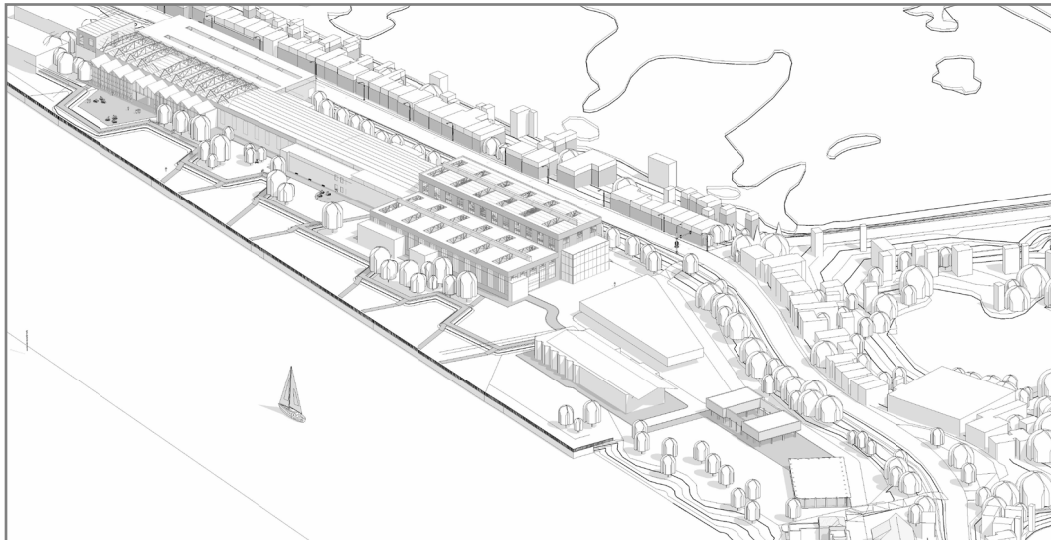


Reflection report

Paul-Cristian Fucarev | 5883784

Graduation studio Revitalizing heritage



The paper investigated the integration of adaptability as a key value in the transformation design process of outer dike industrial halls, ensuring their continued relevance in the modern urban context. Otherwise speaking, the research analyzed different practices of combining new architecture in the context of an old and mostly obsolete function, taking into account the existing urban and societal conditions. Therefore relating to the chosen track (Architecture) and delving onto multiple scales, ranging from urban context and up to building technology and science.

During the first semester of the academic year, the design and research were intertwined, as the

historical, social and landscape analysis were represented a foundation for both design decision and research positioning. It was decided to use the research as a stepping stone for the design requirement formulation, and the subsequent design requirements influenced the format of research result (design guidelines), thus forming a symbiotic relation.

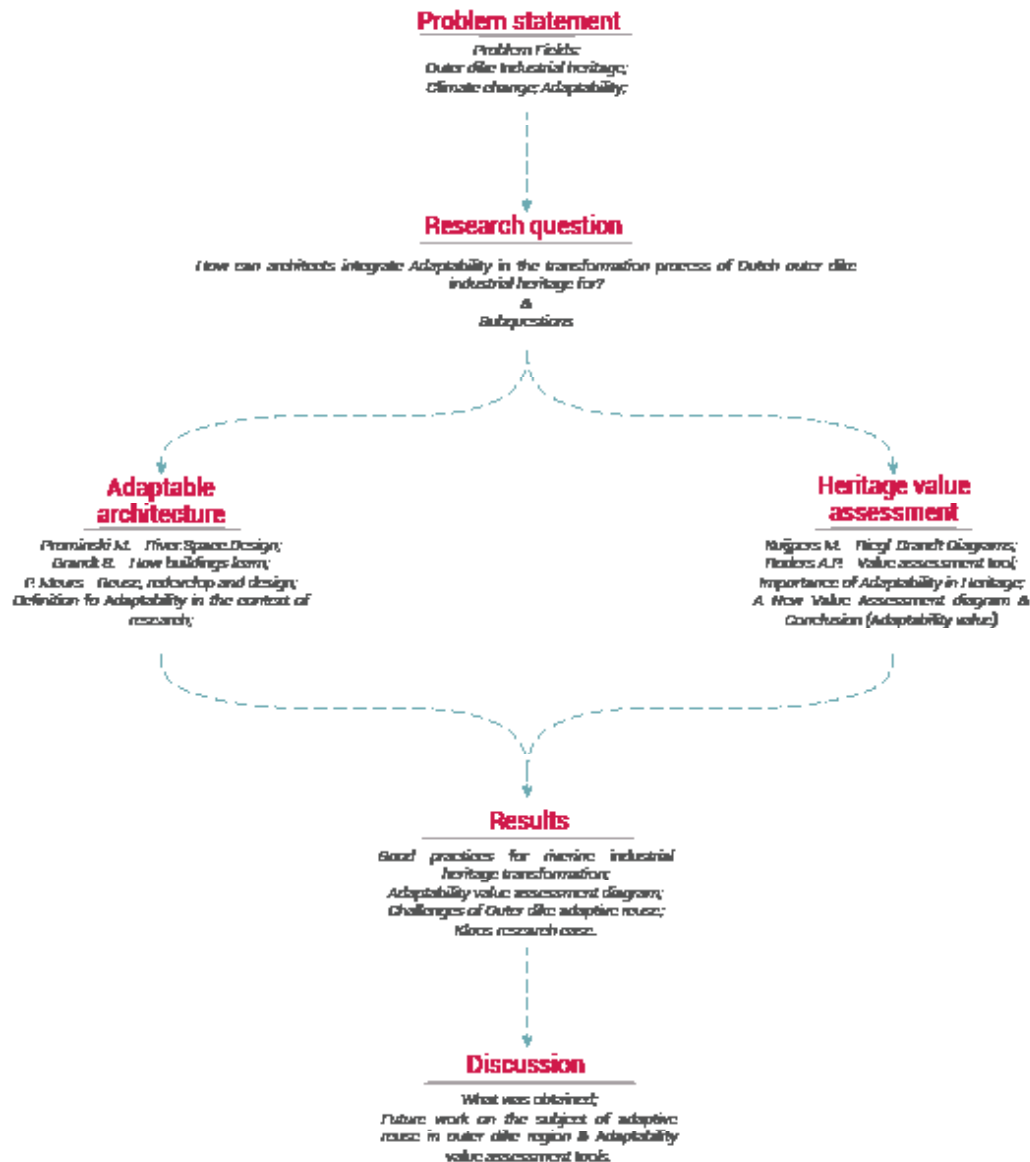
Even though the paper was submitted in the final days of the first semester, the research continued with the goal of finding more small-scale solutions in terms of adaptable architecture (spaces, partitions, elements).

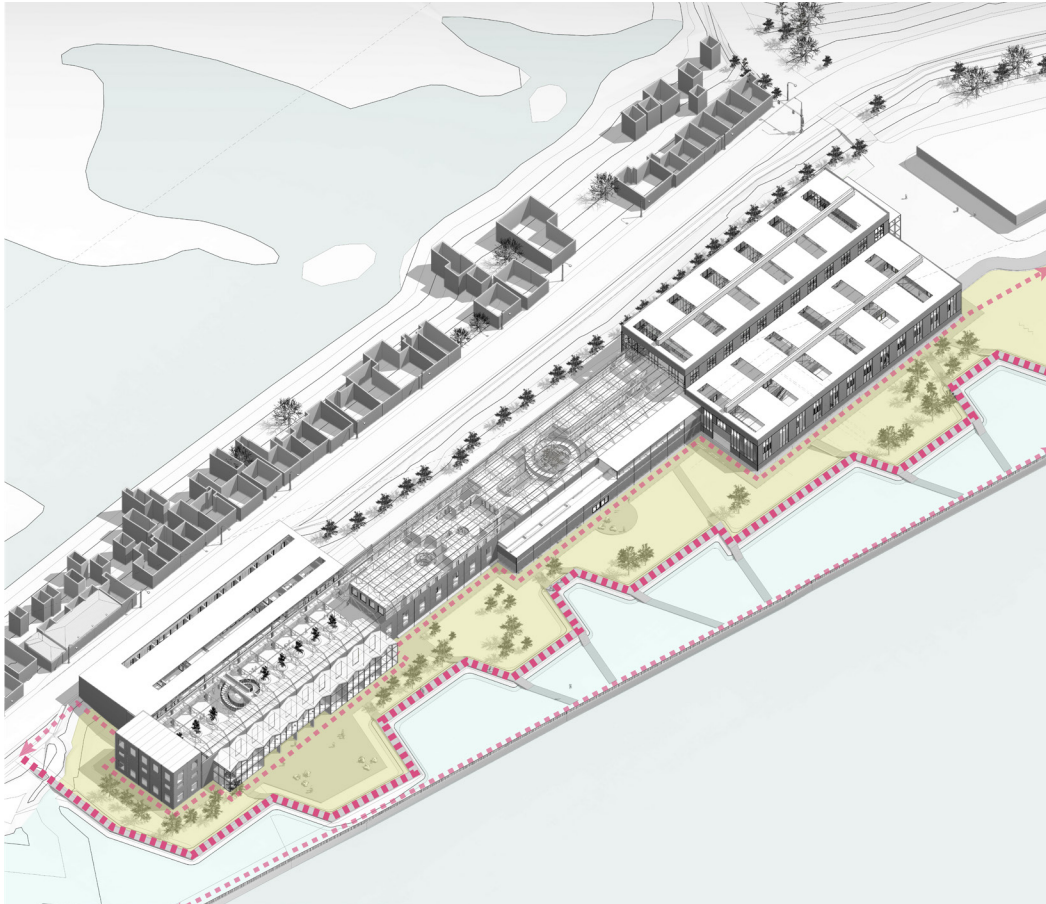
For the research it was decided to use two methods of data collection – a value assessment matrix and literature review on the topic of indus-

trial heritage and adaptive reuse. This method brought mixed results. The value assessment matrix was divided into a heritage and adaptability value assessment. The matrixes were combined with the goal of finding a correlation between heritage value and adaptability however it showed that only values linked to physical properties can score high in adaptive reuse,

thus overshadowing such values as Age, Spirit of the place and Social.

The literature review on the topic of industrial heritage and adaptive reuse yielded good results, which let me understand the reasoning behind the ignorance of the heritage value of these industrial halls and their subsequent isolation. In terms of adaptability, the abundance of





information led me to the conclusion that a definition should be created for this research, which clarified what is meant by adaptability and helped me create a vector of the research and implement it in the design strategy of the project as well. Therefore the methodology used in this research yielded good results but more work is required.

Given that the research delves into the domain of heritage and transformation, where the building and its site contain already a layer of history, multiple values are tackled both directly and indirectly. After tracing back the manner in which industrial heritage was classified in the past,

it was clearly seen that the industrial halls located in outer dike were at a losing position from the start. Therefore, industrial halls, especially the ones located in floodable zones and isolated by the dike represent a whole group of neglected architectural pieces of the past, workplaces of generations and past economical might. Therefore the research with the subsequent project paves the way for future research into the reintegration of outer dike industrial sites, especially the disappearing mid-century industrial halls. I am equally thankful for the help given by my tutors in the course of this research and academic year, their critical review of my work

and honesty of its results.

In the initial part of the research and data gathering, of the project, ethical issues were discussed, notably the choice between making a once private space public, preservation and restoration or development, as well as the positive and negative impact on the environment.

The results of the research are generalized in a set of guidelines which can be used for any industrial site located in an isolated, floodable territory. If some constraints are omitted, the same guidelines can be implemented in the design process of other heritage monuments and landscapes. For instance - the site guidelines. The book *River.Space.Design* was used for example extraction and good practices when tackling outer dike heritage. Given that we were tackling only the industrial sites, only the embankment Rivershore typologies have been considered as a directive. Once the industrial site criterion is removed, the guidelines are opened to much more Rivershore typologies, thus allowing us to implement them on other building types.

The Kloos redevelopment project proposed by me follows the guidelines on multiple scales ranging from site (1:1000) to partition detailing (1:50). Therefore, the project can be seen as an example of successful integration of the aforementioned directives in terms of architecture and urban context.

Overall the research proved fruitful as it has fulfilled its goal, that being the creation of several direc-

tives that are useful for architects that are tackling a transformation project of an industrial construction in outer dike situations. Nevertheless, more work could have been done. The adaptability value research and creation had a solid foundation but required a more structured approach when it comes to its implementation and correlation with other assessment tools. Besides that, the formulation of the guidelines can be translated into a more user friendly format that would help architects choose the most appropriate transformation strategy, such as a decision tree chart, although it would require more rigidity and data collection. Personally I feel content with the result and agree that there are further elaboration points that can be applied in the future for a more complete perspective in the domain of heritage adaptability. I feel that it is important that such architectural heritage as the industrial halls of the outer dike are safekept for future generations and their reuse allows a dialogue between the past historical events that tackled the site and present challenges in need of a future-proof solution.

Literature

1. Adaptive Strategies for Water Heritage. (2020b). In Springer eBooks. <https://doi.org/10.1007/978-3-030-00268-8>
2. Brand, S. (1994). How buildings learn. <https://en.wikipedia.org/HowBuildingsLearn>
3. Buijs, A. (n.d.). Public support for river restoration. A mixed-method study into local residents' support for and framing of river management and ecological restoration in the Dutch floodplains. *Journal of Environmental Management*, 90(8), 2680–2689. <https://doi.org/10.1016/j.jenvman.2009.02.006>
4. Central Bureau for Statistics. (n.d.). Sea level: Dutch coast and worldwide, 1890-2014. *Environmental Data Compendium*. <https://www.clo.nl/en/indicators/en022909-sea-level-dutch-coast-and-worldwide>
5. Den Boer. 29 Jul 2022, Citizen Participation in Waterfront Redevelopment along Noord River in Alblasserdam, the Netherlands from: Handbook of Waterfront Cities and Urbanism. Routledge. Accessed on: 06 Sep 2023. <https://www.routledgehandbooks.com/doi/10.1201/9781003204565-22>
6. Den Boer, A. (2020). Neglected and undervalued cultural heritage: Waterfronts and riverbanks of Alblasserwaard, The Netherlands. In C. Hein (Ed.), *Adaptive strategies for water heritage* (pp. 15-xx). Springer. https://doi.org/10.1007/978-3-030-00268-8_15
7. Egberts, L., & Riesto, S. (2021). Raise the dikes and re-use the past? Climate adaptation planning as heritage practice. *Maritime Studies*, 20(3), 267–278. <https://doi.org/10.1007/s40152-021-00226-1>
8. Evans, G. (2017). The edge condition: re-use of industrial heritage on urban waterfronts: a case of London's second river. Mdx. https://www.academia.edu/105063376/The_edge_condition_re_use_of_industrial_heritage_on_urban_waterfronts_a_case_of_London_s_second_river?uc-sb-sw=22136485
9. KNMI. (2014). KNMI'14, climate scenarios for the Netherlands (in Dutch). Publication KNMI.
10. Kuipers, M., & De Jonge, W. (2017). *Designing from Heritage: Strategies for Conservation and Conversion*. Tu Delft.
11. Meurs, P. (2021). *Reuse, redevelop, and design (Updated Edition): How the Dutch deal with heritage*.
12. Meyer, H. (2016). Making urbanizing deltas more resilient by design. *International Planning History Society Proceedings*, 17(3), 13–24. <https://doi.org/10.7480/iphs.2016.3.1784>
13. Meyer, H. (2020). Toward a cultural heritage of adaptation: A plea to embrace the heritage of a culture of risk, vulnerability, and adaptation. In C. Hein (Ed.), *Adaptive strategies for water heritage* (pp. 21-xx). Springer. https://doi.org/10.1007/978-3-030-00268-8_21
14. Nevzgodin, I. (2016). A paradigm shift in the adaptive reuse of Dutch industrial heritage in the 1990s-2010s. In H. Saito & Y. Kitao (Eds.), *Distinctive and attractive utilization for conservation of modern industrial heritage: Contemporary subjects in the Netherlands, Italy, Taiwan, and Japan* (pp. 36-42). Kyoto.
15. Plevoets, B. (2014). *Retail-Reuse: An interior view on adaptive reuse of buildings* [Ph.D. Thesis, Hasselt University Press, Belgium].
16. Prominski, M., Stokman, A., Stimberg, D., Voermanek, H., & Zeller, S. (2012). *River. Space.Design: Planning strategies, methods, and projects for urban rivers*. Walter de Gruyter.
17. Projectbureau Industrieel Erfgoed. (1993). *Handboek Branche Onderzoek* (1st ed.).
18. Redeker, C. (2018). *Rhine Cities - Urban Flood Integration (UFI): German and Dutch adaptation and Mitigation Strategies*. *A+BE: Architecture and the Built Environment*, 4, 1–394. <https://doi.org/10.7480/abe.2018.4.2001>
19. Riegl, A. (1982). *The modern cult of monuments: Its character and its origin*. MIT Press.
- Schmidt III, R. (n.d.). *What is the meaning of Adaptability in the Building Industry* [Thesis]. Loughborough University.
20. Schutzman, L., & Roders, A. P. (2020). Methods in assessing the values of architecture in residential neighborhoods. *International Journal of Building Pathology and Adaptation*, 39(3), 490–506. <https://doi.org/10.1108/ijbpa-10-2019-0095>
21. Spoormans, L., & Roders, A. P. (2020). Methods in assessing the values of architecture in residential neighbourhoods. *International Journal of Building Pathology and Adaptation*, 39(3), 490–506. <https://doi.org/10.1108/ijbpa-10-2019-0095>
22. Will, T. (2015). *Flood protection for historic sites. Integrating heritage conservation and flood control concepts. Experiences in Germany*. Tu-dresden. https://www.academia.edu/44469630/Flood_Protection_for_Historic_Sites_Integrating_Heritage_Conservation_and_Flood_Control_Concepts_Experiences_in_Germany
23. Yazdani Mehr, S., & Wilkinson, S. (2021). A MODEL FOR ASSESSING ADAPTABILITY IN HERITAGE BUILDINGS. *INTERNATIONAL JOURNAL OF CONSERVATION SCIENCE*, 12(1), ijcs.ro.