

[Re]formation of Maritime Dystopias

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Abstract

This project explores the complex interplay of utopian and dystopian perceptions within the maritime industrial heritage context, focusing on the former Van Eijk shipyard in Sliedrecht, the Netherlands. Once a symbol of industrial progress and prosperity, the site now embodies a sense of abandonment and spatial decay, reflecting a shift in societal and functional values in the post-industrial era. The central research question is: How were the utopian/dystopian dualities manifested over the course of the former Van Eijk shipyard's lifetime and its epistemological sections, and how can these dualities be employed to re-form its appearance into a heritage-based transformation? The study examines how industrial spaces, traditionally viewed as utopian (Zimmermann 2013, 235–262) often evolve into dystopian environments, depending on their current state and social perception. Drawing upon historical and theoretical frameworks—such as critiques by Manfredo Tafuri, and Constant Nieuwenhuys's New Babylon—the research reveals how utopia and dystopia are not fixed categories but subjective experiences shaped by context and use. A new method of heritage evaluation is introduced, emphasizing spatial experience and user perception over traditional value matrices. Unlike established matrix-based assessments, which often require expert interpretation and singular viewpoints, this approach incorporates multiple user perspectives to recognize the coexistence of contradictory spatial meanings. By focusing on spatial dualities (accessible vs. inaccessible, extrovert vs. introvert etc.) the method allows for a more nuanced, participatory understanding of space. This user-oriented model not only facilitates adaptive reuse strategies grounded in emotional and experiential spatial qualities but also strengthens the continuity and identity of heritage sites. Ultimately, the architect's role shifts toward mediating between spatial atmosphere and collective memory, enabling a more inclusive and sustainable transformation of post-industrial environments.

Keywords: Maritime Heritage, The Netherlands, Revitalization

Introduction

The “Erfgoedlijn Maritieme Industrie” area contains both remnants and still-active maritime industrial sites. Today, these sites are often perceived as neglected or abandoned buildings, remnants of a once-vibrant industrial era, raising questions about their purpose and existence in the post-industrial era. The focus site is located in Sliedrecht and encompasses the industrial area surrounding the current Rotterdam Steel Works factory. The industrial site, originally a shipyard, was named after the van Eijk family, the landowners and proprietors of the business, which continues to operate in steel production. While the industrial theme of the site remains, its vibrancy has diminished. Industrial spaces

were historically presented as utopian places, symbolizing progress and prosperity for the surrounding communities. However, it is pertinent to question whether these spaces truly embodied the utopian ideals they purported to represent, and to define what constitutes a utopian place. Furthermore, it is worth asking why these spaces were defined as utopian and what impact this had on the people who owned them, worked in them, or lived nearby. Given their current appearance and utilization, the former shipyards are often perceived as dystopian sites, which is diametrically opposed to their original intent. To address the questions arising from the problematization of the meaning and characteristics of maritime industrial sites, the following research question was formulated: How were the utopian and dystopian dualities manifested over the course of the former Van Eijk shipyard's lifetime and its epistemological sections, and how can these dualities be employed to re-form its appearance into a heritage-based transformation? While sub-questions include: What were/are the main spatial characteristics or dualities of industrial sites/shipyards? How can we describe or depict the connection of these sites to society in the past and present? How did these sites alter the surrounding area? Was the impact beneficial or otherwise? Why is it important to re-form maritime sites, and how can this be achieved?

The concept of utopia versus dystopia is not new in academic discussion. Between the two world wars, when Western civilization required reconstruction, the CIAM group's Athens Charter at 1933 (Le Corbusier 1973) presented a utopian model of the new world. This approach prompted critical reflections, most notably by Italian architectural historian Manfredo Tafuri (Tafuri, La Penta 1976), on utopianism and architecture's capacity to shape society, independent of capitalist imperatives. Utopian thinking is also part of Dutch culture; the painter and sculptor Constant Nieuwenhuys' *New Babylon* explored utopian design and lifestyle. His work questioned what utopia or dystopia looks like, emphasizing that utopia is deeply connected to feelings rather than purely objective theory. Contemporary studies, such as MacLeod and Ward's *Spaces of Utopia and Dystopia*, show that utopias are often controlled and exclusive, emphasizing fortification and order. While dystopias are associated with decay, abandonment, and social exclusion (MacLeod, Ward 2002). Perceptions are inherently subjective: one individual's utopia may be another's dystopia. Fortified, exclusive areas may restrict freedom, whereas abandoned, dark spaces can foster coexistence and inclusivity. In this research, the spatial dimension is prioritized, focusing on the effects of space rather than the type of utopia/dystopia. The former Van Eijk shipyard contains multiple overlapping utopias and dystopias (industrial, architectural, rural) allowing a combination of perspectives. Sectional drawings close to the urban fabric will depict these dualities, emphasizing the interplay of space, perception, and historical context to inform a heritage-based transformation that is both adaptive and socially resonant.

The Creation of the Method

The initial stage of the research was to create a value assessment matrix to comprehend the values occurring at various scale (from site to materials), their significance, and how they had been altered. To accomplish this, the matrix proposed in *Design from Heritage* (Kuipers, de Jonge 2017) by Professors Wessel de Jonge and Marieke Kuipers was utilized. Chapter 4 of the book amalgamates the theories of Stewart Brand and Alois Reigl to achieve a fairly objective value assessment. The explanation of the values is based on the work of Ana Tarrafa Silva and Ana Pereira Roders, who presented a precise and easily comprehensible

definition of values in their conference paper Cultural Heritage Management and Heritage (Impact) Assessments (Pereira Roders, Taraffa Silva 2012, 375-382). The examination of both positive and negative values indicated a strong correlation of water with the former shipyard (now mostly disappeared due to the dyke construction) the connection between the shipyard and the surrounding community, and the layers of time experienced by the shipyard itself. While these outcomes are significant, they remain overly generalized, and the theme of utopia and dystopia could not be clearly identified, prompting the creation of a new assessment method.

To achieve a more precise outcome, the study employed the dualities theory based on the archetypal duality of utopia/dystopia. This method required a thorough examination of drawings and photographs from different time periods to extract pairs of dualities. Distinctive feelings, characteristics, atmospheres, or events were identified, resulting in a comprehensive list. The objective was not merely to reveal changes but to extract the most striking spatial elements at their peak and pair them with moments when the same elements had diminished or taken on a negative impact, creating a spatial duality of utopia and dystopia. A timeline documented the “epistemological sections,” precise moments when events caused significant changes to the site, characterized by industrial growth and architectural alterations. This approach enabled the identification of the most utopic and dystopic moments, allowing a comparative analysis of analogous elements over time. The acquisition of information and revelation of dualities was facilitated by drawings and photographs, followed by a secondary classification to enhance accuracy. Some duality pairs were more perceptible at the site scale. Revealing the relationship between industry and society, while others emerged in building size or material aspects. Categorizing dualities by scale proved essential for the subsequent design stage, justifying design choices. Section drawings, sketches, and photographic notes enhanced the clarity of the analysis, collectively forming the primary outcome of this research, guiding decisions on preserving, reviving, or discarding elements to enhance heritage and create a harmonious design.

Dualities and Classification

As previously stated, numerous duality pairs can be defined and presented; however, only

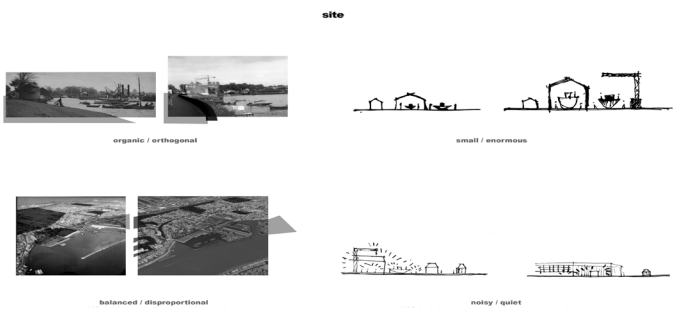


Fig. 1. The category “site” of dualities occurred in various epistemological sections. They are selected to highlight the differences in the existence of the same place, and demonstrate how a space can transform through the various eras

the most distinguished of these have been selected based on their heritage value and primary value assessment. In the subsequent text, these pairs are presented with a focus on the distinctive characteristics that led to their selection, elucidated according to the scale to which each refers. It is important to note that while these pairs can influence other scales, they are most readily identifiable in the scale under discussion, providing clear insights into spatial and architectural transformations over time. At the “site” scale, four dualities were most prominent (Fig. 1). The first shipyard exhibited a more organic relationship between the land and the surrounding environment, with the terrain meeting the water naturally. Roads were unformed, and structures were constructed with natural materials, adaptable to flooding, creating a rural, harmonious setting. By 1990, roads and structures were well-defined and man-made, producing a highly structured appearance relative to both water and natural surroundings. The second pair pertain to the size of the industrial settlement. In 1920, the site was small and sufficient for the needs of the industry. However, in 1965, the industrial site underwent its first major expansion, driven by rapidly growing demands. A larger, single-volume structure superseded preexisting volumes, surpassing their height and extending over a greater length, reflecting the industry’s expansion and its evolving connection to the dredging sector. In 1965, the site and surrounding area exhibited a balanced image, maintaining a harmonious equilibrium between green and industrial elements. Today, industrial presence dominates, and the site’s exterior spaces, once active and noisy, now convey tranquility, with heavy operations confined either within buildings or at the extremities of the industrial platform beyond the dyke. This contrast highlights the transformation of the site from an industrial utopia to a more subdued, contemporary perception.

At the “building” scale, six additional dualities were identified. Accessibility in 1965 was revolutionary: the site was open to the public, reinforced by shipyard workers living nearby, strengthening its relationship with the community. After closure, accessibility decreased, and the complex is now enclosed by fences. Proximity to water was another significant duality. In 1965, two slopes, one in the external space and one inside the building, created a direct connection between the shipyard and the water. The 2009 dyke construction, however, caused the water to recede several meters from the building. The expansion of machinery and installation of cranes gave the exterior an extroverted, outwardly oriented character. Today, cranes are removed, materials occupy exterior spaces, and the building’s interior is more utilized, resulting in a more introverted appearance. The early site in 1910 was fragmented, with two separate warehouse-like buildings. By 1947, these were positioned closer together, but construction materials remained substandard, producing poor working conditions. Low-rise structures and limited natural light contributed to an unfavorable work environment. By 1965, industrial growth prompted the construction of a colossal metal structure sheathed in glass, unifying the site and improving working conditions. The glass walls allowed ample light, creating a distinctive visual identity. In 1977, the shipyard expanded into a complex of buildings, replacing the single hall and marking a significant industrial transformation.

The “material” scale encompasses construction elements, employing a smaller-scale approach. Three critical dualities were identified. Initially, the shipyard was constructed using wooden plates, replaced in 1947 by brickwork with small openings, creating minimal contrast with surrounding residential buildings. In 1965, steel and glass replaced previous

materials, resulting in airy, monumental spaces symbolizing innovation. The final extension in 1977 used steel and plastic sheeting, enhancing visibility and community connection. However, current disrepair and grime on glass and plastic have significantly diminished transparency, aesthetic appeal, and functionality. Determining utopian versus dystopian qualities reveals spatial interpretations. For the “site” scale, utopias are organic, enormous, balanced, and tranquil; for the “building” scale, accessible, water-related, extroverted, holistic, bright, and vibrant; for the “material” scale, light, desegregated, and transparent. Not all of these qualities exist today, nor do they always align with the proposed uses of the site. Different users may perceive them differently. As previously noted, 1965 represents an architectural utopia, whereas 1977 reflects an industrial utopia, highlighting the shifting nature of utopia and dystopia across time, typology, and stakeholder perspectives.

This analysis underscores the value of recognizing dualities across multiple scales. The site, building, and material categories interact to reveal the complex history and heritage significance of the Van Eijk shipyard. These dualities inform the design language by identifying which qualities should be preserved, revived, or transformed, providing a method for connecting historical layers with contemporary interventions. The approach balances industrial and natural elements, extroverted and introverted spaces, as well as visibility and transparency, ensuring that the heritage value is expressed holistically. Ultimately, the identification and application of these duality pairs provide a comprehensive framework for understanding the site’s historical and spatial evolution. Guiding future interventions while respecting the richness of its industrial heritage. By emphasizing flexibility, stakeholder perception, and scale-specific analysis, the method offers a robust tool for translating heritage values into design strategies. Ensuring that the Van Eijk shipyard’s past continues to inform and enrich its contemporary and future use.

Translation into Design

Having established the duality pairs and their rationale, the final step of this method was to translate them into a design language rooted in the revealed heritage values. While utopia and dystopia are often mentioned, the goal is not to produce a utopian or dystopian place but to achieve harmony through design choices. Accordingly, some site elements were selected to be revived, while others were designated to be forgotten. From each pair, one element was chosen to inform the design language, providing a basis for decisions across scales and serving as a source of inspiration for a multi-faceted approach to design (fig. 2). The essence of these elements is prioritized over merely replicating their initial appearance. In this case, a combination of elements guided the design proposal, with the reconnection to water being the most significant in enhancing heritage value. Substantial structures reminiscent of the shipyards’ dimensions and appearance are proposed near the water beyond the dyke, reinforcing the site’s industrial character. The proposal transforms the former noisy and vibrant shipyard into a site with increased public uses, including an expanded dredging museum and new links between piers, platforms, and paths. The central area will feature an experience park with a 1:1 scale ship exhibition and maritime machinery displays, emphasizing the site’s active and extroverted character.

Accessibility is a core heritage value, addressed by proposing multiple entrances linked to specific uses. These entrances are designed to embody transparency and immediate recognition, revitalizing the site’s brightness through material choices. Another key feature

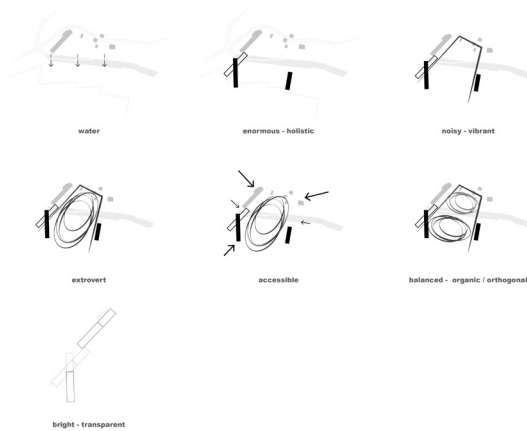


Fig. 2. Translating the selected values from the dualities into architectural design choices

is the balance between green and industrial elements, achieved through a combination of orthogonal and organic design strategies. Importantly, these duality pairs serve primarily as inspiration for the master plan but can guide all stages of design—from zoning to material selection. The method functions as both a value assessment and a design tool, reinforcing design decisions across scales. By connecting heritage aspects across different layers, it provides insight into the site’s values while creating space for further exploration and thoughtful interventions. Ultimately, this approach ensures that heritage and spatial qualities are preserved, celebrated, and harmoniously integrated into the site’s contemporary use.

Conclusions

This research implemented a new method of heritage evaluation. Starting from a broad concept, such as the feeling of a space as utopian or dystopian, the first challenge was to define the type of utopia/dystopia and its relevant users. In the chosen site, multiple utopias existed, an architectural utopia in 1965 and an industrial utopia in 1977, which could be contradictory depending on perspective. For example, the industrial utopia might be perceived as an architectural dystopia, since architectural utopias impact users and surroundings more directly, while industrial utopias affect owners and workers. The strength of this method is its ability to combine different stakeholder perspectives, focusing on the effect of the space on its users through measurable parameters. Controversial aspects can be explored via spatial analysis and recognition of dualities, allowing any user to express their experience without requiring theoretical knowledge. By acknowledging coexisting utopian and dystopian elements, the method highlights the subjectivity of spatial perception. Shaped by historical, social, and functional contexts. Architecture is considered not only as a physical form but as an atmosphere, accessible and experiential for all involved. This approach differs from the traditional “matrix” method discussed in Chapter 1. The matrix is a well-established tool for documenting values, primarily suited for architects

or heritage specialists, often requiring guidance for other users. It maintains a single perspective; analyzing another viewpoint necessitates creating a new matrix. In contrast, this research method emphasizes simplicity and inclusivity, allowing multiple stakeholders to share perspectives, making spaces more active, sustainable, and socially integrated. It strengthens the identity of a place by associating it with diverse users, permanent and temporary, giving all a voice and fostering unique, livable environments. Ultimately, the architect acts as a mediator, translating collective feelings into spatial quality. While tested in industrial maritime heritage, the method could be applied to other cultural contexts. It aims to be objective, yet flexible, leaving room for discussion and adaptation. As noted, utopia cannot exist without dystopia. One person's utopia may be another's dystopia.

Notes

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