exhibition concept and project file to the municipality. He indicated that they obtained permission solely from the municipality for the use of two churches (Taşbaşı and Jason) and two open spaces for a duration of three months. Additionally, the municipality and the local conservation board (a governmental organization) were in communication regarding the permission process for the use of historic structures (Interview with Alper Aydın, 2024).

The local administration plans to transform Cape Jason into a 'Project Space' featuring temporary environmental artworks. They have considered Alper Aydın as the coordinator for this process. Thus, it can be interpreted that the area is currently undergoing a transformation in land use, creating opportunities for temporary open-air exhibitions to take place. Alper Aydın is currently in discussions with the municipality and is in the process of establishing a platform for artists. The municipality will finance the entire process, but Alper Aydın will provide voluntary support to ensure the process adheres to appropriate procedures. This idea was conceived by the municipality after the success of the ‘Fata Morgana’ exhibition and was proposed to Alper Aydın because of both the success of his exhibition and his status as a 'local' resident of Cape Jason (Interview with Alper Aydın, 2024).

In conclusion, it can be asserted that the local initiative and support from the rural community around Cape Jason played a significant role in the success of the exhibition.

4.4 Description of the Site

Ordu is a metropolitan city located in the Black Sea Region of Turkey, with a population of 769,692 as of the beginning of 2024. Taşbaşı Art Space is located in Ordu city center, while Cape Jason, Jason Church, and Cape Sülü are located in a relatively more suburban space, in a natural landscape. Cape Jason and Cape Sülü

are 42 km from Ordu - Giresun Airport, 35 km from Ordu, and 20 km from Perşembe. It is a first-degree archaeological and second-degree natural conservation area (Source: https://turkiyeturizmansiklopedisi.com/yason-kilisesi, Accessed in August 2024).

Figure 4.1. Locations of Cape Jason, Jason Church, Cape Sülü and Taşbaşı Art Space. (Photos of Yason Church, Cape Sülü and Taşbaşı Art Space are by the author; Photo of Cape Jason is obtained from the Ordu Metropolitan Municipality Official Website, *https://www.ordu.bel.tr/Haber/44511/yason-burnu-kendine-hayran-*birakiyor, Accessed in August 2024)

The exhibition's use of multiple locations establishes a narrative that connects various parts of Ordu, integrating different areas of the city and landscape. This spatial organization contributes to a cohesive urban and environmental tapestry, enriching the city's identity.

4.4.1.1 Taşbaşı Sanat Alanı (Taşbaşı Art Space)

Taşbaşı Art Space is the first venue of the exhibition. Located in the heart of Ordu, this cultural hub serves as a gateway to the exhibition. It is located in Taşbaşı Neighbourhood, which is considered to be a heritage asset in Ordu, and fall within an urban conservation area (Republic of Turkey Ministry of Culture and Tourism, Accessed in August 2024). It provides a space for visitors to engage with the themes of 'Fata Morgana' before experiencing the outdoor installations, linking the urban environment with the natural landscapes of the other sites.

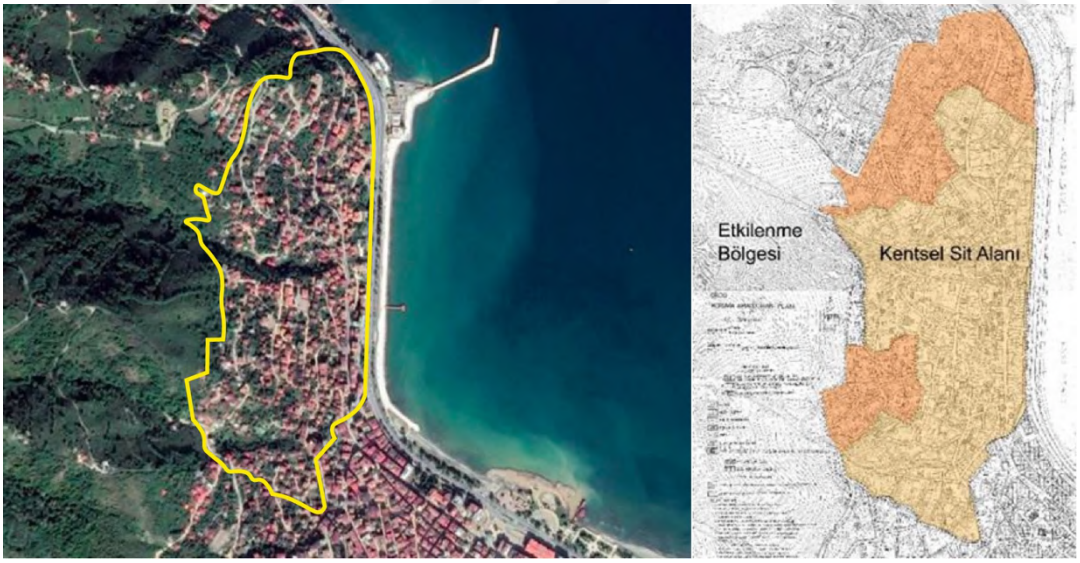

Figure 4.2. Borders of the Urban Conservation Area in Ordu. (Atabeyoğlu et al., 2019)

Figure 4.3. The border of Taşbaşı Neighbourhood falls within the Ordu Urban Conservation Area. (Created by the Author, Map is obtained from Google Earth)

The neighbourhood, which is also an urban conservation area, is directly connected to the city center. On the north, it is bordered by the Black Sea coastal road. Due to its dominant position, the area offers numerous vista points from where the city and the sea can be viewed. Additionally, the site creates highly effective silhouettes for those observing from the road and within the city. The feature that makes these silhouettes particularly striking is the view of traditional built environment that are located on sloped terrain in such a way that they do not obstruct each other. The settlement's location on a sloped landscape enables both a commanding view and natural air circulation. However, for many years, construction that is not in harmony with the historical texture and traditional architecture has been obstructing the vantage points, negatively impacting the silhouette, diminishing the area's visual dominance, and impeding natural ventilation (Atabeyoğlu et al., 2019).

Figure 4.4. Taşbaşı Art Space with a view of the sea and a historic silhouette as its background. (Source: Google Images, Accessed in August 2024)

Taşbaşı Art Space, built in an east-west direction in a rectangular style (Republic of Turkey Ministry of Culture and Tourism, Accessed in August 2024), features as a prominent landmark in Ordu.

4.4.1.2 Yason Burnu (Cape Jason) and Sülü Burnu (Cape Sülü)

Cape Jason and Cape Sülü are situated on the eastern side of the Black Sea, slightly off the main Eastern Black Sea Road (Doğu Karadeniz Sahil Yolu). This location provides them with a sense of seclusion and natural tranquility, away from the more developed and busy coastal areas.

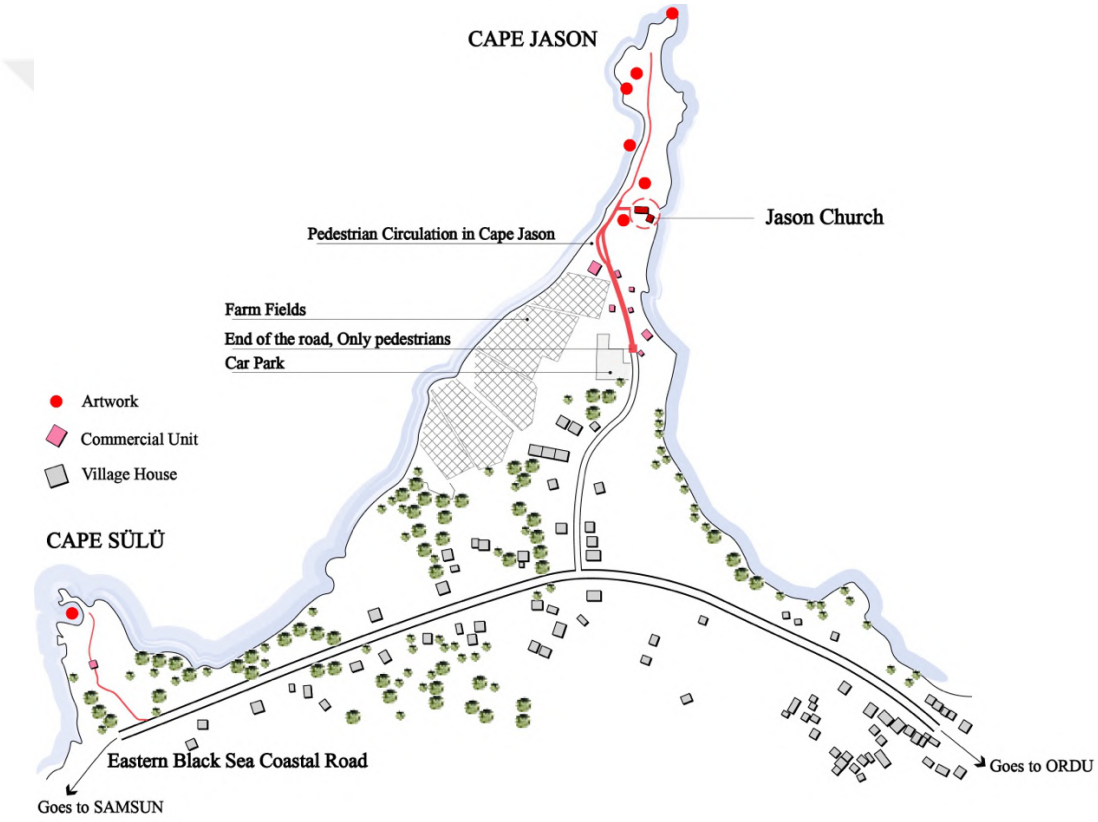

Figure 4.5. Contextual diagram of Cape Jason and Cape Sülü, indicating the land-use, vehicular and pedestrian mobility. (Created by the Author)

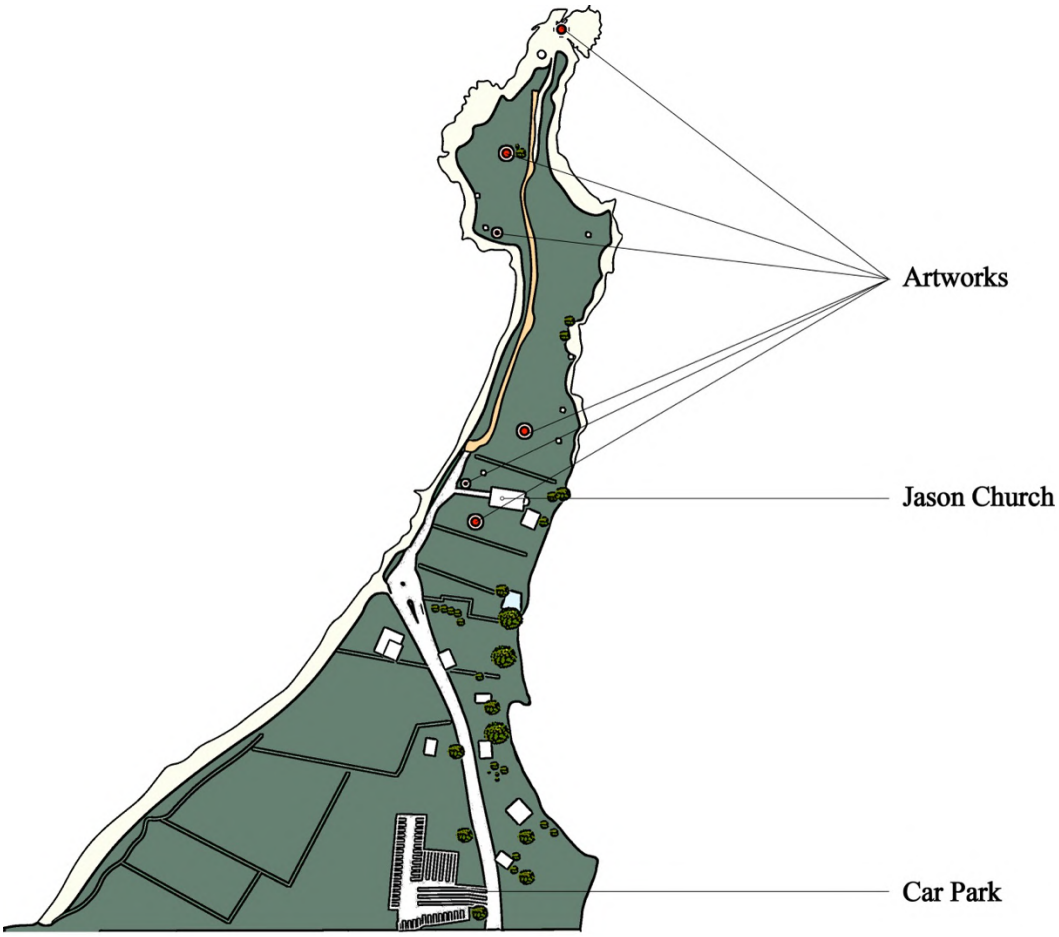

Figure 4.6. The arrangement of artworks within the layout of Cape Jason as part of the open-air exhibition. (Created by the Author)

The cape features gentle inclines as it extends into the Black Sea. These slopes are covered in lush vegetation, and the land gradually descends toward the water, creating a picturesque landscape. From the sea, the gentle inclines of Cape Jason's fields are clearly visible, contributing to the cape's distinctive topography. The combination of cultivated fields, natural vegetation, and the background of the Black Sea creates a stunning visual experience. The cape itself provides panoramic views of the surrounding coast and the endless horizon of the Black Sea. Scattered throughout the landscape are village houses, which are typical of the region's rural

architecture. Walking through the area, especially along the paths leading to the cape, small, locally-run cafes can be encountered. These cafes often have simple entrances, sometimes marked by wooden signs or small gardens.

Figure 4.7. Entrance of Cape Jason. (Photo by the Author)

Figure 4.8. Camping area visible from the entrance to Cape Jason. (Photo by the Author)

First of all, Cape Jason is a site of natural and historical significance. The area's dramatic coastal landscape and archaeological richness provide a striking background for land art, which often seeks to harmonize with or highlight natural environments. Land art often engages deeply with its environment, aiming to create a dialogue between human creativity and natural processes. Cape Jason, with its rugged coastline and unique geology, offers an ideal setting for exploring these themes.

Natural setting of Cape Jason allows for artworks that are both environmentally sensitive and accessible to local communities and visitors. The natural scenery of Cape Jason, with its rocky shores, lush greenery, and panoramic views of the Black Sea, is cherished by the local population. People from Ordu often visit the cape during weekends or holidays for picnics, sightseeing, and to enjoy the serene environment.

Figure 4.9. Explanation Sign for Fata Morgana. (Photo by the Author)

This peninsula offers the opportunity to witness the sunrise and sunset on 320 days of the year. During the summer months, visitors can watch both the sunrise and sunset with the naked eye. Additionally, the peninsula's shores are adorned with an abundance of sea shells. The peninsula and its nearby coastal area offer picnic spots, dining facilities, and parking. It is one of the most popular attractions in Ordu Province. For foreign tourists, especially Christians, the church on the peninsula is a must-see religious site. Cape Jason is also associated with the legendary Golden Fleece (Argonauts' Legend). Cape Jason is the only peninsula along the Black Sea coast that has a church on it. (Türkiye Turizm Ansiklopedisi, *https://turkiyeturizmansiklopedisi.com/yason-kilisesi*, Accessed in August 2024)

Figure 4.10. Observing Cape Jason while standing on Cape Sülü. (Photo by the Author)

Just 300 meters west of the peninsula is a place known as ‘Yalancı Yason’ (referred to as *Cape Sülü* in cadastral maps). In ancient times, this area functioned as a

maritime trade center. Both here and at Cape Jason, there are fish ponds carved out of 4,000-year-old stones. Surface surveys indicate the presence of clay beds and evidence of pottery production and trade from ancient periods. The area attracts numerous tourists for water sports and diving. Additionally, local residents have made several attempts to search for treasures here.

4.4.1.3 Yason Kilisesi (Jason Church)

Jason Church, located at Cape Jason in Ordu, Turkey, is a historical and cultural landmark with significant local and regional importance. The Jason Church is believed to have been built by Greek Orthodox settlers in the mid-19th century. It is named after the legendary figure Jason from Greek mythology, leader of the Argonauts, who is said to have passed through this area on his quest for the Golden Fleece. Its design includes stone masonry, arched windows, and a bell tower, characteristic of the ecclesiastical structures from that period (Buyruk, 2019).

Figure 4.11. Jason Church (Photo by the Author)

Situated on Cape Jason, the church offers stunning views of the Black Sea and the surrounding landscape. This location not only provides a picturesque setting but also connects the site to the ancient maritime routes and myths associated with Jason and the Argonauts. Today, Jason Church is a popular tourist destination, attracting visitors interested in history, architecture, and mythology (Buyruk, 2019).

4.5 Examining Fata Morgana's Place-Making within Environmental Art Framework

The place-making impact of 'Fata Morgana' will be examined within the framework of environmental art. This analysis will explore its effects across macro, meso, and micro scales, providing a comprehensive understanding of its integration into the urban landscape.

4.5.1 Macro-Scale Assessment: Urban-Nature Nexus

Open-air art exhibitions at various locations in the cities can indeed offer valuable insights for urban place-making strategies. The artist, Alper Aydın is from Ordu and is a local in a village by Cape Jason. There is a strategic approach to choosing a linear path from Taşbaşı Art Space in the city center to Cape Jason and Sülü, connecting the urban center to the surrounding villages and nature. Multiple places encourage exploration of the city's diverse areas, as well as creating a sense of a journey or trail, enhancing the visitor experience. This approach can turn the exhibition into an exploratory adventure, where each site offers an interaction with the city in varying ways and contexts. For instance, one location might improve engagement with blue infrastructure, particularly with the sea, while another could foster place-based education about the local natural environment.

By placing art in both urban and natural settings, exhibitions can highlight the interconnectedness of these environments. This can promote a greater appreciation

for natural spaces within urban contexts and vice versa, encouraging a more holistic view of the city's landscape. In this case, Taşbaşı Art Space in the cultural district of the ‘Taşbaşı Neighbourhood’ as an urban public space, and Cape Jason and Cape Sülü as natural rural sites, are connected at the city level. This integration is not part of an administrative framework, program, or plan; it was the first solo open-air exhibition. However, it received PR support from local authorities, magazines, and associations such as SAHA Association. Posters for the exhibition were displayed in collaboration with the local municipality in certain parts of the city, particularly hanging down from pedestrian bridges, making them visible to vehicles passing below.

In terms of *accessibility*, natural settings may require travel to reach the installation, which can limit spontaneous encounters but offer a sense of adventure and discovery. Urban installations are generally more accessible and integrated into daily routines. They are encountered by a broader and more diverse audience. In the context of *engagament*, it is often more serene and personal, with visitors experiencing the art in a relatively undisturbed environment. In the urban public space, engagement is often more immediate and varied, with potential for high levels of interaction, including public events, performances, or casual observation.

Cape Jason is an archaeological and natural conservation area (Ordu Provincial Directorate of Culture and Tourism, *https://ordu.ktb.gov.tr/tr-130751/yason-burnu-persembeordu.html*, Accessed in August 2024), and as a result, its designation presents significant challenges and opportunities. One of the key issues is the limited vision and enthusiasm for integrating a conservation area into broader urban and public contexts, primarily due to the strict conservation status.

Environmental art and temporary installations can play a crucial role in bridging this gap. By strategically placing art in these conservation areas, public engagement and awareness of these sites can be enhanced, while also fostering a deeper connection between urban environments and natural heritage. Such interventions can highlight

the ecological and historical significance of these areas, potentially sparking increased interest and more innovative approaches to their management.

By situating the artworks in a specific cultural and environmental context, ‘Fata Morgana’ can also address local issues, such as land use and conservation. The challenge lies in navigating the balance between preserving the integrity of these conservation areas and introducing dynamic, temporary art that engages the public. Effective integration requires careful planning to ensure that artistic interventions respect conservation guidelines while also enhancing the site's visibility and role within the broader urban context.

Hosting this open-air exhibition, Ordu attracted visitors from various cities nationally and internationally, for nearly three months. This event not only showcased environmental and land art, but also led people to discover a beautiful natural field close to the urban area. The exhibition bridged the gap between city life and nature, highlighting the accessibility and charm of the landscape and fostering a deeper appreciation for the region’s natural beauty.

Overall, at the macro-scale, the exhibition provided:

- **Cross-district connectivity** by linking the city center with peripheral areas, encouraging a broader interaction with less frequented, yet culturally and environmentally significant locations, and encouraging exploration and movement throughout the coast,

- **Emphasizing key urban landmarks** by situating installations near or along significant pathways, such as continuous coastal road, enhancing the exhibition's reach.

-**City-wide promotion** with posters particularly on arterials roads as the coastal road (between the center, Taşbaşı Neighbourhood, Cape Jason and Cape Sülü).

4.5.2 Meso-Scale Assessment

This scale examines the sites that the artworks are located in. In the meso-scale, environmental artworks create an environment that enables a connection between urban dwellers and varying spatial contexts.

4.5.2.1 Artwork-Cultural District Connection

The Taşbaşı Art Space, located in a neighbourhood that is actually a spatial-cultural heritage, exemplifies a connection via environmental art by fostering a dynamic interaction between urban dwellers and the surrounding environment. As an environmental art exhibition, the installations at Taşbaşı not only enhance the aesthetic and cultural value of the site but also serve as a bridge that connects the urban population with the historical essence of the neighbourhood.

Figure 4.12. Taşbaşı Neighbourhood as an urban conservation area. (Photo by the Author)

Figure 4.13. The connection of Taşbaşı Art Space with the neighbourhood, and an example of the permanent sculptures in its garden. (Photo by the Author)

By positioning the exhibition within this site, the artworks contribute to a broader narrative that connects urban life with historical continuity, environmental awareness, and public engagement, making the Taşbaşı Art Space a vital node in the

urban fabric that enhances the cultural and environmental connections of the area. Figure 4.13 illustrates that from the garden of Taşbaşı Art Space, direct integration to the neighbourhood (with stairs) can be seen. Although the Taşbaşı neighbourhood boasts historical significance and conservation status, it suffers from spatial neglect and underuse. This exhibition brings new life into the area, transforming it into a temporarily vibrant hub within its previously overlooked surroundings.

4.5.2.2 Artwork-Public Space Connection

The garden of Taşbaşı Art Space as a public space with several artwork, has a immersive vista point. The proximity to the sea further enriches this connection, as the artworks interact with the natural landscape, creating a seamless integration between the cultural district and the coastal environment.

Figure 4.14. The garden of Taşbaşı Art Space as a public space with permanent artworks. (Photo by the Author)

The garden, as a public space, plays a crucial role in this relationship, providing a communal area where the artworks can be experienced in a setting that encourages reflection, social interaction, and a deeper connection to both nature and the cultural heritage of the neighbourhood.

4.5.2.3 Artwork-Waterfront Connection

The ‘Artwork-Waterfront Connection’ at Cape Jason is a compelling example of meso-scale intervention. The artwork's placement and design are intricately linked to the specific geographical and environmental context of the waterfront, highlighting a deep integration with the natural landscape.

Figure 4.15. Examples of artwork-water connection in the meso-scale. (Photo by the Author)

Figure 4.16. Pathway near the shore, as enhancing the connection with the water. (Photo by the Author)

The exhibition site at Cape Jason is characterized by its rugged coastal terrain and panoramic sea views, which are crucial elements in shaping the artwork's impact. The artwork strategically uses the natural features of the waterfront, such as the rocky outcrops and the expansive sea, to enhance its thematic and aesthetic dimensions.

The installations weave together with the rhythm of the sea and the rugged coastline, using materials and forms that echo the fluidity and texture of the shore. For instance, some pieces might shimmer like the play of light on water or flow seamlessly with the contours of the rocky outcrops. This integration transforms the art into a living extension of the landscape, inviting viewers to immerse themselves in an experience where the boundaries between creation and nature blur, and where each artwork becomes a part of the ever-changing seascape.

4.5.2.4 Artwork-Natural Landscape Connection

The artworks invite viewers to interact directly with the environment. As visitors walk through Cape Jason, they encounter the landscape in surprising ways, deepening their connection with the natural world. This interaction can inspire reflection on environmental concerns and humanity's relationship with nature.

Figure 4.17. The natural landscape with sea, different colors of geological landforms, the greenery and the hill, as well as the presence the village houses. (Photo by the Author)

Their placement is thoughtfully chosen to complement the geological features of Cape Jason, such as the jagged rock formations and the shifting sands. The artworks often mimic the fluid movement of the ocean or align with the jagged contours of the rocky outcrops, creating a visual and sensory dialogue with the landscape. This alignment ensures that the artworks do not merely occupy the space but become an

integral part of it, engaging with the natural elements and contributing to the site's visual and environmental narrative.

Figure 4.18. Varying landforms on Cape Jason. (Photo by the Author)

Through this connection, the artworks not only celebrate the beauty of Cape Jason but also invite viewers to experience the landscape in a new light. The interplay between the art and the natural surroundings fosters a deeper appreciation for the site, emphasizing the fluid relationship between human creativity and the ever-changing natural world.

4.5.3 Micro-Scale Assessment

The micro-scale focuses on the individual artworks and their intricate designs, which are meticulously crafted to interact with the site’s unique characteristics. At this

scale, each piece becomes a detailed exploration of form, material, and placement, contributing to a broader dialogue with the environment.

4.5.3.1 Contextual Integration

In ‘Fata Morgana’ at Cape Jason, the contextual integration of the artworks is masterfully achieved through careful consideration of layout, path, order, background, and composition.

The layout and path indicate a deliberate arrangement of artworks along a continuous route (Figure 4.16), guiding visitors through the site in a way that fosters exploration and engagement. This linear or meandering path ensures a cohesive journey, allowing each artwork to be experienced in relation to the others, thereby enhancing the overall narrative flow.

The order of the artworks is meticulously aligned with the natural contours of the landscape, creating a visual and thematic sequence that mirrors the natural rhythm of Cape Jason. This careful arrangement not only integrates the artworks into the topography but also ensures that each piece contributes to a harmonious and fluid experience.

The choice of background plays a crucial role in contextual integration, as each artwork is set against a background that both highlights its unique qualities and blends seamlessly with the surrounding environment. This thoughtful selection of background ensures that the artworks do not stand apart but become an integral part of a unified visual composition.

Overall, the composition of the exhibition is a harmonious blend of art and nature. By aligning the artworks with the natural features of Cape Jason, such as the rocky outcrops and coastal views, ‘Fata Morgana’ creates a dynamic interaction between the art and the landscape. This integration enhances spatial coherence and

strengthens the connection between the artworks and their environment, providing a more integrated and contextual experience for visitors.

4.5.3.2 Scale and Proportion

In ‘Fata Morgana’ at Cape Jason, the scale and proportion of the artworks are carefully calibrated to resonate with the expansive nature. The interplay between the size of the artworks and the vastness of the landscape creates a figure-ground relationship, where the artworks either stand out against the expansive background or blend into the natural environment.

Figure 4.19. An example of a large-scale artwork that stands out in the landscape primarily due to its imposing size, and also its striking color. (Photo by the Author)

Some artworks stand out prominently against the expansive background, their monumental size emphasizing the grandeur of the natural setting. These large-scale

pieces command attention and highlight the scale of the landscape, creating a dramatic visual impact.

In contrast, other artworks are designed at a more human scale, blending seamlessly into the environment. These smaller, more intimate pieces invite close examination and interaction, offering a subtle yet significant presence that engages viewers on a personal level. This variation in scale ensures that the exhibition offers a rich, layered experience, where the artworks both complement and contrast with the natural surroundings, enhancing the overall narrative and connection with Cape Jason.

4.5.3.3 Visuality and Form

In the exhibition, the visuality and form of the artworks are deeply rooted in natural patterns and forms, using elements such as waves, fractals, and other organic shapes to enhance nature resemblance.

Figure 4.20. Natural forms within the artwork's visual design. (Photo by the Author)

Figure 4.20 displays an example of the artwork that draw inspiration from natural forms, such as the undulating curves of waves. By incorporating these elements, the exhibition creates a visual harmony with the surrounding landscape, making the art feel like a natural extension of its environment. This approach not only emphasizes the artworks' integration with the natural world but also reinforces the theme of nature as an integral aspect of artistic expression.

Figure 4.21. Relevance of artworks' visuality in the narrative. (Photo by the Author)

Color plays a pivotal role in how artworks interact with their surroundings. In the exhibition, vibrant and dynamic colors are used to highlight the artworks (Figure 4.19), creating striking contrasts against the natural and urban backgrounds. The geometric forms employed in the artworks often mimic natural patterns, such as the symmetry found in fractals or the fluidity of waves, adding depth and visual interest.

These geometric shapes (Figure 4.20) help the artworks stand out while maintaining a dialogue with the natural elements they represent.

The interplay of color and geometric forms establishes a visual rhythm that guides the viewer's experience. This rhythm can evoke a sense of movement and fluidity, mirroring the dynamic nature of the environment. For instance, the repetition of fractal patterns or the wave-like forms can create a feeling of continuity and connection, linking the artwork to the broader landscape.

The choice of visual elements and forms ensures that the artworks are not only aesthetically pleasing but also contextually relevant (Figure 4.21). By aligning with the natural and urban contexts, the artworks enhance their surroundings and contribute to a cohesive visual narrative throughout the exhibition.

4.5.3.4 Material and Temporality

In the context of the exhibition, a temporary environmental artwork was installed in the garden of Taşbaşı Art Space, made entirely from natural elements such as tree stumps and plants. The artwork (Figure 4.22) aimed to give a second life to dead tree roots. Cape Jason faces various cases that reveal the effects of global warming and the resulting ecological disasters. One of these cases was when massive 250-year-old tree roots, part of the exhibition, were washed ashore by floods. These roots, from different tree species and varying in size and shape, were collected from the shore (by the artist). They were hollowed out using various techniques, filled with soil, and new saplings were planted inside them. The key point here was that the roots themselves, not traditional soil, served as the planters for these saplings. This intervention allowed a tree that was on the verge of extinction to regain functionality and continue to live in an organic form. This work, which demonstrates how uncertain the concepts of death, ending, and losing function are in nature, is a living artwork (Semercioğlu, 2023).

Figure 4.22. Artwork made from a dead tree washed ashore by floods, was collected by the artist and brought back to life. (Source: Ekonomim: *https://www.ekonomim.com/hafta/orduda-tek-kisilik-bienal-fata-morgana-haberi-700113*, Accessed in August 2024)

The artworks in Cape Jason blend seamlessly with the natural landscape, often using materials collected from the site itself. This practice emphasizes the sustainability and ecological consciousness typical of environmental and land art. In some cases, the artist incorporates elements like wood or stone to integrate the artwork more seamlessly into its natural context. These materials can ground the installation and contrast with the more surreal elements, highlighting the interaction between the natural and the artificial.

The artworks dynamically interact with the shifting light conditions of the coastal environment. As natural light changes throughout the day, these materials alter their appearance (Figure 4.23), creating a fluid, ever-evolving visual experience that mirrors the changing atmosphere of Cape Jason. The artworks further enhance this

dynamic interaction by shifting hues in response to different lighting and weather conditions. This transformation not only engages viewers with the immediate environment but also reflects the natural rhythms and variations of the seascape, adding depth and vibrancy to the artwork.

Figure 4.23. The real weight of the rocks establishes a tangible connection with the environment. The artistic intervention is executed using paint that is not water-resistant, emphasizing the temporariness of the artwork with material selection. (Photo by the Author)

Natural material selection showcases awareness and responsiveness of art materials to their natural surroundings and conditions. In land art, this sensitivity is crucial as it reflects the artist's intent to harmonize with, and be affected by, the natural environment. Dying plants, often characterized by their changing colors due to weathering, erosion, or biological growth, demonstrate how natural processes impact materials over time (Figure 4.24). There is a profound connection between the

materiality and temporality of the artworks in this exhibition. The choice of materials, often inherently susceptible to decay, reinforces the artworks' temporary nature and their interaction with the evolving environment. Artists might utilize relevant material to convey themes of *decay*, *renewal*, or *growth*.

Figure 4.24. Artworks created using tree trunks, Jason Church (Photo by the Author)

Figure 4.25. Artwork symbolizing the process of nature, against any kind of construction in any scale. (Photo by the Author)

As shown in Figure 4.25 and Figure 4.26, the temporality of these artworks means that some cannot withstand the relentless forces of time and nature. As they succumb to weathering and decay, they become integral parts of the landscape's evolving story, symbolizing the transient beauty of art in harmony with its environment. This

inevitable degradation adds depth to the narrative, highlighting the temporary yet impactful presence of the artworks within the natural setting. As the art exists only temporarily, it engages in a dynamic dance with its surroundings. Its fleeting presence accentuates the evolving nature of the urban or natural environment, echoing themes of impermanence and flux.

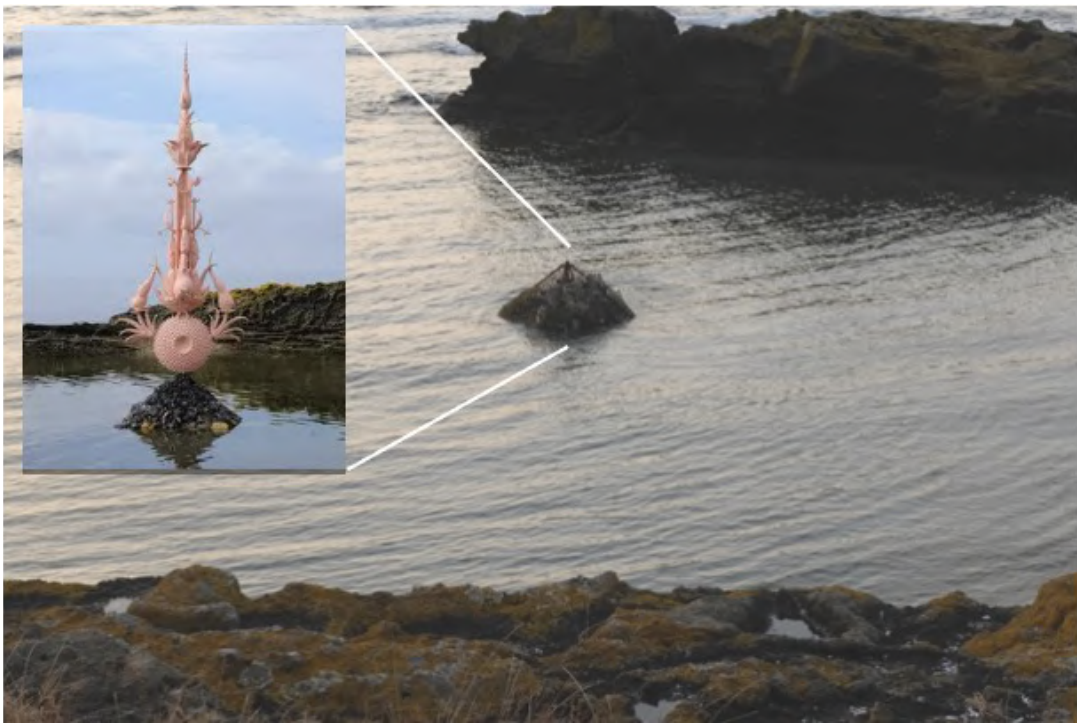

Figure 4.26. Artwork that could not endure the forces of nature, ultimately being worn away by the waves and carried off by the sea. (Photo by the Author, the image of the artwork is obtained from Sanatax, *https://www.sanatatak.com/fata-morgana-ve-gercegin-doga-baglamindaki-yeri-2/*, Accessed in August 2024)

The ever-changing landscape provides a temporal perspective on the artwork's relationship with the environment, highlighting its integration and transformation over time. The choice of impermanent natural materials and the inevitable temporariness in the landscape is further linked to the use of media, specifically

video and photography. Videos capture the dynamic interplay between the art and the natural elements, showcasing how the artwork responds to shifting light, changing tides, and the ever-evolving atmosphere of the waterfront. Photography complements this by documenting the static yet evocative moments where the art and landscape converge. Photography and video are essential for capturing the temporary nature of the 'Fata Morgana' artworks, preserving their fleeting interactions with the environment. As the artworks fade and are absorbed back into nature, these media document their temporary intervention to the site, ensuring that even as they disappear, their moments of convergence with the landscape are remembered and appreciated.

4.5.3.5 Movement and Rhythm

In the exhibition, rotating objects act as threads in a dynamic tapestry, continuously reshaping the landscape and creating an ever-evolving visual narrative. These kinetic elements introduce a rhythmic flow to the environment, merging art with nature in a seamless dance of motion and transformation. As the objects spin (Figure 4.27), they generate shifting patterns and reflections that interplay with the urban and natural settings, weaving them into a unified, vibrant canvas. This perpetual motion infuses the landscape with life, making the site and its surroundings appear as part of a living artwork.

The rotating objects not only enhance the visual appeal but also redefine spatial connections, encouraging viewers to experience the environment from new angles. By transforming static spaces into interactive experiences, the exhibition embodies creative place-making, turning the landscape into a dynamic, immersive tapestry that celebrates the harmony between art and nature.

Figure 4.27. Rotating objects continuously alter the landscape, creating an ever-changing visual experience. (Photo by the Author)

4.6 Analysis of the Outcomes

As discussed in Chapter 3, environmental art establishes both direct and indirect connections to nature. The ‘Fata Morgana’ Open Air Exhibition in Ordu illustrates how environmental art facilitates direct engagement with natural conservation areas adjacent to urban centers through effective integration into urban place-making strategies. This case study demonstrates the role of environmental art in balancing conservation objectives with land use, thereby enhancing public interaction with natural environments.

Assessing outcomes across scales (macro, meso, and micro) provides a comprehensive understanding of how artworks interact with their environments. This multi-scale assessment reveals how different levels of integration contribute to the overall effectiveness of the exhibition, from city-wide strategies to site-specific details. Evaluating across these scales helps to elucidate how artworks connect disparate areas and function within both urban and natural settings.

At the macro scale, the exhibition encouraged cross-district exploration, revitalizing key landmarks in Ordu and incorporating art into the broader cityscape. This integration facilitated increased public engagement and appreciation of Ordu’s diverse environments. By linking various city districts through a unified artistic narrative, the exhibition highlighted Ordu’s cultural and natural assets, enhancing the city's overall appeal and fostering connectivity between its districts. This approach aligns with Lynch’s principles of urban form, emphasizing the role of connectivity and imageability in enhancing urban spaces.

At the meso scale, artworks are not isolated objects but are understood through their interaction with specific sites. This scale examines how artworks influence and are influenced by their immediate surroundings, such as cultural districts, public spaces, waterfronts, or natural landscapes. By considering the site-specific contexts, one can assess how artworks shape and are shaped by these environments, demonstrating the

importance of contextual factors in defining the artwork's impact. This perspective highlights the mutual relationship between art and its setting, aligning with urban design dimensions such as morphological and perceptual factors.

At the micro scale, the design of artworks reflects the natural elements of Cape Jason, incorporating textures and shapes that resonate with the surrounding landscape. Materials are selected for their visual impact and their interaction with environmental factors such as light, weather, and sea conditions. Each artwork is designed to harmonize with its site, considering details such as surface texture, color, and scale to enhance its connection to the natural world. For example, some artworks feature reflective surfaces that interact with the changing light of the seascape, while others use patterns and colors that align with the natural contours of the coastline. Strategic placement of artworks maximizes their visual and experiential impact, framing specific views, aligning with natural features, or responding to tidal movements. This careful integration contributes to a vibrant, dynamic, and engaging environment, underscoring how spatial relations impact perception, connection, experience, and awareness. The artworks create an immersive experience that enhances the user's interaction with the site, reflecting the Principles of Gestalt Psychology by organizing visual elements to create a cohesive and meaningful environment.

The role of local initiative is crucial in the success of the exhibition. Local stakeholders, including community members and organizations, provided vital support in various forms, such as direct financial contributions, as well as transportation and accommodation, which significantly reduced costs for the exhibition team and artists. This engagement facilitated a more effective integration of the artworks within the city and enhanced community participation. Ultimately, it demonstrated that this large open-air exhibition featuring environmental artworks would not have been possible without the support of the local community.

CHAPTER 5

CONCLUSION

In the Anthropocene, an era defined by the profound impact humans have on the Earth's ecosystems and climate, the disconnection from nature has become a central concern. This disconnection, driven by rapid urbanization, industrialization, and technological advances, has been among the reasons of the environmental problems we now face. Environmental art has emerged in response to these crises, serving as a powerful tool for reconnecting people with nature. It is motivated by the need to address the consequences of the Anthropocene and to communicate essential messages about the environment.

Environmental art developed as a movement that prioritizes the integration of artwork within natural or urban contexts. Unlike traditional art forms, environmental art often cannot be separated from its surroundings, as its meaning and impact are closely tied to the site in which it exists. The relationship between the artwork and its site becomes central to how the artwork is experienced, perceived, and understood.

This spatial relation allows environmental art to create a dialogue between place and urban dwellers. The physical and emotional dimensions of space, such as scale, proximity to natural elements, and the ways urban dwellers move through or around the artwork, are crucial to the environmental art's ability to convey messages about nature, ecology, and climate change. As a result, environmental art becomes a means of rethinking not only how we interact with art but also how we relate to the spaces we live in. Through these spatial relations, environmental art challenges us to reconsider our role within the ecosystems, offering new ways of perceiving and connecting with the environment. Environmental art can alter the imageability and

dynamics of a space, influencing both the spatial experience and the way users emotionally and perceptually connect to it over time.

Environmental art operates on the premise of facilitating **experience** that actively engages individuals with their natural surroundings. In an increasingly urbanized and technology-driven context, where human interaction with nature has diminished, environmental art seeks to restore this lost connection through multi-sensory encounters. These experiences transcend the purely visual to involve tactile, auditory, and even olfactory stimuli, making the engagement with the artwork and its natural elements more comprehensive. For instance, installations that integrate natural components such as wind, water, or vegetation engage viewers across multiple sensory modalities, thereby heightening their perceptual and cognitive awareness of ecological dynamics. This approach not only immerses individuals in their immediate environment but also fosters a deeper understanding of ecological fragility and interdependence by engaging them on a visceral level. Through this broad, multi-sensory framework, environmental art cultivates a profound connection between individuals and nature, reinforcing its educational and communicative potential in addressing environmental issues.

Beyond experience, environmental art raises **awareness** about the environmental impacts of human activity. In the Anthropocene, the effects of climate change, habitat destruction, and pollution are often abstract or distant to many individuals. However, environmental art makes these issues visible and tangible. By integrating environmental themes into artistic expression, it highlights the consequences of human actions on ecosystems, species, and the climate. These artworks act as visual reminders of the ongoing damage, prompting viewers to reflect on their relationship with the environment and encouraging greater ecological responsibility.

The idea of **connection** plays a crucial role in bridging the growing divide between people and the natural world, especially within the Anthropocene. Environmental artworks often invite viewers to interact with and contemplate nature in ways they

rarely experience in their daily lives, particularly in urban environments. This form of art fosters a deeper sense of connection by encouraging individuals to engage directly with natural materials, landscapes, and ecological processes. By creating immersive environments or site-specific installations, environmental art builds pathways for individuals to reconnect with nature. This connection is not only physical but also emotional and intellectual, allowing people to reflect on their place within larger ecological systems. Ultimately, these experiences aim to rebuild the relationship between humans and the natural world, cultivating a renewed sense of responsibility toward environmental stewardship.

Environmental art also profoundly shapes the **perception** of nature, altering how individuals view and understand their surroundings. In the Anthropocene, where natural processes are often hidden or overlooked, environmental art draws attention to the subtle dynamics of the natural world that might otherwise go unnoticed. By highlighting ecological interdependencies or visualizing environmental issues, such as climate change or pollution, these artworks reshape the way people perceive nature and their role within it. Through its creative expressions, environmental art challenges common perceptions of nature as separate or distant, inviting viewers to see themselves as part of the environment. This shift in perception is critical for fostering a deeper awareness of ecological fragility and human responsibility. By transforming how people view nature, environmental art helps to bridge the perceptual gap created by modern life and encourages a more holistic understanding of the environment.

Creating **vibrant**, **dynamic**, and **engaging** environments is crucial for effectively delivering nature-related messages through environmental art. Such environments enhance viewer interaction by integrating elements that reflect natural changes, such as variations in light, weather, or seasonal shifts. This integration ensures that the artwork is not only visually striking but also responds to its context, making it more relevant and impactful. Dynamic environments stimulate multiple senses, such as

sight, touch, sound, and smell, thereby increasing the viewer's engagement with the artwork. By incorporating sensory elements that interact with the natural surroundings, these environments help viewers better understand and connect with the ecological themes presented. This active involvement aids in conveying complex environmental messages more clearly and effectively. Thus, environments that are vibrant and dynamic ensure that nature-related messages are delivered with greater clarity and impact by fostering deeper viewer engagement and facilitating a more comprehensive understanding of the artwork's ecological context.

The case study of the 'Fata Morgana' in Ordu provides valuable insights into the discussed themes. This case exemplifies the impact of environmental art in bridging the gap between urban centers and natural landscapes. The exhibition's cross-scale approach, integrating artworks into the cityscape and specific sites, demonstrates how environmental art can revitalize urban spaces, enhance public engagement, and foster a deeper connection with nature. The outcomes of this case study highlight the effectiveness of environmental art in creating vibrant, dynamic, and engaging environments. It underscores the importance of spatial relations in nature-related message delivery and offers a model for future urban place-making strategies that seek to address environmental challenges and reconnect people with their surroundings.

Looking ahead, integrating environmental art into urban design presents opportunities for further exploration and innovation. Future research could examine how environmental artworks enhance the understanding of urban transformation or explore new strategies for embedding environmental art within evolving urban frameworks. Embracing the creativity of environmental art can shape urban environments that are not only visually compelling but also deeply resonant with contemporary narratives. In the evolving urban tapestry, environmental art serves as a timeless thread, guiding us to see urban spaces not merely as physical locations but as living, breathing canvases that reflect and enrich our collective experience.

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