



Reimagined fragments of a nuclear landscape

A creative abductive study on Barsebäck's nuclear power plants relation to landscape

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Reimagined fragments of a nuclear landscape: A creative abductive study on Barsebäck's nuclear power plants relation to landscape.

Fragment av ett kärnkraftverkslandskap: En kreativ abduktiv studie över relationen mellan Barsebäcks kärnkraftverk och dess landskap.

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Abstract

The study explores an alternative methodological approach towards the nuclear landscape of Barsebäck. The investigation aims to contribute to knowledge about how changing energy landscapes and specifically nuclear landscapes methodologically can be approached and be reimagined in landscape architecture. The power plants relation towards landscape is thus central in the study. The creative abductive method interweaves past and present representations of the power plants relation towards landscape, inspired by Walter Benjamin's Historic materialism, into new insights of how the nuclear landscape can be perceived. The methodological approach combines several studies from a case study executed by bike to a literate study, to a semiotic analysis of Per Friberg's drawings of the nuclear landscape from 1966. Furthermore, to a visual montage of the nuclear landscape with collages and drawings. The relation between the power plants and the landscape is made throughout the study according to relations of dichotomy, border and distance. Moreover, the investigation combines landscape architects and cultural theorists such as Sylvia Crowe, John Wiley, Umberto Eco and Giorgio Agamben that contextualise the nuclear landscape with ideas of experience and sovereignty. The nuclear landscape is contradictory, defined by experiences of alienation while being an object of imagination. The nuclear landscape is the dialogue between the experience and the power plants. By encountering the nuclear power plants a dialogue that seems unfamiliar, unknown and somehow out of reach, presents itself.

Keywords: Nuclear landscape, Barsebäck, Nuclear power plants, Creative abductive method, Per Friberg, Historic materialism, The state of exception, Reimagining, Walter Benjamin.

Foreword

Special thanks to my supervisor, Dennis Tidblom, for guiding, questioning and improving the study throughout the writing process. I would also like to thank SLU's brilliant archivist, Douglas Strandberg, for the help and generosity in the process of investigating Friberg's drawings in the attic of the archive. Additionally, I would like to thank my great counter reader, Jona Udland Tvilde, who has invested much time in the study and contributed with academic clarity. Lastly, my family members and friends for reading through the essay in times of need.

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Introduction

1.1 Background

The nuclear power plants of Barsebäck are visible on the horizon along the western coast of Skåne to Denmark. The presence of the reactors is constant as I commute by bike between Malmö and Alnarp. During clear days, the two power plants stand with the horizon; on foggy days, the reactors are invisible (see figure 1). The presence of the nuclear power plants is a subject of questions: how are the nuclear power plants transforming the landscape? Are they shaping another landscape? What is the nuclear landscape becoming when experiencing it?



Figure 1. Collage of Spillepengen: two pictures layered with adapted opacity to make the nuclear power plant almost invisible. Aiming at describing the temporality of visibility of the power plants. [photograph and collage by the author, 2026-02-23]

These questions are recurring as I bike back and forth between Alnarp and Malmö. The reactors seem unreachable almost in a mystical manner. Consequently, I notice a pattern while biking, the landscape stands in dichotomy towards the nuclear power plants, completely contrasting the expression of the nuclear power plants (see figure 2). Additionally, the landscape seems to function as a border, where vegetation, the bay and pasture create barriers, as well as the constant distance towards the nuclear power plants. These subjects of dichotomy, border and distance become central in the investigation.



Figure 2. Drawing on a photograph of Spillepengen: a photograph is digitally drawn on to describe the signification of border, distance and dichotomy towards the nuclear power plants. [drawing by the author, 2026-02-23]

The landscape of the nuclear power plants was planned and designed by Per Friberg, most known for his design of his private gardens and cemeteries. However, he designed proposals for several energy landscapes, including the landscape surrounding Barsebäck nuclear power plants (Friberg 1972:62). In 1966, Friberg represented, with several drawings, how the Barsebäck nuclear power plants was to be experienced in relation to the coastal and agricultural landscape of Barsebäck (Krohn Andersson 2008:60). Friberg saw it as his responsibility, as the only professor in Landscape architecture, to make the reactors align with the landscape (2008:61). Today, the nuclear power plants of Barsebäck are not in operation, and the plans for them are undecided (Kävlinge municipality 2024). The future of the nuclear power plants is therefore currently discussed and debated (Thuresson, Dougles, Sonesson & Jähnke 2026).

The geographers Håvard Haarstad and Tarje Wanwick explain in *Carbonscapes and beyond: Conceptualizing the instability of oil landscapes* (2016) that the rule of energy landscapes is that they are ever-changing. New methods of extracting energy make nuclear landscapes temporary. Solar panel fields and wind turbines are substituting nuclear landscapes (Haarstad & Wanwick 2016), and as new modes of energy production are relevant for Barsebäck (SWECO 2025), the expression of the nuclear landscape will change.

The question is whether the relation between energy production and the landscape will change with the evolution of modes of energy, or if it will continue. The relation between the nuclear power plants and the landscape reveal insights into how nuclear landscapes are experienced. This study serves as a perspective on how to approach the nuclear landscape that is created in the relationship between the power plants and the landscape. By examining Friberg's drawings combined with a case study by bike, the investigation of past and present visual representations leads to a reimagination of the nuclear landscape.

1.1.1 Purpose and Aim

The purpose of the study is to investigate Barsebäck nuclear landscape. Hence, to bring insights into how a method can reimagine the nuclear landscape. This reimagination of the nuclear landscape is relevant in the current debate of the transformation of Barsebäck nuclear power plants. Moreover, serves as a contribution in the discussion of how to methodologically approach energy landscapes in future climate transitions.

The investigation aims to create new insight into how Barsebäck's nuclear power plants relate to landscapes, through the subjects of dichotomy, border and distance. Ultimately, study how these relations constitute Barsebäck's nuclear landscape in Friberg's drawings compared with experiences from a case study executed by bike. These studies become the basis of a visual reimagination of the nuclear landscape with collages and drawings of a landscape architectural approach towards the nuclear power plants.

1.1.2 Research questions

- In what ways are the landscape and the nuclear power plants related through *dichotomy*, *border* and *distance*, in Friberg's drawings, compared to an encounter of the nuclear power station by bike?
- What reimagination of the nuclear landscape can be derived from these relations?
- What landscape architectural approach can be created towards the nuclear power plants?

1.2 Definitions

The study interweaves terms of landscape and dichotomy, border and distance, with theories of states of exception and historic materialism. How these are defined and interwoven into a theoretical framework and into the method will be further explained (see figure 3).¹

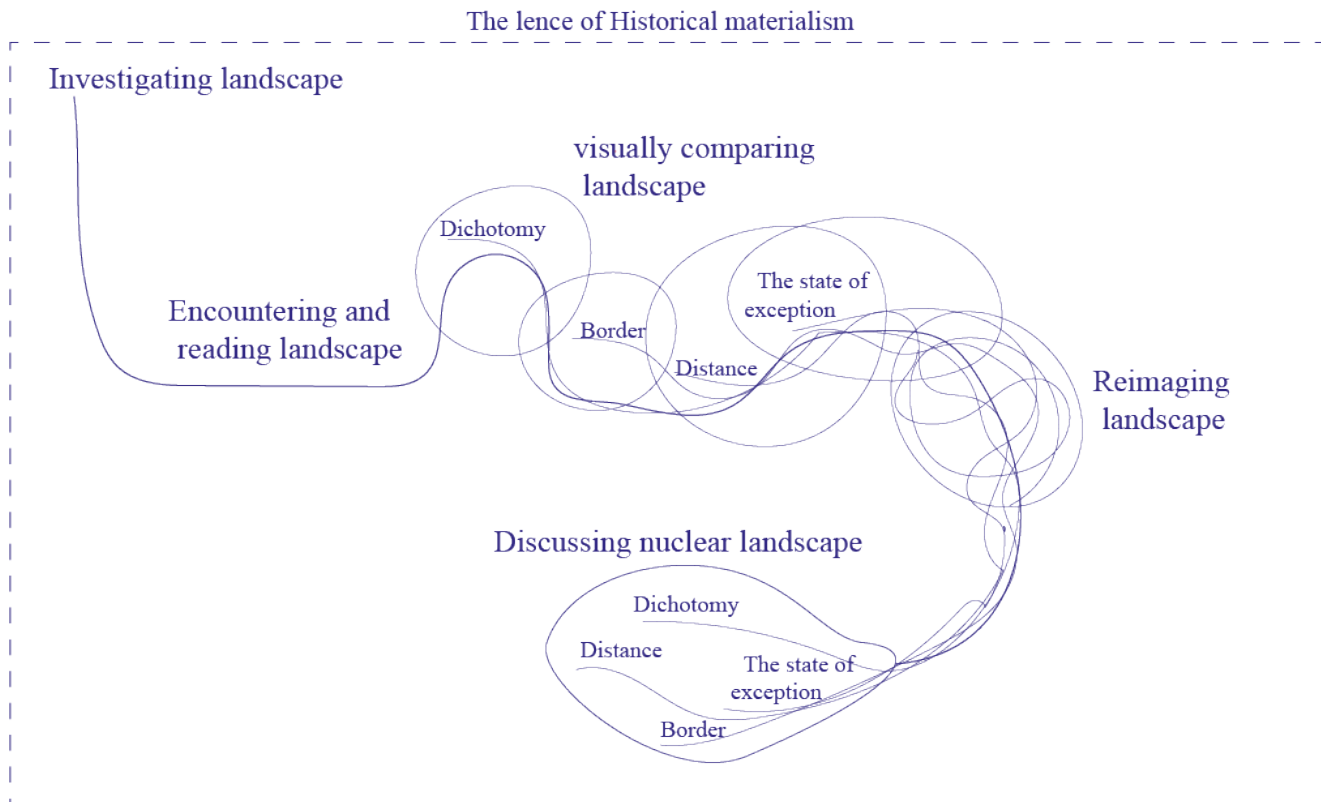


Figure 3. Drawing of the theoretical chronology of the study. [drawing by the author, 2026-03-03]

1.2.1 Landscape

Landscape is a complex and ambiguous term; in this study, its definition is based on the anthropologist Tim Ingold's description.

"In short, the landscape is the world as it is known to those who dwell therein, who inhabit its places and journey along the paths connecting them." (Ingold 1993:156)

Ingold (2019) describes the landscape being created in the human relation and experience of it. John Wylie, a cultural and historical geographer and spatial theorist (2013) provides an

¹ The models of figure 3–5, are made to illustrate the process of the investigation and are inspired by Prominski and Seggers, *Design research for urban landscapes: theories and methods* (2019), where models of the creative process are part of the methodological practice.

additional understanding of how the concept of landscape relates to the experience. Wylie argues that the concept of landscape inherently has connectivity with the experience. Wiley clarifies, similarly to Ingold, that it is impossible to create a diversion between the experience and the landscape; they are intertwined, and the experience should therefore not be disregarded (Wylie 2013: 128). Phenomenology is an approach that centres the experience, hence, the encounter of a phenomenon or situation, through oneself (Wylie 2013). In the context of this study, landscape is encountered through a phenomenological approach.

The nuclear landscape can be interpreted through this theoretical framework as created when it is perceived, experienced and visible. The journey on the bike between Malmö and Alnarp is thus part of the creation of the nuclear landscape. Additionally, the philosopher and author Walter Benjamin (1940) argues that interweaving present experiences with past knowledge is essential for understanding. This approach towards landscape constitutes that it must be reimagined and represented, as it is in metamorphosis through new experiences.

1.2.2 Dichotomy, border and distance

The experience of biking and perceiving Barsebäck's nuclear landscape has been described through the terms of dichotomy, border and distance (see figure 2). These subjects can be understood as concept and semiotic signs (Rose 2016) that can be read in the landscape, as in figure 2. Dichotomy is a sign, defined as an arbitrary landscape directly contrasting the power plants. The term border is a sign that enhances the aspect of the power plants being unreachable and explains that human mobility is limited. The sign of distance describes how the landscape relates to the power plants through the perceiver through distance.

These signs are traced in Friberg's drawings and in the photographic material of the case study and can therefore be compared. To examine what the representation and experience of the relations of dichotomy, border and distance can reveal, theories of power structures are interwoven.

1.2.3 The state of exception

The study of the nuclear landscape derives from questions of how it is becoming a landscape that is experienced as unapproachable. The notion of sovereignty is hence relevant. Giorgio Agamben introduces in *Homo sacer: sovereign power and bare life* (1998) the concept of the state of exception. The term derives from a critique of the discourses in which sovereignty is justified. Agamben (1998) defines it according to the state of exception, where the sacred and sacrificed, for instance, a Messiahiah, is sacred while deprived of rights. The state of exception gives insights into how landscapes can become exceptions and be sovereign through paradoxical discourses of both being deprived of rights while being aesthetically upheld. In the study, this idea of a contradictory landscape serves to widen a critical synthesis of the nuclear landscape.

1.2.4 Benjamin's Historic materialism

Another term that is of importance in creating a critical approach towards the nuclear landscape is Benjamin's concept of historic materialism² (1940). It presents a critique towards the conformism of history and is used to analyse theological and political constellations (Bolz & Reijen 1994:30). Benjamin (1940) argues that resistance towards fascism and totalitarian structures is through a reconstruction of the past, where stories of suffering are approached instead of denied. Benjamin argues that the objective history serves the conformist view and oppressor, the subjective history or the historical materialism, allows experiences of the oppressed (Bolz & Reijen 1994:10).

Similar to Agamben's (1998) theory of a state of exception, historic materialism is an idea that suggests that studies of past and present observations can be combined to critically examine transformations. In the context of this study, transformations of landscapes. By interweaving past visual and written material and present experiences, an alternative current view on the landscape is created and opposing a conformist view of the landscape (Bolz & Reijen 1994:10). This perspective works as a theoretical framework in the study (see figure 3) where the investigation itself is a process of creating landscape materialism, a subjective critical perspective on the nuclear landscape as well as the nuclear power plants.

1.3 Methodological framework

The process of creating the insights into the nuclear landscape is made by a method that derives on the landscape architect Hille Von Seggern argument, that to design, one must invent (2019: 16). This methodological perspective implements both creative and rational methods in landscape architecture (Seggern 2019: 8). In figure 4, the step of the method is described chronologically, following the dotted lines from research question to discussion. Each step will be explained, as well as the creative abductive method in which the steps rely on.

² Historic materialism is derived from Marx and Engels theory of historical analysis but is in this essay relevant in relation to Walter Benjamin.

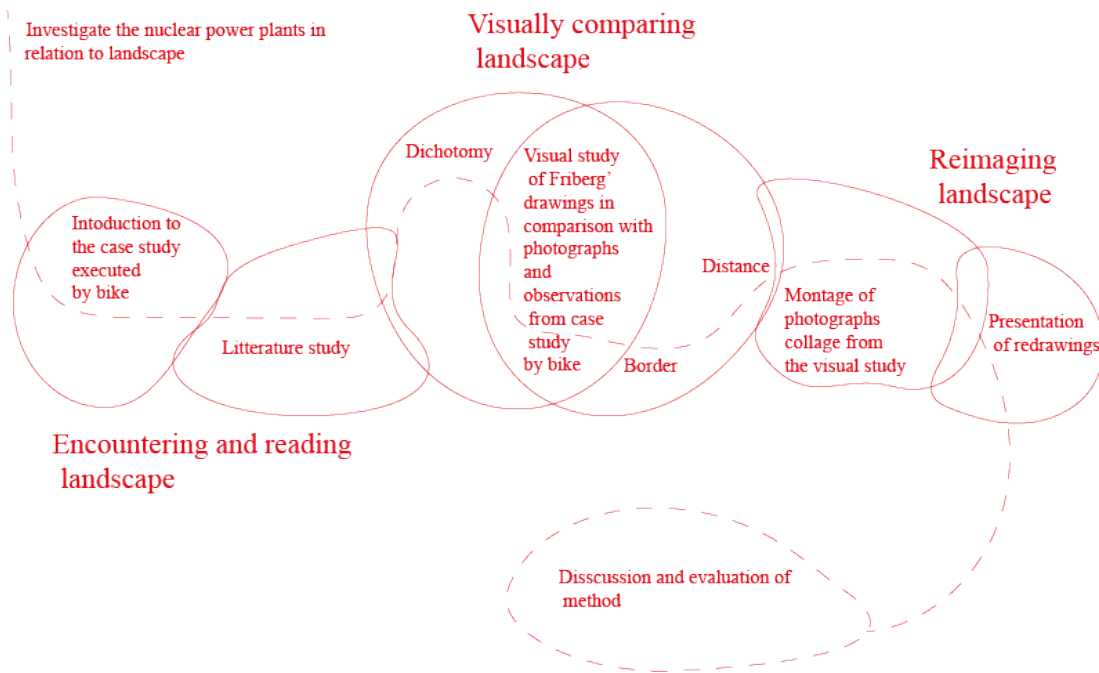


Figure 4. Figure 4. Drawing of how the methodological framework relate to the chronology of the study. [drawing by the author, 2026-03-03]

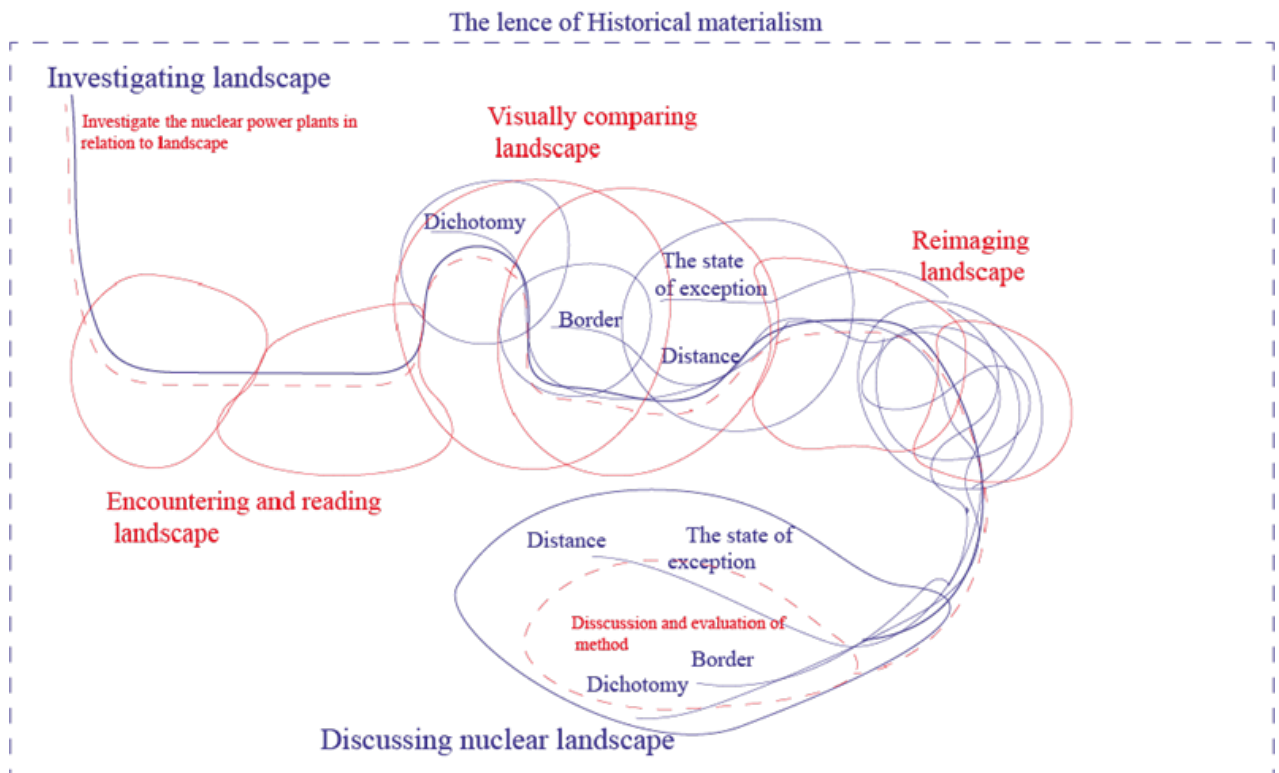


Figure 5. Drawing of the structure of the creative abductive method (red) related to the theoretical framework (blue) of the study. [drawing by the author, 2026-03-03]

1.3.1 The creative abductive method

The design researchers Neal Dreamson and Phyo Khine (2022) argue that the abductive study is closely related to design thinking and that it should be used to embrace complexity and invention. Consequently, the abductive combines the deductive and the inductive methods into a collaborative theoretical and practical study (Neal Dreamson & Phyo Khine 2022). How the practical and theoretical and methodological interweave in the study is presented in figure 5

The abductive is additionally used by the Italian author Umberto Eco, who, brings another aspect of the method while redefining it to the creative abductive method. The purpose here, is to build a synthesis that leads to a reimagination (Johansson 2000:15). The landscape architect Rolf Johansson (2000: 17) argues that all paradigm-shifting knowledge is created through the creative abductive method. The purpose of using the method is thus to invent and simultaneously create knowledge (Johansson 2000:18).

Similarly, to how Benjamin explains the need for alternative history (Bolz & Reijen 1994:10), the creative abductive method leads in this study, to inventing an alternative nuclear landscape. In the context of this study, the nuclear landscape is investigated through the creative abductive procedure of using several practical and theoretical studies of differing methods (see figure 4). Thus, combining a case study, literature, visual analysis and design process to approach the nuclear landscape. This method has similarities with Glaser and Strauss *Grounded theory* (Glaser 2007) mostly used in sociology and directed towards behaviours rather than experiences. The steps of the study synthesise the nuclear landscape and were initially unknown and found to be necessary during the process of the investigation. Walter Benjamin's theory of historical materialism (1940) is through the method actualised (see figure 4). In Figure 5, the theoretical framework (blue), coherent evolvment with the creative abductive method (red), is described to create the approach towards the nuclear landscape.

Firstly, the case study by bike will be presented; secondly, the introductory literature study; thirdly, the visual semiotic analysis of Friberg's drawings compared to the case study. This leads to the presentation of the method of reimagination of the nuclear landscape through a montage of collages and drawings of the nuclear landscape. Followingly, each approach will be further explained, the encounter leads to the reading leads to the seeing of the nuclear landscape.

1.3.2 Encountering the nuclear landscape: the case study by bike

The encounter towards the nuclear power plants, through a case study by bike, is derived from John Wiley's notion of the phenomenological embodied act of approaching landscapes (Wiley 2005). For one day, Wiley walks and narrates his observations with photographs and text. The experience, body and the landscape are, through movement, a tool to approach the

landscape (Wiley 2005). This logic is used in the execution of the case study by bike, which aims at encountering the nuclear power plants through a phenomenological perspective towards the landscapes.

The case study is a bike journey from central Malmö to the Barsebäck nuclear power plants. The bike journey is performed on the 26 of January 2026 from 14:00 to 17:00, where the aim is to photograph and observe the nuclear power station with my film camera. The observations are centred around the experience of moving towards the power plants and the relation that it has with the landscape. The bike enables several perspectives and viewpoints of landscapes. The photographs, hence, function as visual documents and an exploration of my own experience of the landscape. The observations of the case study are presented in text and photographs in chapter 2.1 and then compared with the visual study in chapter 2.3. In between is the reading of the nuclear landscape, presented with a literature study.

1.3.3 Reading the nuclear landscape: the literature study

The literature study contains an introduction to the power plants, the nuclear landscape, and the design process, to provide an overview of the history of the transformation the nuclear power plants and the nearby landscape. The literature that is presented is primarily the landscape architect Sylvia Crowe's *The Landscape of Power* (1959), Per Friberg's articles "Barsebäck kärnkraftverk" and "Järvallen: Fritidscentrum – grustäkt" in *Landskab* that was published in 1972. They are combined with an overview of the Swedish nuclear design processes presented by Fredrik Krohn Andersson in *Kärnkraftverks arkitektur* (2008). The secondary literature was primarily found through the references by Krohn Andersson. However, to find more current research, searches were executed from Primo and JSTOR. Search words such as "Energy landscape", "Nuclear (AND) landscape", "Barsebäck kärnkraftverk", "Per Friberg" and "Kärnkraftverks arkitektur" were part of finding an overview of literature. The municipality of Kävlinge, the energy concern of Uniper, who are responsible for the nuclear power plants and the energy authority were also important sources in developing the context of the nuclear landscape. The literature study contextualises the visual study of Friberg's drawings, which subsequently will be described.

1.3.4 Seeing the nuclear landscape: the visual analysis

The study of Per Friberg's drawings of landscapes is executed with a semiotic analysis of the drawings as signs. The semiotic method is mostly used in research fields of visual culture (Rose 2016:130). Nonetheless, it is relevant in this study as it serves to examine Friberg's representation of the landscape and the power plants' relation. In semiotics, derived from the structuralist philosopher De Saussure, the visual image does not inherently bear meaning, but is given meaning (Rose 2016:131). Meaning is created through signs that signify ideas and depend on the interpreter's conceptual framework, in this case, of me as a landscape architecture student. The landscape architect Daniele Stefáno (2021) argues that the method of semiotics applied to landscape architecture raises awareness of our understanding of how

cultural signs affect landscape design. Semiotics, according to Stefáno (2021), should be more commonly used to investigate landscape representations.

Friberg's drawings of Barsebäck are part of Per Friberg's archive, part of the LTV, SLU's archive in Alnarp. All the drawings are not yet fully digitised. Jan-Olov Jarlöv and Pär Gusafsson and Per Friberg drew and worked on the project of Barsebäck, however, in the study the drawings are referred to as Friberg's, hence referencing Friberg's office and not to the maker of the drawing. Nonetheless, the selection presented in the essay has been hand-scanned by me with my phone in the archive during the afternoon on the 4th of February 2026. Accurate depictions of scale and precision in the scans must be taken with moderate accuracy. The drawings that are relevant are both perspectives, conceptual maps and plans. Six drawings of perspectives are presented, one conceptual map and two conceptual plans, which have been edited in black and white, to specifically analyse the presented shapes of the landscape.

The selection of drawings is made throughout the study and is not a random sample. The recognition of signs is revised through the case study. Signs of the nuclear landscape's vegetation, movement, composition, static and dynamic structures and the lack of representation of landscapes are analysed in Friberg's drawings. These signs are then analysed through the signs of dichotomy, border and distance and compared with the case study (see how the terms function in figures 2, 3,4). The comparison of how dichotomy, border and distance function in the visual representation versus the experience leads to an interpretation and reimagination of the nuclear landscape.

1.3.5 Reimagining the nuclear landscape: montage through collage and drawings

The last part of the creative abductive method is to investigate and present the nuclear landscape through a design-oriented reimagination (see figure 3 & 4). The reimagination is based on Eco's notion of reimagining and additionally inspired by Aby Warburg's reimagining by the montage of his memory (Mnemosyne) atlas (Rampley 1997). Walter Benjamin and Aby Warburg were both cultural historians who reimagined culture and history through montaging photographs and texts (Johansson 2000:15). The concept of reimagination is hence, in the context of this study defined as a creative process of re-defining the meaning and perception of the nuclear landscape.

Inspired by Warburg's montaging which aim to illustrate that ideas are connected (Rampley 1997). The process of reimagination is combining photographs from the case study with semiotic relations from Friberg's drawings. The subjects of dichotomy, border and distance are hence central in the montaging process. The photographs are digitally deconstructed and reconstructed into seven collages and presented with the derived ideas (see figure 3). This use of montaging photographs can be seen in other studies, such as Linda Maria Thompson's *(In)visible powers: witnessing the 'tourist-waters' of Nämforsen* (2022), where the method of rephotographing combines past and present landscapes into new images. Similarly, in how

Thompson defines Nämforsen through past and present photographs, the collages of the nuclear power plants illustrate defines Barsebäck's nuclear landscape.

The collages lead to a reimagining through drawings. In relation to the method of rephotographing (Thompson 2022), the drawings functions as redrawing's. Semiotic references interweave Friberg's drawings with the new ideas derived from the result and with the new insights of the nuclear landscape. The redrawings are made to illustrate a landscape architectural intervention and approach towards the nuclear power plants.

1.4 Disposition and reading instruction

This chain of studies that have been described, synthesises a new approach towards Barsebäck's nuclear landscape. To follow the steps of the synthesises, the case study is supposed to be read first, as it introduces the encounter with the power plants. The observations should be read as fragments that will continue to be discussed.

The case study is a reference throughout the study and leads to the literature study. It serves to contextualise Barsebäck's power plants with the surrounding landscape. Thirdly, the visual study of Friberg's drawings is presented and analysed through landscape relations of dichotomy, border and distance. Consequently, they are compared with examples from the case study, which leads to the reimagination of the nuclear landscape through seven collages. These collages lead to a conceptual design with five drawings. A discussion summarises the synthesis that has been presented. Lastly, the creative abductive method is evaluated, and the study is concluded.

2. Results of the creative abductive method of the nuclear landscape

2.1 Encountering the nuclear power plants

The purpose of this chapter is to describe the bike journey and the encounters that were observed between the nuclear power plants and the landscape. The bike journey begins in Malmö on the 26th of January 2026. The weather is cloudy, and it is about minus 3 degrees when the journey begins. The route is mostly along the coast, and I am aware that the nuclear power plants will become visible from Spillepengen. The journey starts in the urban environment of Malmö and continues through the semi-rural villages of Arlööv, Lomma, Bjarred, Löddeköpinge, Hoftorup and ends in the rural agricultural landscapes of Barsebäck (see figure 6).



Figure 6. Ortho map 2026 of the coast of Malmö to Barsebäck, the bike ride is marked with red. [© Lantmäteriet, 2026-02-27] <https://minkarta.lantmateriet.se> (edited by author)

It is my first time biking parts of this route, which creates confusion in both Bjärred and Hofterup, where I must redirect and find the right exit and direction. I orientate with the signs of the route of Kattegattleden and with Google Maps. It will take me two hours to bike one way, and when I arrive at Barsebäck, the time is 14 o'clock. The nuclear power plants are, as thought, not seen until I reach Spillepengen (see figure 7). The pastoral fields lie as foreground to the silhouette of Barsebäck, where the power plants are visible. The nuclear power plants are experienced as part of the horizon through the unified blue hue. During the journey along the coast, the power plants continue to be part of the horizon (see figure 8).



Figure 7. Photograph of Spillepengen and the silhouette of the nuclear power plants in the distance. [photograph by the author, 2026-01-26]



Figure 8. Photograph of the pasture from a viewpoint in Lomma. The power plant is viewed more closely. [photograph by the author, 2026-01-26]

While biking, I am constantly orienting myself to where the nuclear power plants are situated (see figures 9). They start by being almost in front of my view in Malmö, to being on my left, to completely disappearing when biking through Löddeköpinge and Hofterup. Then they appear when reaching the highway. The notion of scale is felt. From afar, the power plants seem to be monumental; however, when getting closer, they appear similar to an ordinary industry.



Figure 9. The four photographs are a series that describes different viewpoints, angles, and positions that were able while biking towards the nuclear power plants. [photograph by the author, 2026-01-26]

The biking lane follows the valley, and a panoramic view of the horizon of Denmark is set up at the highest point of the hill (see figure 10). From the lookout point, Landskrona can be seen in the north and Malmö in the south. Evidently Barsbäck is a land edge surrounded by the sound, this cause a sense of being on an island. The aspect of isolation and connection towards the landscape is moreover created through the power lines that are visible throughout the journey (see figure 11). They indicate the direction to the nuclear power plants and where the electricity is led. They are lines of connection and express that energy has a start and an end destination. The structures are monumental, and the relation towards the agricultural fields dominates the surrounding landscapes. Nonetheless, the scale and shape of the power plants are continuously expressing a similar expression. The duration of biking is instead presenting insights of my own movement.



Figure 10. The photograph describes the Danish silhouette, and the agricultural landscape that encounters a tree row and further the sound [photograph by the author, 2026-01-26]



Figure 11. The series of photographs present different position through the case study where the power lines were visible. [photographs by the author, 2026-01-26]

When arriving to the entrance of the nuclear power plants, big signs forbid photography. There is also a sign from Uniper that says that they are reconstructing the nuclear power plants. Smoke is coming out from one of the buildings; it seems as if it's under construction. Securitas cars are driving out and into the gates through the high fence that surround the

reactors. People are having driving lessons in the parking lot behind the gate to the entrance. To more closely study the reactors, I leave my bike at the pastures that surround the power plants to try to view the power plants and investigate the landscape from different angles (see figure 12). They are facing the sea, which makes it impossible to fully encounter them (see figure 12). However, it is possible to fully encounter the horizon, and this is recurring throughout the journey (see figure 13). Although it is very still and the horizon can be seen, a loud vibrating sound can be heard from the place where the power lines are connected.



Figure 12. The two photographs present different positions of the pastures south and north of the nuclear power plants. They are facing the sound and are unable to further view from the front. [photographs by the author, 2026-01-26]



Figure 13. The two photographs are taken from the same position as the photos in the figure. 9, however, the camera is redirected towards the horizon, similarly to the nuclear power plants. [photographs by the author, 2026-01-26]



Figure 14. The four photographs were taken from different positions along the coast on the way to the nuclear power plants and on the way back to Malmö. Birds flying in different constellations are visible. [photographs by the author, 2026-01-26]

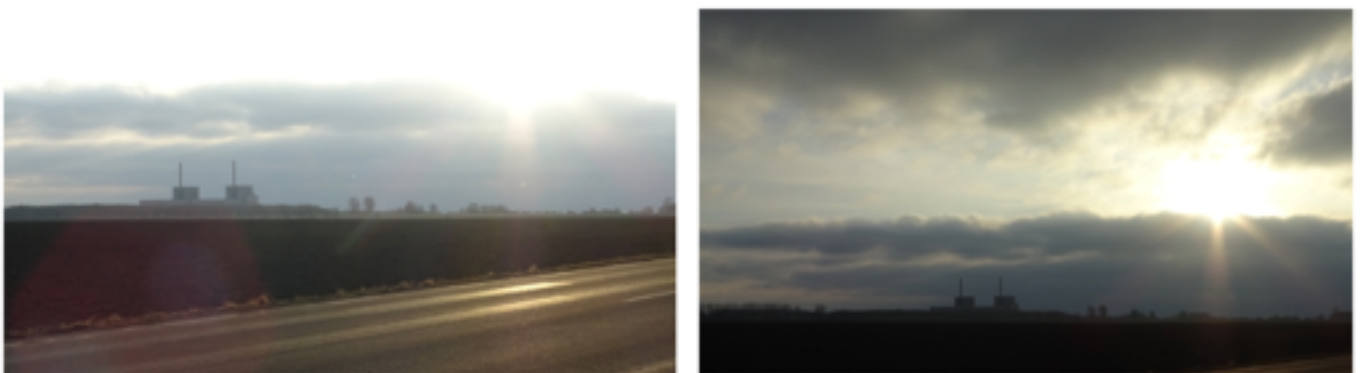


Figure 15. The photographs are taken from the same position, photographed with a couple of seconds in between. They describe the shifting temporality of light in contrast towards the nuclear power plants. [photographs by the author, 2026-01-26]

The temporality of the weather shifts during the bike ride. The light changes become evident as I photograph, and the weather goes from grey to clear. The temporality of the weather and the groups of moving birds (see figure 14) stand in contrast to the power plants' monumentality and the surrounding fields and vegetation. The power plants almost disappear when blinded by light (see figure 15).

These observations develop an understanding of the experience of the nuclear power plants throughout the bike ride. Observations will continue to be exemplified in chapter four, following the visual analysis of the drawings. The landscapes that have been observed and experienced towards the nuclear power plants are the landscape of the horizon, the agricultural landscape, the pastoral and temporary landscape. These landscapes were all taken into consideration in the planning process of establishing Barsebäck nuclear power plants. The next chapter will discuss the transformation of Barsebäck nuclear power plants, to give further insights of the relation between power plants and landscape. Additionally, present the landscape Friberg aimed at creating in relation to the nuclear power plants.

2.2 Reading the nuclear landscape

This literature study serves to create an overview of the transformation of Barsebäck becoming a nuclear landscape. The purpose is to contextualise the case study and further introduce the design process of Friberg's drawings.

2.2.1 The nuclear power plants

Barsebäck belongs to the municipality of Kävlinge and is located between the northern Lundaåkrabukten reserve and the southern Salviken nature reserve (Kävlinge municipality 2024). Sydkraft bought the Barsebäck nuclear property from the owner Ian. D Hamilton in 1965 to build a nuclear power plant station (Kävlinge municipality 2024). The property is still owned by Sydkraft, part of the larger energy concern Uniper, and they operate several energy stations from nuclear, hydro, coal and gas, with distribution throughout Europe. Uniper oversees the transformation of Barsebäck, thus, the disposal of the radioactive fuel and the overall nuclear power plant establishment.

The power plants consist of two reactors, each 20 meters high, with 5 meters in diameter and a total weight of 430 tons (Uniper 2026). The first reactor was activated in 1975, and the second reactor began operating in 1977 (Kävlinge municipality 2024). Barsebäck was supposed to stop operating after a referendum in 1980, and the two reactors were to be liquidated in 2010. The generator of reactor one had a breakdown in 1979, which led to the turbine catching fire. In 1992, another incident caused by a problem with the straining area created high pressure in the turbine of the first reactor (Kävlinge municipality 2024). The reactor and emergency cooling system had weaknesses in its construction, which were recurring in the nuclear power plants in Oskarshamn and Ringhals, and modifications had to be made. The accident was declared a two out of the 7-graded INES-scale (IAEA 2026). The

first reactor was taken out of use in 1999, and both reactors stopped operating in 2005, earlier than initially planned. The radioactive fuel was shipped to the nuclear middle station in Oskarshamn in 2006. However, about 6% of a nuclear complex is radioactive and must be disposed of before an ordinary disposal of metal and cement can be performed.

The demolition of the establishment started in 2016 and is supposed to be finished by 2038 (SWECO 2025). Uniper aims to rearrange nuclear landscapes into usable landscapes where it is possible to establish housing estates and recreational landscapes. Uniper's aim for Barsebäck was to make it into a solar panel field; however, the proposition was suspended by the county board (SWECO 2025:7). Uniper is now aiming to transform it into an industrial landscape, more specifically, a green energy park (Uniper 2026). The concept of a green energy park is described by Uniper as a combination of industrial production and operating energy systems. Solar cells, battery storage, bio-gas establishments are planned to be combined with innovation hubs and greenhouse farming to meet the new standards of climate-positive energy production (Uniper 2026).

The Swedish energy authority declared Barsebäck a national interest in 2019, in energy production and distribution (Swedish energy authority 2019). The motivation of the decision puts emphasis on Barsebäck's strategic geographic position. Therefore, it is most likely that Barsebäck in the future will continue to be an energy landscape that will either be defined by concepts made by energy concerns such as Uniper or re-establish into a nuclear landscape (SWECO 2025: 50).

2.2.2 The energy landscape

The emergence of energy landscapes was early noticed by the British landscape architect Sylvia Crowe, who in *The Landscape of Power* (1959) declared a shift in the rural becoming of the landscape. Crowe argued (1959: 12) that the landscape was becoming dominated by electricity grids crossing the rural landscapes. Crowe (1959) explained the advantages of this progress as generating economic growth; however also that it comes with challenges to maintain the landscape's recreational qualities. Moreover, Crowe (1959) expressed that nuclear power plants differed from hydroelectric plants materialized and driven by earthly power, the flow of water. The nuclear landscape, on the other hand, did not express earthly power; instead, it expressed cosmic power (Crowe 1959:12). If the description of earthly power described as the flow of water and the immanent power of nature, the cosmic of the nuclear power expresses something out of this world and beyond both human and nature.

This idea of the nuclear landscape as celestial recurred at the time, the prominent Swedish cultural environment management theorist John Nihlén (1958:11) described nuclear power plants relating to the landscape similarly to how the Greek temples relate to the mountains. The importance of the landscape contrasting the nuclear power plants was the ideal (Krohn Andersson 2008: 118). Landscape architect Gunnar Martinsson reasoned that the landscape seemingly had to be subordinate to the nuclear power plant's monumentality (Nihlén 1958).

The scale of the architectural establishment could never be met by nature, and it should not be hidden away with greenery (Nihlén 1958:11). Due to the innovation of the atomic nuclear fission and thus the economic possibilities, the nuclear operations were expected to spatially dominate. They were supposed to be seen, to be admired (Krohn Andersson 2008: 115).

2.2.3 The design of energy landscapes

The aim of the design of the Barsebäck nuclear power establishment was to "serve the eye" (Krohn Andersson 2008:118). Friberg wanted to make the Barsebäck reactors an integrated part of the coastline (Krohn Andersson 2008: 106) and to align the nuclear establishment into the landscape (Friberg 1972: 64). Before the land was bought by Sydkraft, the owner Hamilton, hired Friberg to plan and design Barsebäck's land edge into a park (Friberg 1972:10). The project was named Järavalley. It was supposed to become a nearby recreational area related to the cities. The idea was to combine carparks with recreational picnic spots in a defined fallow land (Friberg 1972:10).

This was, however, not what happened, as the land was bought by Sydkraft, Friberg was given the commission to design and align the landscape with the power plants (Friberg 1972:62). Initially, Friberg wanted to place the power plants into the topographic descent of the Järavalley, but the station needed to be placed in direct contact with the sea (Friberg 1972:62). Two design alternatives were then presented; these two designs are evident throughout the Barsebäck collection of drawings and plans. The first suggestion used topography as a barrier towards the landscape making the power plants into an island. A convex shape framing it away from the agricultural landscape and canals were planned to create barriers. Nonetheless, it was declined by Sydkraft as it would prevent a future extension of the nuclear station (Friberg 1972:62). The second alternative aimed at establishing a forest that would work as a glade in the landscape, or as Friberg described it:

"Det planerade området beräknas bli en behaglig, skyddad uppehållsplats för människor och djur. Vegetationens uppgift är inte att dölja, utan att hålla samman, skapa lä, ge skugga och identitet." (Friberg 1972: 64)

The forest was supposed to be a place of identity in the open agricultural landscape, consisting of oak and pine. However, the proposal was altered, and the forest was minimised (Krohn Andersson 2008). Furthermore, to investigate Friberg's design proposals further, the study will continue with the semiotic visual study of Friberg's drawings.

2.3 Seeing the nuclear landscape

The following three discussions focus on how the landscape relates to the nuclear power plants. Firstly, as a place in dichotomy to the power plants, secondly as a border, thirdly through distance. These three landscape relations are interwoven with observations from the case study and build upon the literature study.

2.3.1 The nuclear landscape as a dichotomy

The idea of the landscape in relation to the nuclear operation, as stated by Friberg, was to establish an identity of a free zone for animal life and for nature to exist (Friberg 1972:62). This description of the nuclear landscape as being a place for animal life and vegetation creates a contrasting landscape towards the nuclear operation.



Figure 16. The scanned drawing depicts a vegetation stand immersed into the nuclear power plant of Barsebäck (SLU archive, Friberg, 1966) [Scanned by the author, 2026-02-04]

This is seen in the drawing of figure 16, where a stand of trees with a grown field level contrasts the nuclear power plants in the background. The bodies of the power plants can be seen, but the rest of the establishment is absent from the drawing. The sky and agricultural

landscape are not notable. The sound and coast can be imagined through the apertures created between the reactors. Instead, the field level and the leaves of the trees are described in detail, with shadows and lines signifying light, texture and movement. The landscape is animated while the reactors are static, and the vegetational landscape is becoming a dichotomy towards the power plants. Moreover, a landscape with contrasting features.

This representation is an idea of what the nuclear landscape is supposed to be. Accordingly, an opposition towards the nuclear operation and a landscape of its own. Where it could be possible, with Crowe's reasoning (1959), to continue to feel enjoyment although the nuclear operation is present. This creates a nuclear landscape that stands in dichotomy towards the power plants.

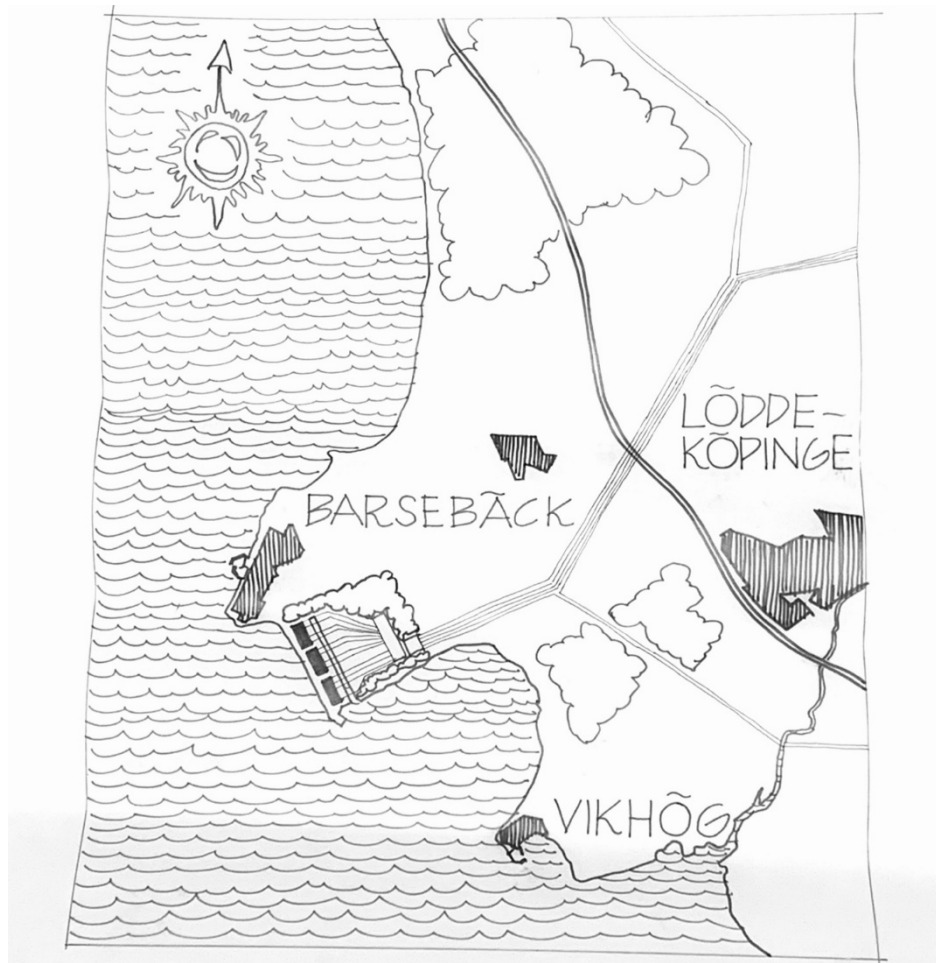


Figure 17. The scanned drawing depicts a map of the nuclear power plants relation towards Barsebäck, the coastal landscape in relation to the agricultural landscape and the connectivity that binds them. Ink on layout paper. (SLU archive, Friberg, 1966) [Scanned by the author, 2026-02-04]

The relation between the power station and human activity can be further seen in figure 17. The representation of the nuclear power station is presented in the drawing related to its nearby environment. The harbour of Barsebäck and the village of Barsebäck, Vikhög and Löddeköpinge are marked out tightly chamfered. The nuclear power station is shaped as a

square. The power lines are the connectors of the nuclear establishment into the landscape. The sound is represented with curved lines signifying waves, which express movement. Left blank is the cropland with the highway lined in black. Binaries are composed between the sound and land, the organic shapes of vegetation and the geometrical shapes of the villages. A hierarchical relation between the road, the brook and the power lines is expressed.

On the one hand, the nuclear landscape is described as inside the square, on the other hand, it is described as dispersive and spreading through the landscape. The nuclear landscape is signified as both contained and spreading simultaneously. The nuclear landscape can hence both be described as the actual square of the nuclear operation in figure 17, but also with the pattern of the power lines spreading and connecting. In this case, landscape as dichotomy is represented through binary signs of the sound and cropland. However, it is also represented as connected to the land edge of Barsebäck through the power lines.

During the case study, landscapes of dichotomy were not felt or identified. The oak forest, described by Friberg, was initially thought of becoming a landscape of its own. Is today constituted by oaks and a field layer of bush wood (see figure 18). The stand is oblong, and there are no trails that make it possible to go inside the stand. It is experienced as a barrier instead of a landscape bearing identity. This could be a cause of the fact that there was no human activity there. When following the road to view the oak stand from different perspectives, a different experience of the landscape was enhanced (see figure 19). However, the presence of the nuclear operation was heard as well as visible, and a landscape of contrast was not created; instead, it felt part of the nuclear power plants.



Figure 18. The photograph depicts an oak stand which is situated behind the nuclear power station. [photographs by the author, 2026-01-26]

Where there existed a possibility of experiences of dichotomy was in the pastures, where different field layers created different spatial qualities than the rest of the landscape (see figure 20). However, the experience of the pasture was similarly to the oak stand integrated with the power plants in the background. The birch and vegetation (see figure 20) are creating a foreground to the power plants and not a contrasting landscape. The landscape is becoming an integrated part of the nuclear plants and is not constituting a landscape that completely stand in dichotomy. The nuclear landscape is constituted by the constant relation between the power plants visually dominating features in which the landscape is part of.



Figure 19. The photograph describes the road and the avenue of willows that leads to the oak stand. [photographs by the author, 2026-01-26]



Figure 20. The photograph is taken from the pasture; it presents a view of the nuclear power plants with vegetation and a birch tree surrounding it. [photographs by the author, 2026-01-26]

The landscape created with the pastoral vegetation and Friberg's oak glade is, nonetheless, closely related to the nuclear power plants, not through dichotomy but through connection. The scale of the two reactors is not met by a volume of vegetation, as Friberg aspired (1972:64). Nonetheless, the landscapes that were observed to constitute contrast and dichotomy were the sound, sky and croplands. They are experienced as contrasting the monumentality of the nuclear power plants. The sky especially creates a dominant position towards the reactors (see figure 21). Moreover, the temporality of the changes of the sky and the flocks of birds creates a contrast to the nuclear power plants. The dichotomy is constituted in the contrast between the phenomena of static built concrete reactors and the temporal dynamic changes in the landscape. The flying birds and changing weather contrasting the reactors being under strict surveillance.



Figure 21. The photograph depicts the nuclear power plants relation towards the sky. [photographs by the author, 2026-01-26]

Houses and homes were observed on the pastures and on the croplands (see figure 22 & 23) they appear to be very close to the reactors. Moreover, Barsebäck's village and harbour are within walking distance to the area. People were observed living, walking their dogs and driving around with the nuclear power plants as an unquestioned part of the landscape. The intimate lives of the people living in Barsebäck suddenly stands in relation to the nuclear plants of great scale. The private sphere of the home's contrasts with the power plants. The dichotomy that was supposed to be created through Friberg's drawings through a glade and vegetation is not experienced. Instead, the composition of spatiality through vegetation serves as an integrated part of the nuclear power plants. Instead, the private sphere where people live constituted by the homes, the village and harbour are in dichotomy towards the nuclear operation.



Figure 22. The photograph depicts houses that stand in relation to the nuclear power plants, and the agricultural fields are in between. [photographs by the author, 2026-01-26]



Figure 23. The two photographs present homes that were situated close to the nuclear power plants. [photographs by the author, 2026-01-26]

2.3.2 The nuclear landscape as border

The next relation between the landscape and the nuclear power plants is the relation of the border. The purpose of this part is to analyse in what ways the nuclear landscape functions as a border and barrier.

The two alternatives that Friberg described in the *Landskab* (1992: 62) centre around the idea that landscape should serve as a barrier. The following two conceptual drawings present two ideas of how Friberg imagined a relation between the power station and the landscape (see figure 24 & 25). The two conceptual drawings of the design of Barsebäck contain a marked coastline. In the drawing of figure 24, the coastline includes the shape of the borders in the harbour, while it in drawing of figure 25 exclude this as a coastline. Both drawings have represented lines of topography which are presented with thinner lines, while thick lines of shapes behind the power plants are marked, becoming central in the sketches. The thinness and thickness of lines constitute hierarchy. They create an understanding of what is supposed to be perceived as important. The coastline with its darker outline is perceived to be uncompromisable, while the topography with thinner lines is more adjustable.

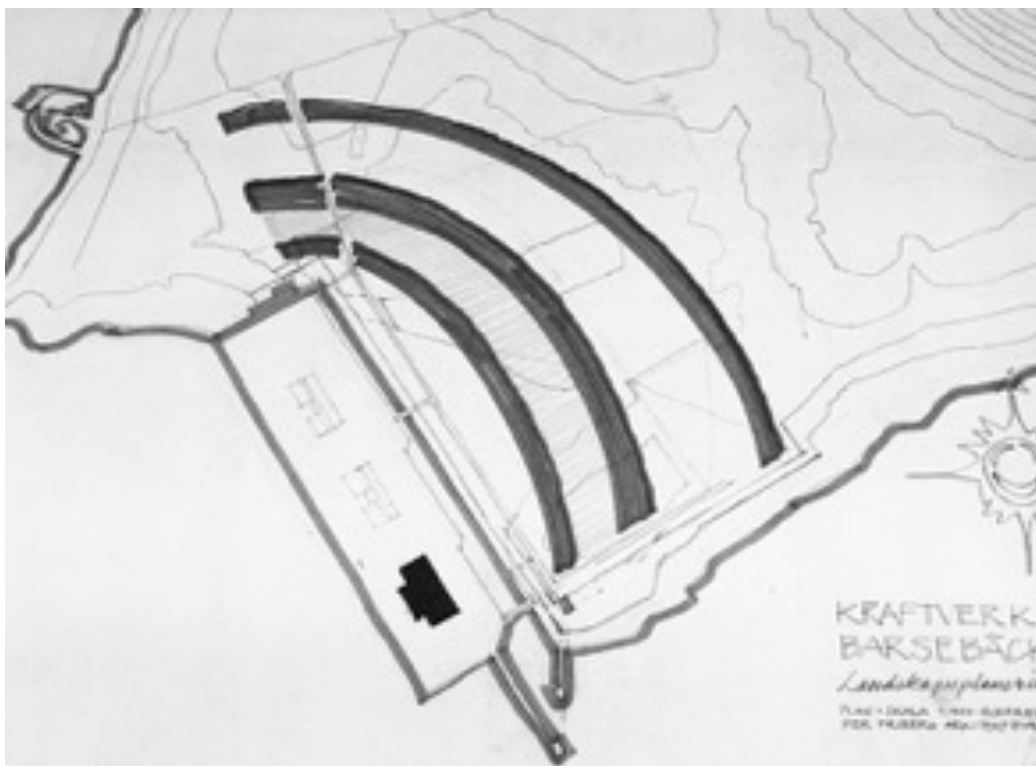


Figure 24. The scanned drawing of a plan of a proposition of the nuclear power plants. Coloured Indian ink on paper. (SLU archive, Friberg, 1966) [Scanned and edited by the author, 2026-02-04]

The drawing of figure 24 has three curved, thicker lines that extend into the agricultural fields. The space between the curved lines marks the in-between spaces. The nuclear power station road that leads to the nuclear power plants crosses these concave lines. The road is

signified as static, in which the landscape adapts. In drawing of figure 25, seven rectangles constitute the borders of two oblong rectangles. The road is, in this case, not taken into consideration; instead, it crosses through the rectangles. Throughout the road, the rectangular shapes and curved lines create shapes in the landscape. The two drawings describe the power plants extending and connecting to the land edge of Barsebäck through borders. Moreover, the shapes of vegetation relate to the nuclear operation as an anchor point. The purpose of the shapes can hence be seen as barriers, as successive borders or an entrance into the nuclear power operation.

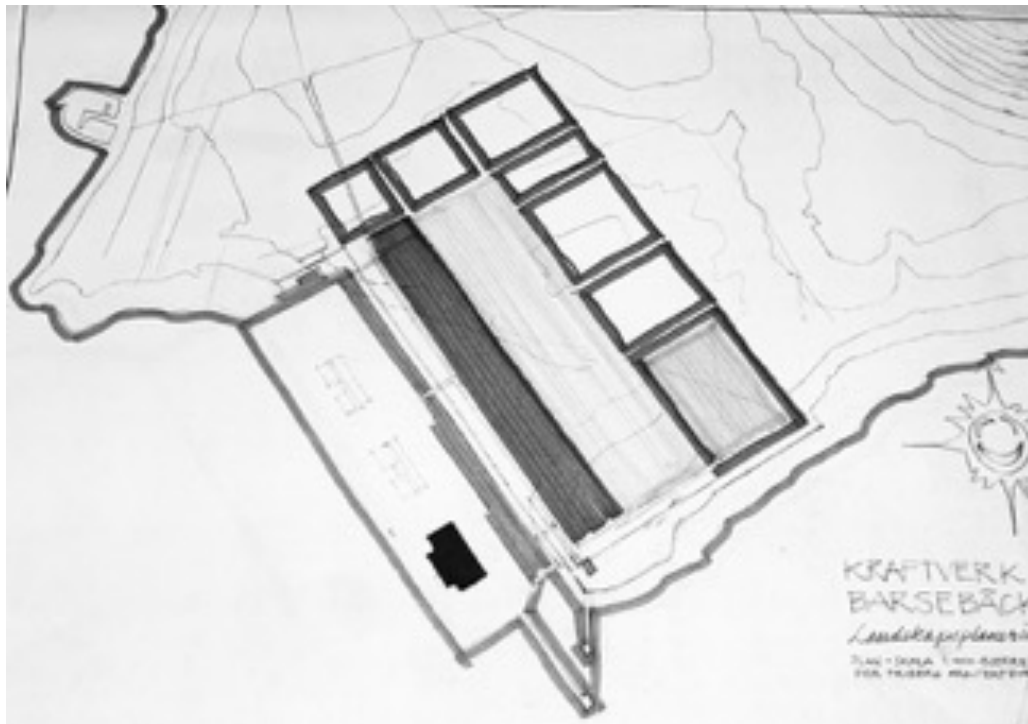


Figure 25. The scanned drawing of a plan of a proposition of the nuclear power plants. Coloured Indian ink on paper. (SLU archive, Friberg, 1966) [Scanned and edited by the author, 2026-02-04]

If we examine another drawing (see figure 26) notably, the village and harbour of Barsebäck are represented relationally. The drawing is a representation of the entire coastal landscape to the agricultural landscape. The perspective is from a bird's eye view and expresses an overview from the sky. Left blank in the drawing is the sound, sky and the landscape directly surrounding the nuclear power station. To leave parts of the drawing blank can be interpreted as to not imagine it. The blank can hence be perceived as an ultimate border. If the lines indicate the process of designing through pen, the blank indicate a potential for the spectator to imagine. The drawing describes an agricultural landscape through squares constituted of thinner lines in several directions, creating a patchwork of agricultural fields. There is a represented contrast between the agricultural landscape in the drawing of figure 26, and the tree stands. This recurs in the conceptual drawings (see figure 24 & 25), vegetation has similar purpose of creating contrast towards the agricultural landscape.

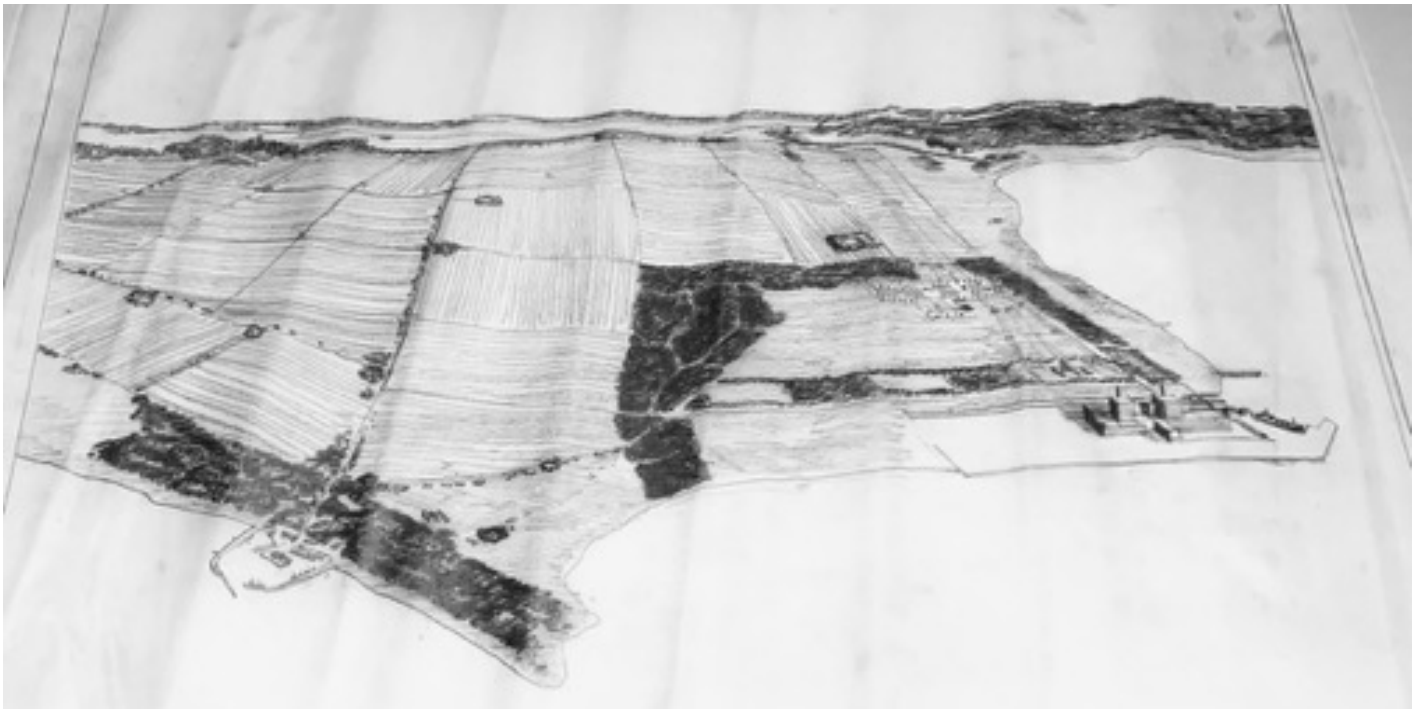


Figure 26. The scanned drawing depicts the nuclear power plants from a bird's view. Graphite on layout paper. (SLU archive, Friberg, 1966) [Scanned by the author, 2026-02-04]

The pattern of contrasts between vegetation and the agricultural fields creates a border. The border is recognised in several parts of the drawings, for instance in the conceptual drawings of figure 25 where bigger and minor rectangles create frames of borders, and in drawing of figure 24 where the concave lines create several interconnected borders. However, in drawing of figure 26 the viewpoint is from the sky, a connection between the harbour and the nuclear operation is created with the edge of vegetation. Vegetation is thus, in this case, what connects the nuclear operation and the village. Yet again, the intimate, social and human private sphere is relational towards the nuclear operation, through the landscape.

Moreover, while the sound, sky and croplands contrast the power station, the vegetation is observed to be subordinate. When encountering the vegetation around the nuclear power plants, it is notable that it is shaped by the coastal wind conditions. The pine trees grow away from the wind from the coast, and the blackthorn stretches down on the grass, which indicates adaptation to the wind (see figure 27). The structure of the vegetation follows the roads and fences. Its purpose seems to enhance the barriers of the nuclear power plants.



Figure 27. The two photographs depict the vegetation in relation towards the nuclear power plants. The blackthorn grows along the pasture, and the pine trees grows along the road of the nuclear power plants. [photographs by the author, 2026-01-26]

On the other hand, the pastures function as a passing ground (see figure 28). The Skånetrail connects the harbour to the nuclear landscape, which makes the landscape accessible. While walking on the pastures, observations of people wandering, walking their dogs and jogging is made. The pasture is becoming a landscape that connects and not a landscape of border, through the activity that the Skånetrail enables, human activity and mobility in landscapes are creating connection. On the other hand, the agricultural fields create borders where no mobility is possible (see figure 29).



Figure 28. The photograph depicts the Skånetrail that crosses the pasture north of the nuclear power plants. [photographs by the author, 2026-01-26]



Figure 29. The two photographs describe the croplands and the agricultural landscape that were encountered throughout the case study. [photographs by the author, 2026-01-26]

The nuclear landscape that has been discussed, created with Friberg's drawings compared with the case study, is the nuclear landscape becoming and not becoming dichotomy, through temporal movements in the landscape and through being connected towards the nuclear power plants. The border towards the power station is created through vegetation and landscapes as the cropland and the sound because they are barriers of mobility. The nuclear landscape is becoming defined by being connected while having barriers that makes it isolated. The nuclear landscape is actualised and perceived through human mobility. The study will continue to be discussed as created from a distance. This leads to further investigation of the nuclear landscape perceived from a distance.

2.3.3 The nuclear landscape in the distance

The purpose of this chapter of the essay is to describe in what ways the nuclear landscape is perceived in the distance. In Friberg's drawing of figure 30, the power plants relate to the landscape from a distance through the composition of a foreground and a background. In the drawing below (see figures 30-33), the foreground consists of vegetation of grass, bushes and trees with hanging branches, and the power plants are aligned with the horizon. The direction of the lines of the grass indicates a movement of the wind, while it in the background is monotone and static. There is no movement signified in the sky or in the sound. The foreground becomes the place where we as spectators are situated; it is the present landscape. The landscape of the background is the landscape of the nuclear power plants, where we potentially could be in the future. This composition of foreground and background is a pattern in the drawings (see figures 30, 31, 32 & 33).



Figure 30. The scanned drawing depicts the nuclear power plants from behind, with fences, power lines and vegetation represented. Graphite on layout paper. (SLU archive, Friberg, 1966) [Scanned and edited by the author, 2026-02-04]



Figure 31. The scanned drawing depicts a distant perspective from the south side of the nuclear power plants. Graphite on layout paper. (SLU archive, Friberg, 1966) [Scanned and edited by the author, 2026-02-04]



Figure 32. The scanned drawing depicts vegetation, tree branches and croplands from a distant southern position towards the nuclear power plants. Graphite on layout paper (SLU archive, Friberg, 1966) [Scanned and edited by the author, 2026-02-04]

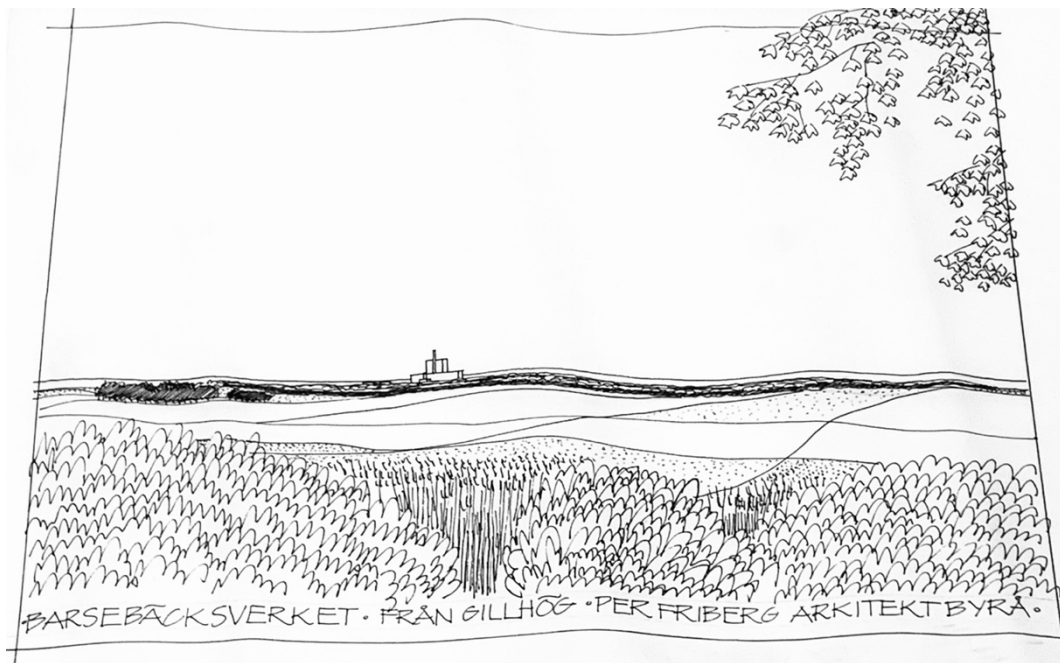


Figure 33. The scanned drawing described the landscape with vegetation, croplands, vegetation around the nuclear power station and the horizon. Ink on layout paper. (SLU archive, Friberg, 1966) [Scanned and edited by the author, 2026-02-04]

A tension is created between the foreground and the background, between the distant and present landscapes. Where the representation of the agricultural fields, is connecting the two, while simultaneously holding them apart. The cropland, hence, causes spatial and temporal distance (see figure 33). Through the investigation the cropland has been described as a border; in this case, the landscape of the cropland additionally becomes a border of temporality.

Moreover, it is as if the detailed vegetation in the foreground functions as a distraction from what is happening in the distance. The composition of the vegetation in the foreground is becoming a component that, to some extent, distracts from the nuclear power plants. On the other hand, if we are to perceive the detailed foreground as what it indicates, a wind that is moving the grass and branches, the foreground actualises the temporality of the landscape. The tension between the foreground and the background is then in dialogue. As if, although there is a nuclear power station in the background, a wind will always be present. Thus, the temporality of the landscape will always reveal itself.

This use of distance in composition and focus on temporality, where tension divides and binds between background and foreground, can be seen in paintings from Romanticism in the 17th and 18th centuries (Honour & Fleming 1982: 640). This visual representation technique describes an approach towards how landscape is experienced as closely felt present and from afar felt unknown. The notion of the unknown in the distance was felt while biking towards the power station. The encounter with the nuclear power station and the landscape is through the horizon and silhouette. The power station is unified with the coastal landscape and the horizon, which can be seen in the photographs of figure 34. The unknown is sensed through the vision of the nuclear power plants.



Figure 34. The photographs of figure 3 and 4, are in this series related to describe the unification the nuclear power plants have with the horizon. [photographs by the author, 2026-01-26]



Figure 35. Three photographs of the cropland related to the nuclear power plants are made into a series where they progressively become closer. [photographs by the author, 2026-01-26]

When approaching from a closer distance, the nuclear power station is seen through the agricultural landscape (see figure 35). The silhouette presents itself again at the end of the cropland. The reactors are almost hidden by the topography and throughout the journey, the power plants are experienced as part of the horizon. This follows Friberg's aim to align the nuclear reactors with the coast (1972: 64) and this relation causes a celestial expression. This celestial expression, mentioned by Crowe (1959) as a purposeful design reference to connect to the power of the nuclear, can be understood through Agamben (1998) as a visual tactic to create states of exception and hence a discourse of sovereignty. If we were to ascribe the nuclear landscape to a state of exception, it would become a subject that is sacred and denied, upheld and unprotected simultaneously (Agamben 1998).

The security, fences and rules of the nuclear power plants make it publicly closed, which in contrast to it aesthetically expressing unification towards the sky works as a state of exception. The nuclear landscape is a landscape alienated towards human encounters, and this alienation serves the sovereign of the landscape. This experience causes an encounter of complexity. The encounter is of discomfort and alienation, as well as giving a sense of transcendence. However, it is ultimately defined and restricted by the policies and force of energy production. To continue to investigate the nuclear landscape, the reimagination through montage continues to present how the nuclear landscape can be understood.

2.4 Reimagining the nuclear landscape

The purpose of this part of the essay is to reimagine the nuclear landscape through the subjects that previously has been discussed related to dichotomy, border and distance. Subjects such as connection, isolation, alienation and transcendence and the temporary, agricultural, bay and vegetational aspects of landscapes are reimaged in the collages.

2.4.1 Reimagining with a montage of collages

The following reimagination of the landscape's relation to the nuclear power station is a reconstruction of the encounter from the case study, combined with the visual analysis of Friberg's drawings. Benjamin's term historic materialism where the past and present are combined, is now actualised and synthesises the nuclear landscape.



Figure 36. The collage is made with two photographs from the case study and combined through scale and colour to create an expression of unification. Where the photos re-establish a landscape. [photographs, montages and collages by the author, 2026-02-15]

The first montage (see figure 36) derives from the aspect of distance, the private sphere and the expression of the unification with the horizon. Instead of perceiving the power plants as distant on the horizon, the montage deconstructs it into a perspective of closeness. Through the play with the two photographs, the nuclear power plants appear as part of the pastoral landscape. The montage experiments with scale and perspective. The power plants are not connected to the horizon or to the coastal landscape, and the celestial expression is compromised. An experience of the nuclear power plants is made more available. The facade of the houses that functioned as foreground in the picture, is now in the montage, centred in the image. The private sphere that was discussed in contrast towards the nuclear power station

is brought to the distant pastoral landscape. The nuclear power plants appear closer, and the nuclear landscape becomes a portal where a sense of closeness is created.



Figure 37. The collage combines two photographs where the cropland is combined with a photo of the silhouette of the coast of Barsebäck and the nuclear power plant. [photographs, montages and collages by the author, 2026-02-15]

The second montage (see figure 37) combines the notions of border, distance and lack of signs of temporality. The landscape of borders, such as the cropland and sound, is layered, and the unification between the power plants and the silhouette is kept. The notion of distance is hence exaggerated. The horizon seems more distant without a foreground, and with only barriers, mobility towards the power plants seems impossible. There is no sign of a trail or connection to reach the nuclear power plants. Nevertheless, the landscape appears far away, and the nuclear landscape is rendered static and in unison, aligned with the horizon, while the celestial expression is retained.



Figure 38. The collage combines the nuclear power plants with the vegetation of a picture taken in July. The collage aims to depict a foreground of vegetation and a background of the power plants [photographs, montages and collages by the author, 2026-02-15]

The third montage (see figure 38) continues the discussion of distance, the dichotomous landscape of background and foreground, static and temporal are interwoven. The montage is a nuclear landscape reimagined through Friberg's drawings of foreground and background. The combination of vegetation from a different photograph, taken on a July evening, is combined with a photograph from the bike study. The montage accentuates the tension and dialogue between the foreground and the background, exaggerating the animation of the vegetation. The contrast of the dynamically growing vegetation is accentuated. The reimagination is a play with temporality, to remake the foreground into a sign that associates a very lush and embellishing environment.

The assemblage hence creates a nuclear landscape that embellishes the power plants but also plays with the temporality of seasons. The temporality of landscapes is distinctive, an embellished landscape close to the perceiver and the unknown nuclear power station in the distance. The nuclear landscape is becoming defined by two dichotomous landscapes, the

temporal and the static. The landscape that has potential to grow, and the industrial landscape in which the nuclear plants exist within.



Figure 39. The montage combines the silhouette of the nuclear power plants which has been re-scaled and layered with a photograph of vegetation from a garden; it is moreover composed with a photo of an agricultural field. [photographs, montages and collages by the author, 2026-02-15]

The fourth montage (see figure 39) shifts focus, and the details and vegetation are placed in the background, emerging with the nuclear operation. The nuclear power plants are no longer seen as distant but as seemingly closer, almost as if they are coming towards you. The montage is created with a picture of branches hanging down, taken in the summer. The montage makes the silhouette into a camouflage, but also fully immerses it into vegetation. The nuclear landscape is transforming and aligning with vegetation. The celestial expression is still expressed and exaggerated. It is possible to think that when emerging into vegetation, it would disappear. However, the montage shows that it instead presents itself. The notion of vegetation as a barrier and as an element that hides is not actualised in this case. Nevertheless, the vegetation of details, movement and temporality can, when fully emerged into the static structure, enhance the nuclear plants and their presence.

In the fifth montage (see figure 40), the relation between the temporal and the border is in direct dichotomy, where the nuclear power plants are in between the temporal sky and the static agricultural landscape. The nuclear landscape is both dominated by the movement of birds and the cropland. Temporality is accentuated through an exaggeration of the experience of birds. The dichotomy between the temporal and the power plants are exaggerated. The reactors are not aligned with the agricultural landscape but is an island where the cropland functions as borders.



Figure 40. The montage depicts three photographs, where birds, power plant and agricultural field are combined into one image. [photographs, montages and collages by the author, 2026-02-15]

The sixth montage (see figure 41) is an experiment on how the nuclear landscape is becoming in relation towards the horizon. The nuclear power plants are in the collage dominating the horizon instead of aligning with it. It has been montaged to be duplicated and rescaled, and the nuclear power station is dominating Spillepengen. The experience of the power plants is overwhelming. The celestial expression has been compromised; there is no alignment towards the coastal landscape. Instead, the object of the nuclear power station has become a border.

In the same manner, the last montage (see figure 42) accentuates the aspect of the nuclear landscape being connected through the power lines. They are in the collage (see figure 42) crossing the nuclear power plants, not leading the electricity from one point to another, but leading the power line beyond the power station. The nuclear landscape is spreading and irrationally connecting. The experience of a constant presence of the nuclear power plants' power lines connecting is described through the montage.



Figure 41. The montage consists of the landscape of Spillepengen cut out, combined with several nuclear power plants placed along the horizon, [photographs, montages and collages by the author, 2026-02-15]



Figure 42. The montage combines photographs of the nuclear power plants with a photograph of the power lines. The power lines are up scaled in relation to the nuclear power plants. [photographs, montages and collages by the author, 2026-02-15]

The montage of collages represents a nuclear landscape that intertwine dichotomy, border and distance which exaggerates both Friberg's visualisation and the observations from the case study. The montage synthesises the tensions and contradictions of experiencing alienation because of the power plants being distant. The authority of the power plants is played with in the montages, which contributes to insights of how the nuclear landscape changes depending

on the power plants alignment with the landscape. The temporal landscape is accentuated and put in dichotomy towards the isolated and distant nuclear power plant. Vegetation and growth are additionally described in the montage to both hide and distract from the power plants, and to accentuate them. These insights of the nuclear landscapes are nuanced and contradictory while they point at one understanding, which is that the nuclear landscape is actualised by encountering it. To further investigate this, drawings will continue with how to approach the nuclear power plants.

2.4.2 Reimagining with the bridge

The purpose of this chapter is to present drawings on how to through landscape architecture approach the nuclear landscape. It is a proposal that leads the synthesis into a further reimagination of the nuclear landscape.

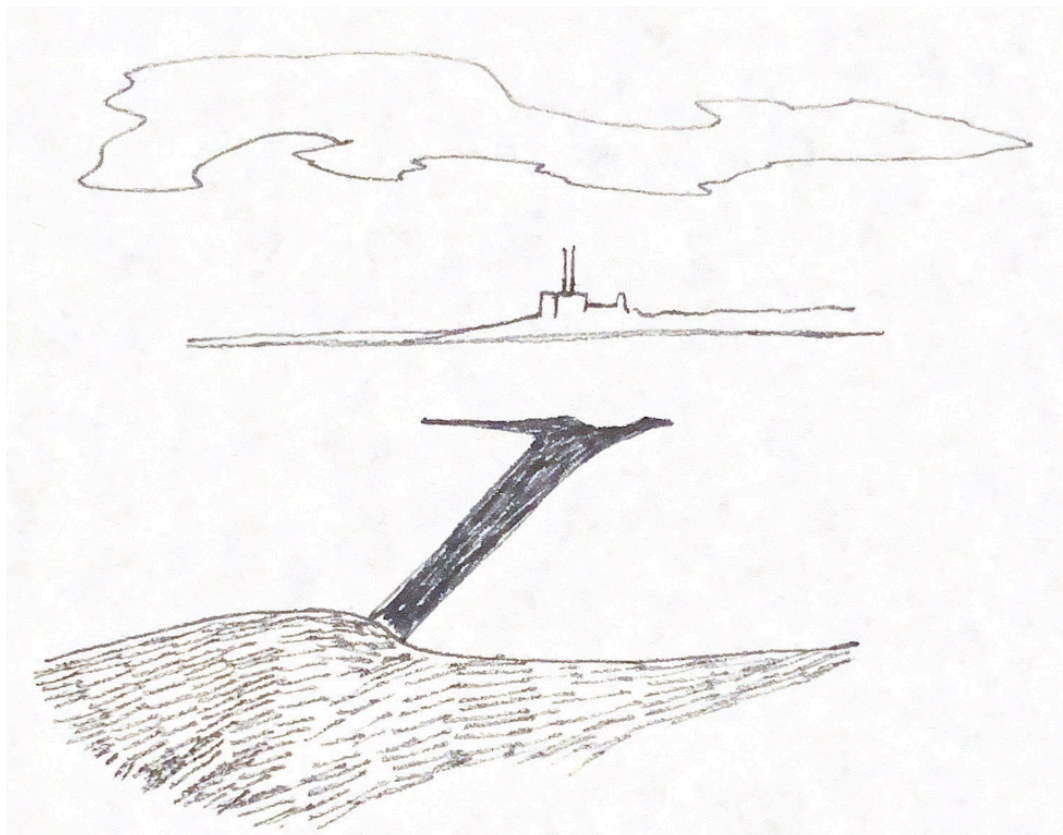


Figure 43. The drawing depicts the nuclear power plants united with the horizon and silhouette. A pasture is signified in the foreground through animated movement of grass which extends the bridge which is coloured dark and approach the nuclear power plants. A cloud is hanging over the sound with the aim to depict temporality. Ink on paper. [drawing by the author, 2026-02-16]

The montages that have been presented create representations that highlight certain aspects of the nuclear landscape. The intervention (see figure 43) in the landscape builds upon these characteristics. The nuclear landscape, as discussed, is constituted by the horizon, the temporality in contrast with the static, the borders created by the landscape of the sound and

cropland, and the constant distance from the nuclear power plants perceived along the coast. The nuclear power plant's presence is recurring through distance as well as to the people living in Barsebäck harbour and village. The hiking and biking trails are the lines of connectivity. An intervention that would create a relation towards the nuclear power plants and hence create an experience of the nuclear landscape is the bridge (see figure 44).

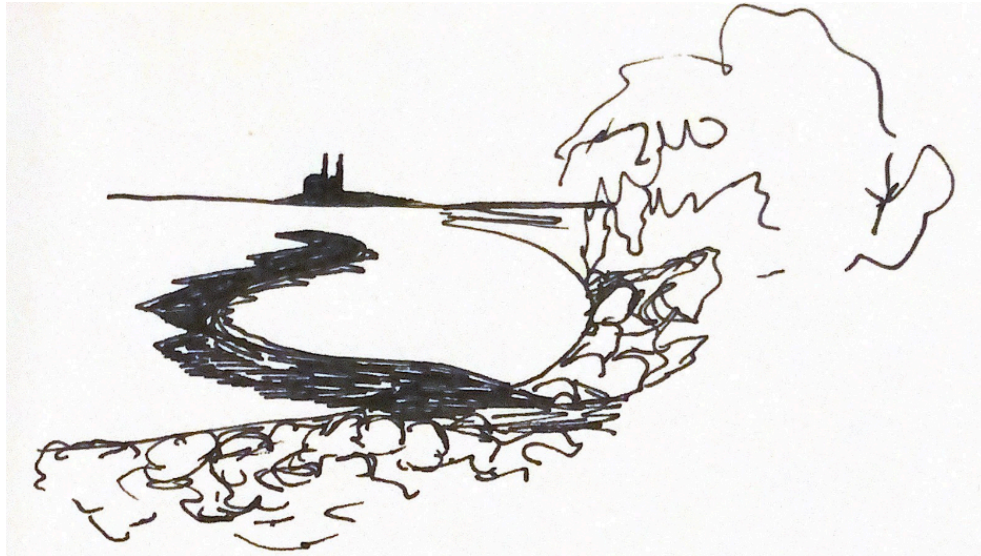


Figure 44. The conceptual drawing depicts the logic of the bridge, where it is supposed to connect the land with the sea to encounter the nuclear power plants. The bridge is drawn, connected to the waves. Indian ink on paper [drawing by the author, 2026-02-16]

The bridge, as a construction and concept, has the capacity to connect as well as to break barriers. The bridge is a path that ends in the landscape (see figure 44). It would therefore work in favour of encountering the nuclear power plants and it would create an experience of the nuclear landscape through enhancing mobility, in addition to its visibility. It would, simultaneously, reinforce aspects of border, distance, temporality, connectivity and dichotomy that make the experience of the nuclear landscape complex. The bridge, additionally, is a dialogue between the present nearby landscape and the power plants in the distance, connecting the landscape of foreground and background (see figure 43).

The bike study is a movement through the coastal landscape to the nuclear power plants, which reinforce mobility and human embodied experiences of encounters. These bridges would give the opportunity to experience, reflect and perceive the nuclear landscape. The bridges would be placed throughout the coast (see figures 45-48) and in the cropland, breaking the barriers of the landscapes, as lookout points. Instead of signifying a connection between the bridge and the nuclear power station through colour or materiality, the bridges could relate to the landscape in which they are placed. They could be shaped differently to create passive or direct encounters.

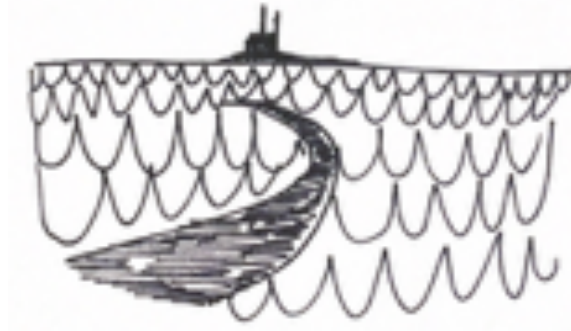


Figure 45. The drawing aims to describe the perspective and encounter with the nuclear power plant. Indian ink on paper. [drawing by the author, 2026-02-16]



Figure 46. The drawing aims to describe the bridge in relation to the sea and nuclear power plants. The drawing is experimenting with how to encounter and approach through the nuclear landscape. Indian ink on paper. [drawing by the author, 2026-02-16]

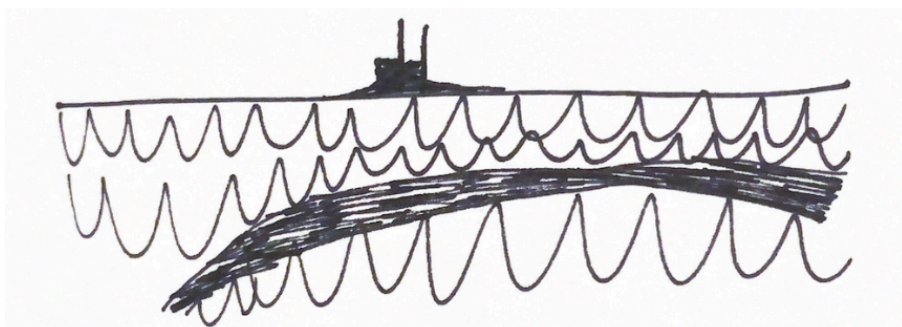


Figure 47. The drawing is related to figures 41 and 24 and aims to describe a conceptual understanding of how the landscape of the sea and the nuclear power plants can relate differently towards each other through the position of the bridge. Indian ink on paper. [drawing by the author, 2026-02-16]

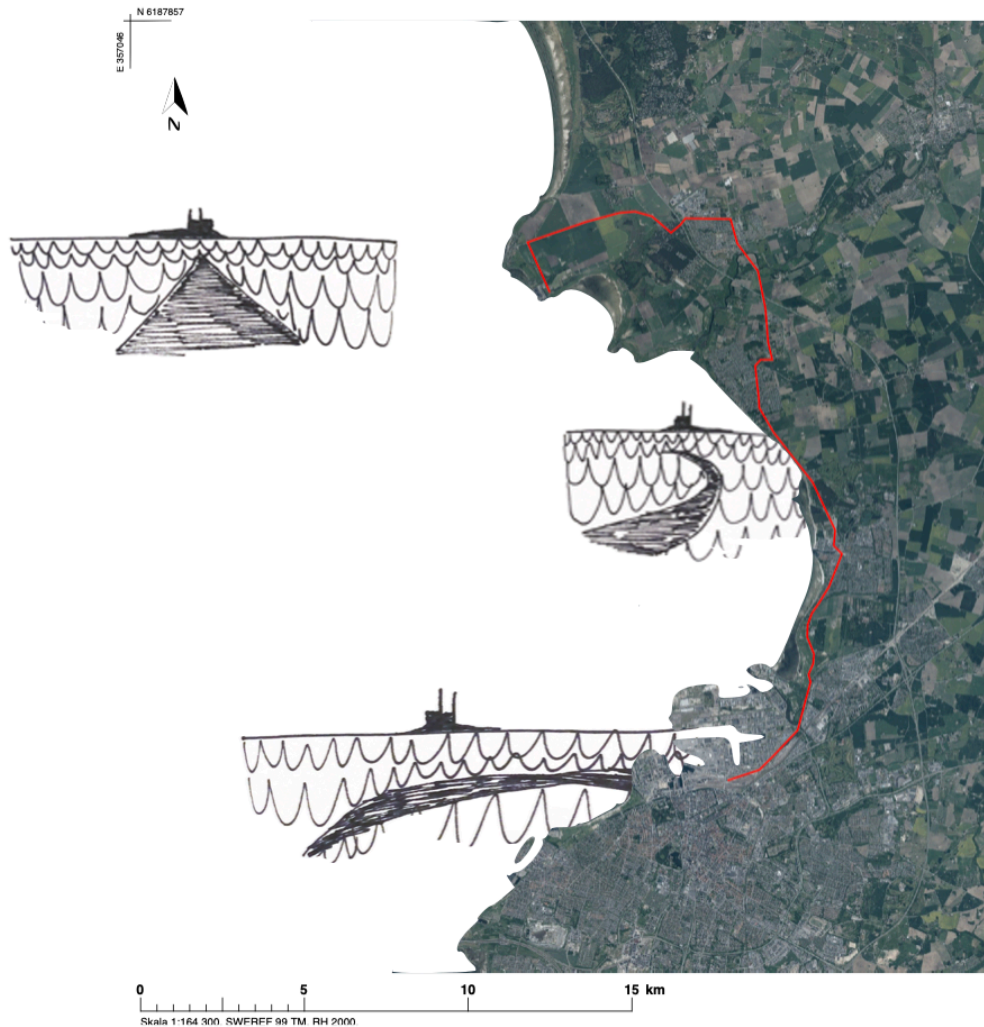


Figure 48. Ortho map 2026 of the coast of Malmö to Barsebäck, the bike ride is marked with red, collaged with drawings of figures 42-44. [© Lantmäteriet, 2026-02-27] <https://minkarta.lantmateriet.se> (edited by author)

The drawings of the bridge are in relation to the nuclear power plants on the horizon and are represented to follow the style of Friberg (see figures 45-47). The redrawing of the map from the case study (see figure 48) describes and combines the perspectives with the geographical positions of where the power plants could be perceived. The redrawings binds the case study with future visual experience.

They (see figure 45-47) work as crosspoints and are intersections that enable dialogue with the nuclear power plants. They connect the coastline similarly to how the power stations connect, and there would hence exist a physical opposition towards them. To encounter a landscape is an opportunity to create a landscape (Wiley 2005). The landscape and the experience are intertwined, while thinking and sensing what it is perceived to be. According to Agamben (1998), the becoming of the sacred and sacrificed landscape is through the

complexity of perceiving it as something other than what it is. By creating a bridge an opportunity is given to mentally perceive the nuclear landscape, and it can hence become a landscape that landscape architects are able to speak about in a more complex manner.

Friberg's (1972:10) ideas of the recreational picknick-carpark, was a refiguration of what a park could be and what Barsebäck could become in an urban context. In contrast to designing parks that relate to ideas where the experience of landscape aims to initiate feelings of transcendence, oneness and relief. As mentioned with Agamben (1998), there is an aspect of power in the use and aestheticization of visual expressions of unification and transcendence. If we, as perceivers of landscapes, feel oneness or transcendence, we must be aware that we are more sensitive to the sovereignty that can sacrifice landscape. The landscape architectural approach towards landscapes can then, instead of enhancing transcendence, enhance dialogue.

Even though the wanderer walking along Spillepengen, Bjärred or Malmö doesn't want to walk on the bridge, its physical construction defines a possibility of connection, by noticing the visibility of the nuclear power plants. This encounter can hence be designed through other means than the bridge; through light, sound or be a visual link with binoculars directed towards the power plants. However, the design would aim to create an encounter. The encounter itself would be valued, and to enable this could be the purpose to design landscapes, to create the opportunity to give up space, or, as the philosopher Michell Serres describes in *Genesis*, "to leave at last the page blank." (1982: 47). The nuclear landscape is becoming a landscape that is actualised through encountering it. Moreover, it can be dealt with through landscape architecture by creating a bridge, with the aim to constitute dialogue. Landscape is hence the dialogue itself; it is the connector and isolator between the human perceiver and the nuclear power plants.

3. Discussion

This study has reimagined apprehensions of Barsebäck nuclear landscape through interweaving the encounter, reading and visual interpretations of the nuclear power plants relation to landscape, into a reimagination of visual material. The nuclear power plants are relational to Friberg's drawings through dichotomy, border and the position of distance have actualised additional insights into how temporality, connectivity, alienation, mobility and dialogue constitute a nuclear landscape. The investigation has been discussing questions of how the nuclear power plants are present and absent in the landscape. How the relation between landscape and the reactors enhances insights of the position the nuclear power plants hold in the experience of perceiving the coast. The relation between landscape, nuclear power plant and experience is what the study of the nuclear landscape has been centered around.

The nuclear landscape is defined by tensions between the nuclear power plants and the landscape, and between what is represented and what is experienced. Friberg's drawings constitute a seeing that might seem natural; however, when compared to the case study, it appears constructed through ideals of what landscape is supposed to be rather than what it is. For instance, the nuclear landscape is supposed to have an identity, function as a border and barrier, while embellishing or distracting from the reactors (Friberg 1972:62) (see figures 30-33 & 38). The nuclear power plants are supposed to be structured within the hierarchy of the topography and within the coastal landscape, while connecting with power lines throughout the region. It is described as both contained and spreading. In comparison to the experience of the encounter with the nuclear power plants, the landscape exceeds Friberg's representations. The recurring aspect in the experience is, instead, a tension, which is created in contrast between the temporal and static, between mobility and barriers, between being close and far away. The nuclear power plants are hence interpreted as both isolated and connected towards the landscape. These tensions and contradictions create experiences of alienation and of transcendence towards the nuclear landscape.

The aim when planning the nuclear power plants (Friberg 1972:64) was to connect and align it into the landscape and not alienate them. Nevertheless, the study has described that the alignment with the horizon creates expressions and experiences of, on the one hand, alienation and, on the other hand, imagination. Friberg's drawings additionally deal with alienation and the tension of connection, specifically by animating the vegetation of the foreground in the drawings. Which, on the one hand, expresses temporality and, on the other hand, expresses a desire to escape the reactors (see figures 30-33). A tension between alienation and presence is derived, and the representation of temporality functions as a reminder of presence, of how to perceive movement in the moment. Presence and temporality are hence closely affiliated. Furthermore, temporality stands recurrently in the investigation, in dichotomy towards the reactors. The changes in weather and the phenomena of birds flying

above the reactors is itself a dialogue with the nuclear landscape. A possible approach towards the nuclear landscape is, in this sense, a position similar to the bird's movement.

The nuclear power plants are governed by energy production, laws and political interest, which limit the mobility towards the nuclear power plants. This stands in dichotomy towards the temporary processes where birds gather, and where wind and light constantly shift. The notion of movement and temporality as contrasting the sovereignty of the power plants is illustrated in the fifth montage (see figure 40), where the temporality of the bird's movement is accentuated. The nuclear landscape becomes an exception (Agamben 1998) through the distanced and imaginative position it has in experiencing it. The celestial expression described by Crowe (1959), the position in which the nuclear plants were aimed to attract perception (Krohn Andersson 2008: 115) and the alignment that the reactor has within the horizon are creating a celestial expression that romanticises the nuclear landscape.

Moreover, through Agamben (1998) and Crowe (1959), the celestial unification of the power plants with the coastal landscape and the horizon creates a landscape that aesthetically can be justified to be sacrificed. However, the study has shown that by approaching it through its contradictions, uncomfortable aspects can be part of the reimagination of the landscape. Possibilities of dialogue are presented beyond serving the purposes of designing recreational environments to intensify mental release and health benefits. Landscape architecture can instead aim at creating encounters that intensify dialogue, reflection and experiences of complexity rather than unification towards landscape.

Additionally, with Wiley's (2013) definition of landscape, if we are to perceive uncomfortable landscapes, the perceiver must be able to hold the existential tension that the landscape causes. The embodied act of biking towards the nuclear power plants along the coast is a confrontation of the alienation towards the nuclear power plants. By biking through the distance, borders and the dichotomy into the nuclear power plants, an experience of dialogue is made with the nuclear landscape. The drawings of bridges can hence be interpreted as an extension of the case study.

The bridge, as an approach, is thus a tool to encounter a multitude of aspects of the nuclear landscape and of the nuclear power plants. The bridges create dialogues through allowing encounters of mobility, activity and perception. Mobility and activity are creating connections between borders. This can further be seen in the landscape where the Skånetrail runs through the pasture, the joggers, people walking their dogs and those having driving lessons. These social activities actualise the nuclear landscape. When the landscape stands in dichotomy towards the power plants, through temporality and activity, the sovereign order of the nuclear landscape is opposed. A dialogue is a possibility for experiencing contradictions. The discussion is followingly, continuing to evaluate the creative abductive method and the process of synthesising the nuclear landscape.

3.1 Discussion and evaluation of the method

The visual representations from the case study have been combined with Friberg's past drawings. A transformation of the visual material has become a montage of collages and drawings. Through this transformation, a synthesis of the nuclear landscape is presented. The visual studies have hence served to create a landscape materialism (see figure 49).

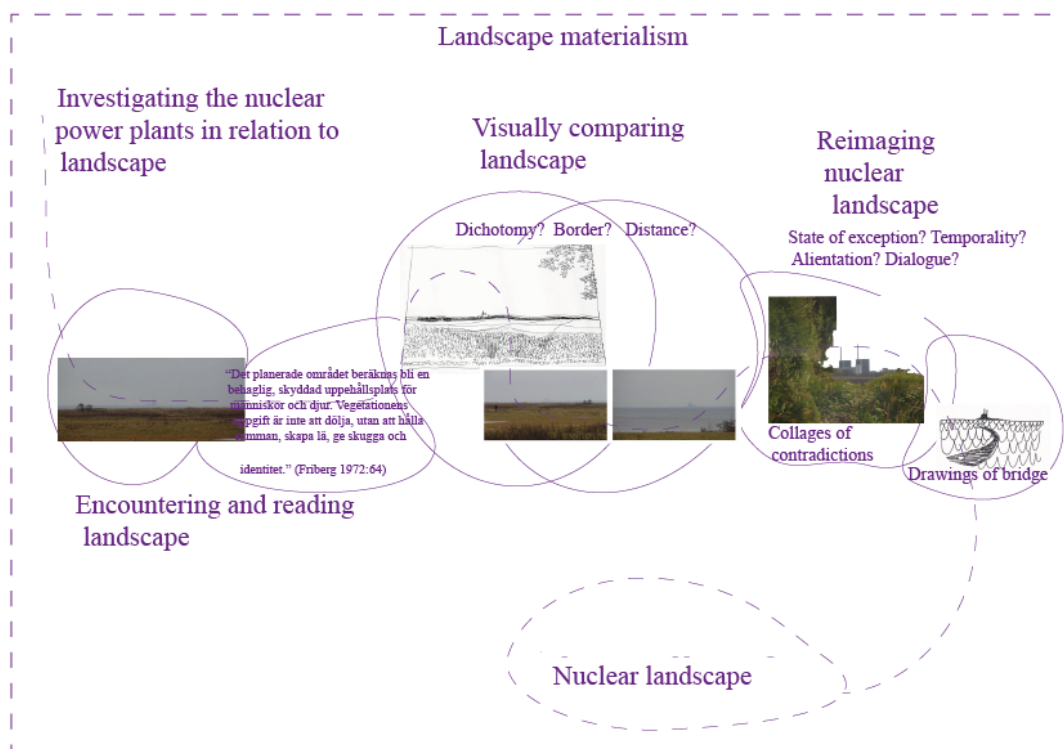


Figure 49. Drawing of how the methodological framework led to the result of the study [drawing by the author, 2026-03-06]

The study moves from analysing visual representations to visually representing and reimagining. Friberg's mode of representing the drawings is used in the redrawings of the bridges. The use of creating visual references is part of the synthesis. The drawings are, like Friberg's drawings, representations of a potential experience of the nuclear landscape. They express different perspectives but refer to Friberg's style of drawing while creating a reimagination of the nuclear landscape.

Simultaneously, this essay, through the landscape materialism, with the material produced, functions as a present document of a nuclear landscape that might disappear or transform. Although the mechanisms of extracting power might disappear or change, landscapes of various forms of production continue to develop. The question of landscapes constituting sovereignty continues to be relevant. Further research should continue to examine the discourse of energy landscapes, specifically the laws and politics of these landscapes. The

current situation of progressive climate change is affecting energy concerns, such as Uniper, in the manner of establishing industrial production landscapes. Although the landscape might change into green innovation hubs, the use of the landscape continues. The documentation of nuclear landscapes is therefore of importance; they serve as part of an understanding of the transformation of landscapes. Moreover, is a document of dialogue.

The creative abductive method has led to reimaginings of collages and of drawings, which constitute an approach towards the nuclear landscape. The method is the approach that has created the nuclear landscape. The result is, in this case, collages and drawings of bridges. The collage and drawings should not necessarily be replicated; instead, the study has shown that the method of reimagining is useful to synthesise landscapes. The study has presented that Benjamin's historical materialism can be applied as a theoretical framework to interweave past and present into alternative knowledge of landscapes, into landscape materialism. The process of investigating through the method has brought insights into how encounters, readings and visual analysis can be combined to understand landscape. Additionally, how visual studies with theories of semiotics, historic materialism and terms of sovereignty can be adapted into landscape architectural studies.

A critical aspect of the creative abductive method is that it relies on self-reflection and is built upon a subjective perspective. Although the subjective is valid (Wiley 2013) and essential in perceiving landscapes, the synthesis is an interpretation that is based on my own experiences and, therefore, also limited by my capacity of perceiving. Therefore, it would be of interest to collect several subjective positions, experiences and encounters that could cover a broader perception. For instance, the focus on birds throughout the study served to discuss temporality and recurred because I experienced them as signs of temporality. However, it is possible that a different person wouldn't consider birds at all; instead, they might have found rabbits or signs of temporality in other parts of the landscape. This actualises another aspect of the study, which is that the objects of the result are not entirely central; they should be seen as documents of the synthesis of reimagination.

The reimagination causes an understanding of the nuclear landscape as complex and interwoven through fragments. The process of reimagining through the literature study, comparative semiotic study with case study, to montaging and redrawing, is a method of creating and collecting into a metamorphosis. This chain of perspectives could contradict a more in-depth analysis. Additionally, while synthesising, the interpretation leaves out parts of the analysis, while other themes get interwoven into the reimagination. The introductory case study and the literature study offer many landscape relations that could be further developed. The comparative study filtrates and reshapes the nuclear landscape, and the process of montaging and drawing generates a new perception of the nuclear landscape.

This process is filtering, constructing, interpreting and in some manner also simplifying the nuclear landscape. This contradicts Abu Warburg's endless Mnemosyne's atlas and Walter Benjamin's Arcade project, which continues to broaden instead of simplifying. Further research projects should continue to interpret a broader spectrum of aspects of landscape

relations beyond the dichotomy, border and distance. This would cause a more complicated result to read; however, it would be able to investigate more of the multitude of landscapes. The reimagination through montages of collage has the potential to be developed on its own. It could, through research of photographic representations of energy landscapes, intertwine even more into a landscape materialism where past and present are interconnected more in-depth. The visual representation would hence be more central.

Nonetheless, this method of creative abductive reasoning enhances different aspects of the nuclear landscape as well as complicating linear logic. Consequently, the study naturally becomes fragmented, but the terms of dichotomy, border, and distance are essential in creating a structure that leads to answers of how the power plants, and the landscape are constituting a nuclear landscape. However, this logic does not cover the entirety of the nuclear landscape; nevertheless, is an attempt.

4. Conclusion

This study is an attempt to synthesise and reimagine the nuclear landscape to give insights into how the nuclear landscape can be encountered. Moreover, how a creative abductive method can metamorphose into new understandings of landscape. The landscape architectural approach created towards the nuclear landscape is the notion of the encounter. The nuclear landscape is contradictory; it is itself the dialogue between the human perceiver and the nuclear power plant. The nuclear landscape has thus the potential of being a bridge. As the transformation of landscapes into production, industrial, and energy landscapes continues to evolve (Haarstad & Wanwick 2016), reimaginings of how to approach landscapes are necessary. The transformation of the nuclear landscape through the subjects of dichotomy, border and distance has shown that the visual alignment that the nuclear power plants have with the landscape is of contradictions and upholds a position of sovereignty. The creative abductive method is a possibility to encounter landscapes more coherently. The study that began with biking between Malmö and Alnarp, of perceiving the nuclear power plants on the horizon, appearing and disappearing, has developed insights into how to continue to stand in dialogue, by being in landscapes that seems to be unknown.

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