MOSEL BEYOND THE PICTURESQUE

From Romantic View to Layered, Resilient Landscape.

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Mosella

"The gifts of Bacchus which in vineyards grow
In long lines and attract one's wandering eye
On rocks and sunny ridges way up high.
Such a dramatic sight!"

Decimus Magnus Ausonius (310-395 AD)

Mosel beyond the Picturesque

The landscape of the Mosel Valley is known for its romantic image; The region attracts thousands of visitors annually and is renowned for its wines, a tradition that has been there since Roman times. The meandering Mosel River and medieval villages add to the picturesque image and contribute to this notion of romanticism. But this heritage landscape faces increasing threats in the form of abandonment of vineyards due to the challenges of steep slopes and high costs of cultivation, resulting in the gradual loss of the cultural landscape.

At the same time, the Mosel River has become both a literal and figurative line in the valley, having lost much of its fluctuating character after its canalization. It has lost its ecological and spatial connection to the surrounding landscape. The decline of both the region's heritage and ecology are largely concealed by the romantic image of the Mosel Valley. This thesis questions the future of the Mosel landscape and examines the elements that contribute to the romanticization of it by means of a terroir analysis and literature review. A vision is developed in which nature becomes the new romantic subject. The vision is tested through a design intervention at Zeller Hamm,that provides different approaches of vineyard re-purposing are developed. Following this, a trail and experiential design are developed that focus on experiencing the new Romanticism.

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Personal Mosel Experience

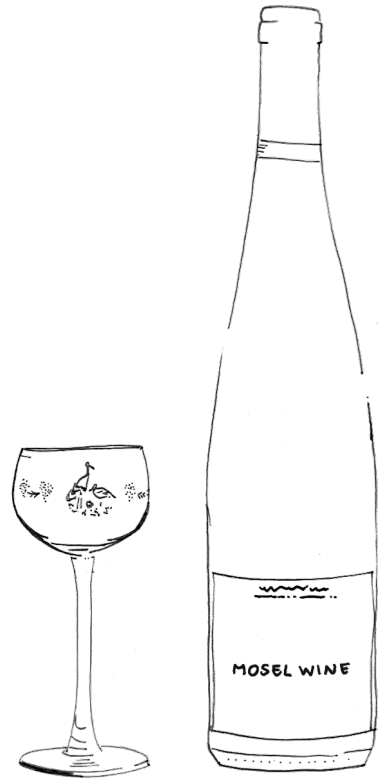
My interest in the Mosel Valley began during family holidays, when I would look out of the car window on our way from The Netherlands to France. Our destination has been the Alsace for as long as I can remember, particularly the northern part of the Vosges Mountains near the German border. The final part of the journey has always been my favorite. After crossing from Belgium into Germany, the landscape suddenly opens: the autobahn is straight and very scenic, crossing valleys on high bridges and overlooking the landscape from a great height. One of these bridges, near Schweich, offers a glimpse of the Mosel Valley, where the river is framed by steep slopes planted with vineyards.

I like using the satellite on Google Maps during traveling, to understand the landscape context of the places I travel through, and seeing the Mosel meanders from above was always intriguing to me. My family has always had a strong love for wine, and as I have grown older, my own interest has grown with this. I became interested in the Mosel vineyards and their romantic but monocultural character. And although I can understand how a river shapes the surrounding landscape, I never really understood the function of the steepness of the Mosel vineyards. This question stayed with me and later became the starting point for this thesis.

I realise that my experience of the Mosel Valley is probably not very different from that of other travelers. The landscape is visually striking, and its vineyards, villages and river give a very romantic scene. When my research on the area started, I noticed that most descriptions focus on viticulture and picturesque villages. Everything seems to revolve around wine and river meanders. The Mosel itself often appears only as a backdrop, much like the vineyard slopes. The region is frequently described as if it were a painting: as a static image that should be carefully preserved exactly as we know it. While I strongly value the craftsmanship and cultural importance of the vineyard traditions, I also see that this landscape (like many other agricultural landscapes) is in crisis. Small, labour-intensive plots are being abandoned or transformed into large, mechanized fields. Perhaps it is time to look at the Mosel Valley more closely.

To put the landscape under a microscope, to take an X-ray and peel back its layers, to understand how it really works and what it truly represents.

This thesis is important to my personal development as a landscape designer, as it marks the conclusion of my years as a student. It brings together the knowledge and skills I have developed during my Bachelor's degree in Landscape Architecture at Wageningen University & Research and during the Master track in Landscape Architecture at Delft University of Technology. I hope this work reflects my values and vision as a designer, and showcases my strongest designs, analyses, and overall body of work.



The Mosel Valley

The Mosel is a rain-fed river that originates in the Vosges Mountains in France and flows from south to north into Germany (Fig. 1). At the city of Koblenz, the Mosel and Rhine River collide and follow the Rhine waterway to the North Sea via The Netherlands. The German section of the Mosel River between Trier and Koblenz is known as the wine region 'Mosel' and has a history that dates to Roman times.

Although the Mosel region is further north than most wine regions, it is suited to produce wines because the valley is relatively warm and sheltered. Vineyards are located on steep slopes facing south to receive optimal amount of sunlight and vines benefit from heat from the ground, as the slate soil heats up during the day and slowly releases heat during the night (Job & Murphy, 2006).

But the Mosel Region is, like other wine regions in Europe, facing decline in the sector. This is a result of difficult production conditions: the vineyards are steep and small, labor is intensive, production cost is high and therefore winemaking is becoming unprofitable (Job & Murphy, 2006). This leads to the abandonment or removal of the traditional steep-slope vineyards that the region is known for, and the historic wine cultural landscape is gradually disappearing. Loss of this Wine Culture Landscape results in a loss of landscape character, wine quality and craftsmanship (Job & Murphy, 2006).

The water of the Mosel River appears quiet and slow, partially because of the weirs that have been constructed in the previous century (EuroCanals, n.d.). The Mosel has not always been calm; the meanders and deeply carved valley indicate a river system that was once far more dynamic. In *The Invention of Rivers*, Da Cunha (2019) argues that rivers are often reduced to simple lines on maps, overlooking their spatial, cultural, and ecological dimensions. This has had influence on how we understand rivers; not as a living system but as a contained line. This theory is applicable to the Mosel River. As the river previously flowed more freely through the landscape, it was different from the controlled waterway we know today. Before the construction of the weirs, periods of heavy rainfall caused the river to overflow regularly, while the water

level was lower during the summer months. The river dynamics and spatial variability have been significantly altered, and the river has been transformed it into a regulated, canalized waterway (EuroCanals, n.d.).

It is important to imagine a future for the Mosel landscape as both pressure on the viticulture sector and the disconnection to the Mosel River are concealed by the romantic imago that the valley has. The challenges that the valley faces might be an opportunity to reframe the Mosel with landscape design. When the landscape is not only considered a romantic, but as an interdependent system shaped by both geological and anthropogenic processes, changes in management can be made and the landscape will become more resilient.

Fig. 1: The Mosel River in context.

A Landscape in crisis

The identity of the Mosel Valley is increasingly under pressure. The disappearance of traditional steep vineyard terraces and the industrialization of wine production collectively contribute to a gradual loss of cultural landscape, as well as a decline in wine quality and craftsmanship (Job & Murphy, 2006). At the same time, the river landscape is becoming disconnected from everyday life in the valley. The Mosel has become a static, contained line within the landscape, rather than as a dynamic, living system that requires space, movement, and fluctuation (Da Cunha, 2019). The romantic image of the cultural landscape may reinforce this disconnection. Wine production and consumption, vineyards, and the river's dramatic curves are celebrated and reproduced in imagery and tourism narratives that are detached from the underlying interdependence between river dynamics, viticulture, and cultural practices. This raises the question of how the different futures of this landscape could look, what the desired future is, and whether the romanticization of the Mosel landscape contributes to a reduced awareness of its layered and interdependent character.

Loss of Cultural Landscape

Analytic thinking is fundamental to landscape architecture. Landscape architects seek to understand landscapes not as static scenes, but as a palimpsest: as layered expressions of natural processes and human activities that have accumulated over time (Bailey, 2007). Landscape is not a static image; it is ever evolving and is in ongoing development. In *The Resilience of Cultural Landscapes*, Aimar (2024) describes landscape as a "system of systems", an interplay between permanence and continuous change. When we use landscapes, it is important to understand these systems. Landscapes are used to our advantage, systems and resources are used up, which leads to large scale implications. But at the same time, we can learn a lot from how we treated the landscape in the past. These cultural landscapes, where the landscape and community have shaped each other, are integral to our collective identity. Losing memory of these landscapes ultimately results in a loss of sense of belonging (Aimar, 2024).

This thesis contributes to a more informed and sustainable engagement with the Mosel Valley. Rather than presenting the landscape as a distant, picturesque image, the project intends to add a layer of understanding that makes the valley's processes and systems legible and experiential. Understanding the cultural landscape and the way it looks can support more conscious decisions in design, tourism, and landscape management eventually leading to more resilience. In this way, the research shows how landscape architecture can improve resilience while strengthening cultural landscapes.

Research Questions

"To what extent can the romantic image of the Mosel Valley be maintained and enhanced through the transformation of its monocultural landscape into a dynamic, resilient landscape?"

1. What geological and anthropogenic processes shaped the Mosel Valley through time?

2. What is a romantic landscape and what contributes to the perception of the picturesque in the Mosel landscape?

3. How do spatial relationships, sequences, and views between the Mosel River, vineyard landscapes, and cultural elements contribute to the romantic experience of the Mosel Valley, (especially at Marienburg and Zeller Hamm?)

4. What problematic of the Mosel can be addressed by landscape architectonic knowledge?

5. Which landscape architectural strategies can address the resilience of the Mosel landscape?

Keywords

Mosel Valley, Cultural Landscape, Landscape Resilience, Picturesque, Romanticism, Viticulture

Design Assignment

"Designing landscape interventions at Zeller Hamm that create awareness for change and increase landscape resilience. The design should critically reinterpret the Romantic Mosel landscape and translate its qualities into contemporary spatial strategies."

The design focuses on visitors of Zeller Hamm and takes the form of a walking route through a new version of the Mosel landscape. The intervention becomes part of the location, designed to work with the site rather than impose upon it. Through materiality, spatial sequencing, and interaction with soil, water, and vegetation, the design adds a new romantic layer to the Mosel landscape in the form of nature. It highlights the dependency of the valley and winemaking on different landscape systems.

Methods

This thesis combines literature research, landscape analysis and design experimentation to investigate the romantic and layered character of the Mosel Region, specifically at Zeller Hamm. The theoretical framework consists of two parts: terroir analysis and desk research, which outlines romanticism and the factors that contribute to the romantic experience of the Mosel landscape (Fig. 2).

For all parts of this research, site visits were needed. The core of this research is about landscape experience, reading time, perspectives and romanticism in the landscape. One site visit was conducted in February 2026, where the first photos were captured and the route at Zeller Hamm was walked for the first time. The second visit was conducted in May 2026 to review design implementations and take pictures in a different season. It was important to visit the site more than once, since the experience of the landscape differs between seasons.

The terroir analysis is used to study the region and the selected site. This theoretical research investigates how the landscape has been shaped over time by geological processes and human interventions. Historical research, photographs and site visits are used to understand the valley's spatial, cultural, and ecological development. This analysis addresses SQ1 by examining how the Mosel landscape has been shaped over time.

After this, Romanticism, experience, and perception of the Mosel Valley are explored. Key concepts such as beautiful, picturesque, and sublime are studied through both desk research and site analysis. This part of the theoretical framework addresses SQ2 and SQ3, using the theory of the romantic landscape as a lens to shape an understanding of how romantic landscape experiences are constructed in the Mosel Valley. From here, design principles are derived.

The terroir analysis and Mosel romanticism are used as a base for the vision for vineyard use in the Mosel Valley, shown as a matrix of actions. To further

explore the vision's possibilities, a detailed design is presented, consisting of a walking route through Zeller Hamm, a design intervention, and the implementation of the vineyard solutions at the site. These designs contribute to answering SQ4 and SQ5 and fulfill the design assignment.

During the design phase, models are produced to understand the context of the Zeller Hamm landscape. One model is made of the Zeller Hamm meander on an A0, scale 1:10.000, roughly shaping the valley and its surrounding relief. The other model is made for design experiments on A3 scale 1:500. Photos of these models are included in the appendix and presented at the final presentation.

The thesis concludes with a reflection on the outcomes of the research and design. This reflection evaluates whether the design challenges the romantic image of the Mosel Valley, assesses feasibility and interests, and argues whether the design can be implemented at other wine-growing regions.

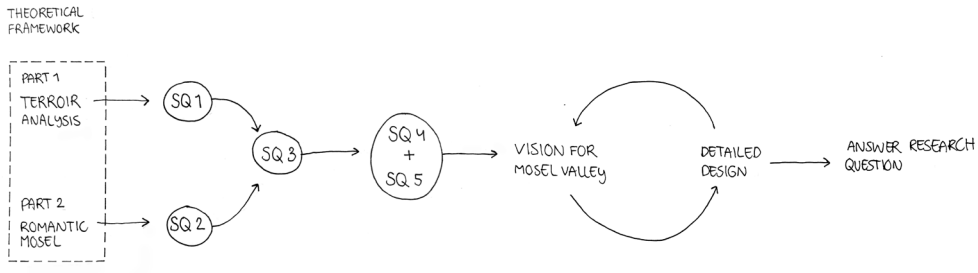


Fig. 2: Schematic overview of the thesis's methods.

Zeller Hamm

The site for this thesis is Zeller Hamm, one of the largest meanders in the Mosel Region (Fig. 3). It lies south of Cochem and downstream of Traben-Trarbach. Several small settlements follow the river's natural course along this stretch, including Reil, Pünderich, Briedel, Zell, Merl, and Bullay. This is the meander where the Mittel Mosel ends and the Terrassen Mosel begins.

Pünderich and Bullay are about 750 meters apart in a straight line yet they are separated by the Petersberg, a peninsula-shaped geomorphological feature formed by the Mosel River's fluvial processes (Fig. 4). Bullay is known for its distinctive double-deck bridge, which carries both railway and road traffic on separate levels. The railway line continues through a tunnel beneath the Petersberg. On the opposite bank of the Mosel near Pünderich, a slope viaduct was constructed. This structure, the longest slope viaduct in Germany, has had a substantial impact on the surrounding vineyard landscape, not only by offering a scenic ride along the river (KuLaDig, 2026), but also because of its value in exporting Mosel Wine since 1879 (Kanonenbahnweg, n.d.).

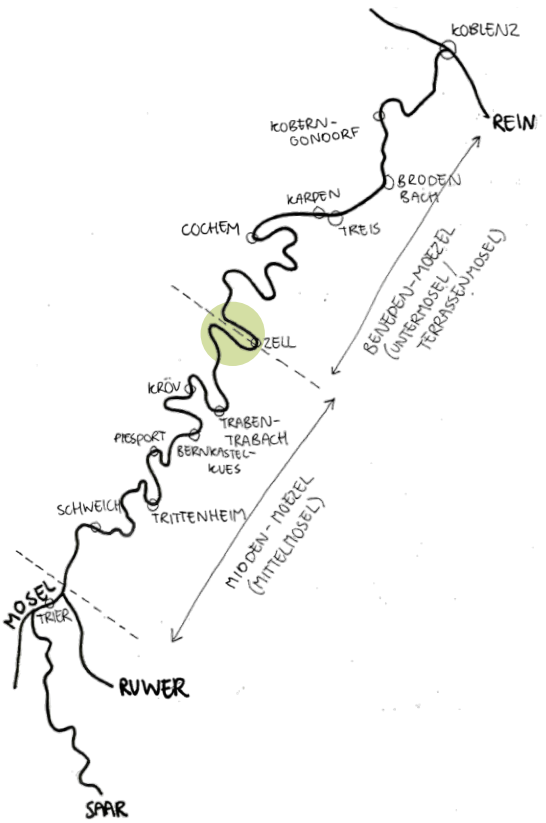


Fig. 3: The German section of the Mosel River, with Zeller Hamm highlighted in green.

Fig. 4: Satellite image of Zeller Hamm.

Zeller Hamm

Burg Arras

Burg Arras is first documented in 1120 as “castello Atrabato”. Its history dates to the 4th century, when a Roman defensive and border fortification was established on the hill. This is supported by archaeological findings, including pottery, glass, and coins (Seifert, 2023). Today, it is a museum and hotel , and is used as event location for marriages and other festivities.

Bullay railway bridge

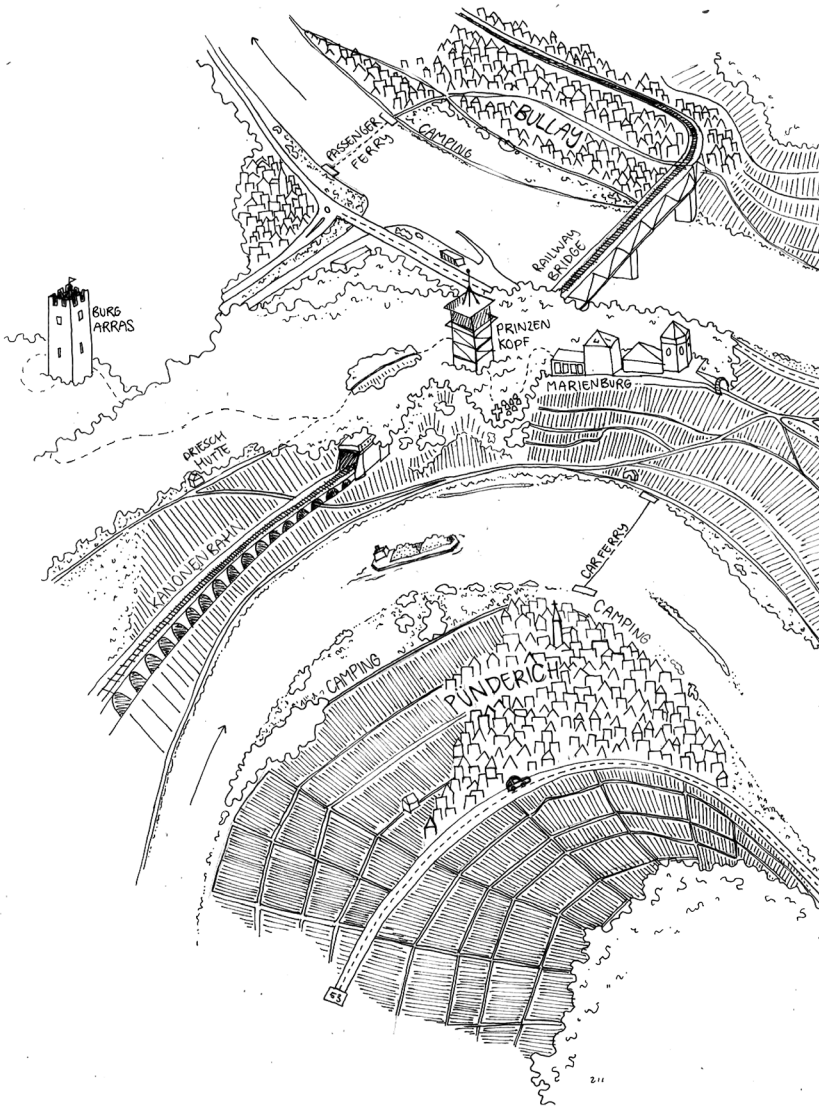
The railway bridge at Bullay was built between 1877 and 1878. Originally designed as a railway bridge only, but later a double bridge carrying both rail and road traffic was constructed. During the Second World War it was repeatedly bombed because of its strategic importance. After intensive attacks beginning in July 1944, was destroyed in February 1945. After the war, residents helped rebuild the structure (Moezeldal, n.d.).

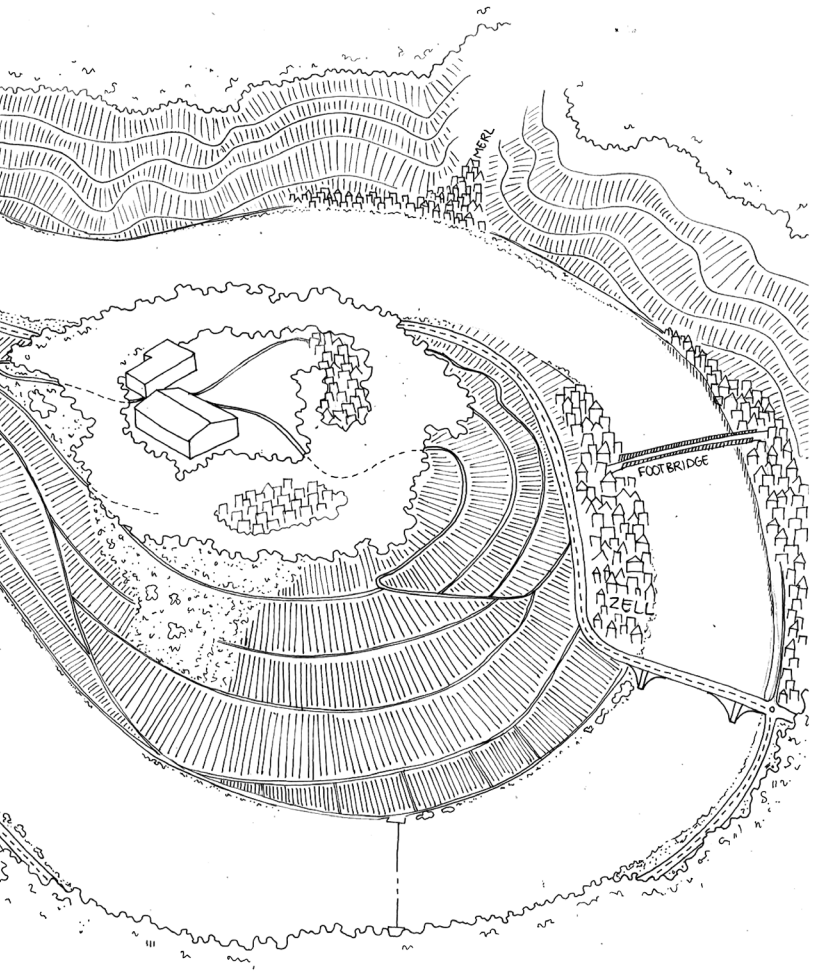
Drieschhutte

Drieschhutte is a small cafe that is open daily during the summer season. They serve their own wines, soda, coffee and snacks and it is a loved place for hikers to stop during their walk. (Driesch Huette, 2026)

Kanonenbahn

Pündericher Hangviadukt is a mountain bridge connecting the Prinzenkopf and Reilerhals tunnels. It is built across steep vineyard slopes, the viaduct required complex engineering solutions, including timber framing for the foundation pits of each pier. Despite numerous bombing attempts by Allied aircraft in 1945, the viaduct survived.





Prinzenkopf tower

The Prinzenkopftower is the viewing tower on this site, its history that began in 1818 when the then Crown Prince and later King Frederick William IV, enjoyed the view of the Mosel from the hill while traveling. The hill was bare at the time and then known as the 'Pferdskopf'. He continued his visits, and the hill came to be known as 'Prinzenkopfhöhe-Prinzenkopf'. Later, forest was planted and a tower was built. Nowadays, it is part of the kanonenbahn trail and visitors enjoy the views at the high tower (Kanonenbahnweg, n.d.).

Prinzenkopf cemitary

Close to the Prinzenkopf tower, the Prinzenkopf cemitary is located. It is a monument in memory of the fallen soldiers and civilians who lost their lives at the end of the Second World War.

Marienburg

Marienburg is first mentioned in 1142 and served as the mother church for several surrounding villages. After the dissolution of the monastery in 1515, Marienburg lost its central role in the area. Today, it serves as a Catholic educational institution, although its future remains uncertain due to declining use, high maintenance costs, and plans to close and potentially sell the site. As of today, no clear new purpose has yet been established. (puenderich, 2026)

Fig. 5: Exaggerated drawing of cultural points of interest in Zeller Hamm, Mosel.

Part I

Terroir of the Mosel Valley

Terroir

"Terroir is not just a geographical site, but also a complex concept aiming to express the *collective knowledge of the interactions* between the environment and the vines mediated through human action"

Bonfante & Brillante, 2022.

Terroir of the Mosel Valley

In the wine-world, a wine region is defined by its unique combination of terroir: a set of interrelated factors including soil composition, topography, climate, landscape characteristics, and biodiversity. In addition, terroir encompasses human influences such as winery tradition and regulatory frameworks. Together, these elements create a distinct environment in which grapes develop specific qualities, resulting in wines with characteristic identities (Bonfante & Brillante, 2022).

A comparable approach can be observed in landscape architecture. The same elements are analyzed and interpreted but used as the foundation for design. This parallel is not coincidental: both disciplines engage directly with the landscape and try to emphasize the uniqueness of a place. However, while viticulture uses the concept of terroir primarily to define and market regional identity, it is used in landscape architecture as an analytical framework to understand spatial conditions and guide design interventions. This chapter explores the different layers of the Landscape Architectural terroir in the Mosel Valley through a terroir analysis, which discusses the geographical context (Soil and topography, climate, biodiversity and hydrology) and Human Influence (Roman heritage, Middle Ages, Golden Era, World Wars, modern times). Lastly, the ecological context and habitat types of the vineyard landscape is discussed.

Geographical Context

The Mosel River is one of the main tributaries of the Rhine River and forms part of one of the most important hydrographic systems in northwestern Europe. It originates in the Vosges Mountains and flows through a catchment that spans four countries: France, Luxembourg, Germany and Belgium (Cordier et al., 2009). Flowing generally northwards, the river eventually joins the Middle Rhine at the city of Koblenz in Germany.

The German section of the Mosel River can be divided into two main subregions: the Mittelmosel (Middle Mosel) and the Untermosel, also known as the Terrassenmosel. The primary distinction between these areas lies in the steepness and morphology of their slopes. In the Mittelmosel, between Trier and Zeller Hamm, natural conditions are more balanced, with broader valley sections and slopes that are steep but generally more manageable. This environment is associated with the production of what are often considered the classic Mosel wines, particularly Rieslings (Cordier et al., 2009). The Terrassenmosel, between Zeller Hamm and Koblenz, is characterized by extremely steep, narrow slopes that pose significant challenges for viticulture. In this subregion, human intervention has been essential as vineyards were established through the construction of terraces and drywalls to make cultivation possible. These terraced landscapes represent a clear example of how human activity has directly reshaped the natural environment to sustain agricultural practices.

Topography

Geological structures of slate control the morphology of the valley and contribute to the steep slopes that characterize the landscape. The geological foundation of this landscape can be traced back to the Devonian Period of the Paleozoic Era, when the region was part of a marine environment in which thick layers of sediment accumulated on the ocean floor. The convergence of the supercontinents Gondwana and Laurasia during the formation of Pangaea subjected these deposits to intense pressure, transforming them into slate (Puckette, n.d.) (Fig. 6).

The meanders formed when the Mosel river originally flowed across a relatively low-relief landscape. During the Tertiary and Quaternary periods, regional tectonic uplift occurred in the Rhenish Massif, the tectonic formation underneath the Mosel Region (Cordier et al., 2012). Instead of migrating laterally across the floodplain, the river maintained its original meandering pattern while cutting downward into the bedrock (Hartenfels et al., 2024). Over time, the Mosel River incised deeply into its terrain, exposing the underlying geological structures and shaping the characteristic steep valleys of the region. The former meanders became embedded in the landscape. Although the resulting slate soils are generally unsuitable for agriculture, they provide distinctive conditions for viticulture.

Fig. 6: Slate soil in a Mosel vineyard.

Slate

The Middle and Lower Mosel are characterized by soils rich in slate and dark clay. The layered rock formations range in colour from grey to black, and in some areas red due to iron content (Fig. 7). The slate absorbs heat during the day and gradually releases it at night, enabling vines to ripen slowly and evenly in an otherwise cool climate (Job & Murphy, 2006). In addition, slate provides good drainage, encouraging deeper root penetration as vines search for water and nutrients, enhancing their access to mineral salts (Della Chiara, 2025). Slate soils are also less conducive to the spread of phylloxera, which explains the presence of many un-grafted, old vines in the region.

There are three main types of slate: red, blue, and grey. Red slate is formed through the heating and oxidation of blue slate. In some vineyards, stones appear red on the surface due to oxidation, while their interior remains blue. Red slate tends to retain less moisture and is therefore more prone to drought stress, whereas grey slate has lower drainage capacity and retains more water (Della Chiara, 2025).

Fig. 7: Different colours of slate in a Mosel Vineyard.

Climate

The Mosel Region is further north than most wine regions, which means that the climate is colder. It is suited to produce wines because the valley is sheltered from rain and cold air streams by the carved-in relief. Vineyards are placed on steep slopes facing south to receive an optimal amount of sunlight, both direct sunlight and light that reflects from the Mosel River. As stated previously, slate soil is a good heat retainer, which means that even the colder nights are still warm enough for vines (Fig. 8).

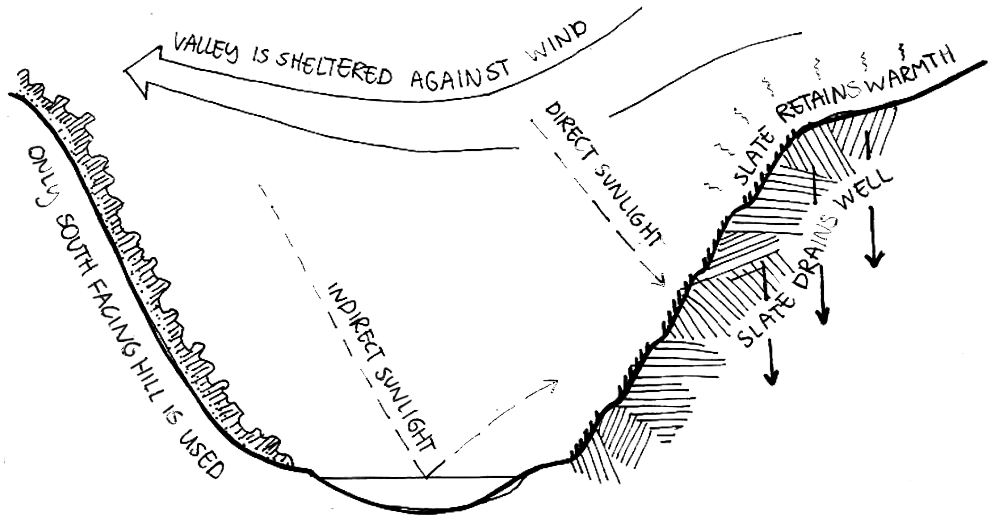


Fig. 8: Environmental factors that provide good conditions for viticulture in the Mosel Valley.

‘Natural’ landscape

The Mosel region has undergone a big ecological transformation over time. Today it is associated with viticulture and a highly managed river system, but it used to be a dynamic and biodiverse natural environment shaped by forests, flooding, and seasonal variation. Some of the species that can be found originally come from the Mediterranean region and are extremely rare in Germany. The occurrence of these heat-loving species on the Moselle is made possible by the mild climate.
Following the last Ice Age, the Mosel valley became covered by dense temperate forests typical of Central Europe. Even today, remnants of the original natural vegetation can be found on the Moselle slopes in the form of light, heat-loving dry forests. These forests are predominantly maple and oak (Lebendige Agrarlandschaften, 2020).

Along the riverbanks, riparian forests developed, dominated by water-loving species like alder, willow, and poplar (Czyżewski et al., 2026). These floodplain ecosystems were particularly rich in biodiversity, providing habitats for a wide range of plant and animal species. Large mammals such as red deer, wild boar and aurochs roamed the region, while the river supported diverse fish populations, including migratory species such as salmon and eel (Mosel commission, 2021).
From Roman times onward, forests were cleared to make way for agriculture and viticulture. The slopes were terraced and increasingly dedicated to vineyards. The most significant changes occurred in the modern period, particularly during the 20th century, when large-scale river projects were undertaken by Germany, France, and Luxembourg. Between the 1950s and 1970s, the Mosel was canalized to improve navigation (Mosel commission, 2021). A system of weirs and locks was constructed, the river channel was straightened and deepened, and water levels are now regulated. As a result, the Mosel was transformed from a dynamic river into a more stable, canal-like system. This has significantly altered natural processes. Floodplains are largely disconnected from the river, and seasonal flooding has been reduced and is more controlled. While this has improved conditions for shipping and reduced flood risk for settlements, it has also led to ecological consequences.

Wetlands and side channels have disappeared, habitats have become more uniform, and biodiversity has therefore declined. The construction of weirs created barriers that disrupt fish migration routes, contributing to the disappearance of species such as Atlantic salmon from the system for a long period (Mosel Commission, 2021). Additionally, slower water flow led to higher water temperatures and lower oxygen levels, which further

affect aquatic life negatively.
In recent decades, efforts have been made to mitigate some of these impacts. Fish passages have been installed at certain weirs to restore migration routes, and ecological restoration projects aim to reconnect parts of the floodplain and improve habitat diversity. Today, biodiversity in the Mosel region reflects a combination of natural remnants and human influence.

Human Influence

Human activity has played a fundamental role in shaping the landscape of the Mosel valley over thousands of years. Archaeological evidence indicates that the region has been occupied since at least 300,000 years ago, with continuous or near-continuous settlement throughout much of prehistory (Cordier et al., 2012). The human presence intensified during the Holocene and became more structurally organized in historical periods, particularly under Roman influence. Key urban centres such as Toul, Metz, and Trier were established or significantly developed during this time, embedding lasting patterns of settlement in the region.

One of the most enduring transformations introduced by the Romans was the cultivation of vineyards. Viticulture became integrated into the regional economy and culture, supported by the consumption of wine, which was a daily staple. Over time, wine production evolved into a defining characteristic of the Mosel landscape, shaping both its physical appearance and identity. Although the popularity and economic significance of Mosel wine have fluctuated in recent decades, viticulture remains a key legacy of human influence in the region.

The Mosel River has held significant cultural, economic, and literary importance since ancient times. During the Roman period, the Valley was a strategic and economic corridor. The Roman city of Augusta Treverorum (Trier) was established along the river and became an important administrative and military centre for the Romans. The river functioned as a crucial transport route linking inland settlements with the wider trade network of the Rhine River basin (EBSCO, 2022).

For the Romans, wine was more than a drink. It was a cultural cornerstone and consumed daily by both wealthy and common people. Wine symbolized civilization and refinement; Roman banquets and religious ceremonies often featured it. They had a god of wine, Bacchus, representing fertility, celebration, and the social and spiritual importance of wine (Dodd, 2022).

Roman soldiers were regularly supplied with wine, which formed an essential part of their diet. Wine was commonly consumed and often diluted with water. As the Roman Empire expanded into northern regions, supplying wine over long distances became less practical and efficient. Romans began cultivating vineyards in newly conquered territories. This practice was not only about provisioning troops but also part of a broader strategy of economic development and cultural integration. By introducing viticulture, the Romans reshaped local agriculture and embedded elements of the Roman lifestyle into these regions (Dodd & Van Limbergen, 2025).

As a result, wine became a major economic and cultural product of the Mosel region, supplying local settlements and connecting them to trade networks across the Roman Empire. Roman villas, forts, and towns in the Mosel region often had their own vineyards, and archaeological evidence demonstrates the wealth and importance associated with wine (Seifert, 2023).

Mosella

One of the most notable literary descriptions of the Mosel River appears in the poem Mosella, written by the Roman poet Decimus Magnus Ausonius around 370 AD. His work provides a portrayal of the river landscape, describing the experience of travelling along its waters and the beauty of the surrounding region. He emphasizes the clear waters of the river, the variety of fish inhabiting it, and the vineyards that cover the valley slopes (Roberts, 1994).
He also refers to the country estates and settlements located along the riverbanks, illustrating the importance of the Mosel in the daily life and economy of the region (EBSCO, 2022).

The poem provides insight into the cultural landscape of the Mosel valley during these times. In his journey, Ausonius mentions the characteristics of the river, its navigability, the diversity of fish species in its waters, and the tributaries that enlarge it on its course toward the Rhine. He highlights the vine-covered slopes and rural villas lining the valley, demonstrating that viticulture and agricultural estates were already central (touristic) elements of the Mosel landscape almost 2000 years ago.

Mosella (160-177)

The gifts of Bacchus which in vineyards grow
In long lines and attract one's wandering eye
On rocks and sunny ridges way up high.
Such a dramatic sight! The Gauran crest
And Rhodope are luminously dressed,
And Mount Pangaea's bright with her own wine,
While Mount Ismarus boasts a verdant shine
Above the Thracian Sea – thus one may see
The golden Garonne painted similarly
By my vineyards, and from the river's verge
Vines grow as to the highest peak they surge.
Blithe folk and busy farmers dash up high,
Then down again as they all roughly vie
With roars. One on the towpath travelling
And a boatman rowing down the stream both sing
Lewd songs to those who prune late in the day.
The rocks, the trembling woods, the stream all pay
Respect to them with echoes.

Middle Ages

After the fall of the Roman Empire, wine remained central to life in the Mosel region. Just as in the Netherlands, where beer was brewed from canal water because clean drinking water was scarce, Medieval Mosel towns relied on wine as a safe source of hydration (Della Chiara, 2025). The necessity of wine shaped the landscape: even more forested hillsides were cleared and terraced for vineyards.

During these periods, the monasteries had the biggest role in selecting the plots for viticulture (Della Chiara, 2025). Places such Marienburg oversaw these vineyards, protecting settlements and controlling trade (Fig. 9). Wine was not only a daily drinking staple, but vineyards stood for wealth and social status, adding onto the value that vineyards had in the landscape.

Fig. 9: Marienburg Church overseeing vineyards in the surrounding area.

Start of the Golden Era

In 1815, the Mosel Region became part of the Kingdom of Prussia, and its wine was competing with other big regions like Pfalz, Baden and Württemberg (Molitor, 2020). But bad weather conditions, the outbreak of vineyard pests, and crop failures led to significant economic decline among Mosel winegrowers. Wine prices dropped dramatically, destabilizing the region's viticultural economy. Despite the region's decline, the Prussian government recognized the Mosel as a wine region worth saving, and they invested heavily in the wine industry. Winemakers were encouraged, and in some cases required, to cultivate the Riesling grape variety. Harvesting practices became more selective, with a focus on later harvests to enhance grape quality. Wines were to be produced in a "natural" manner, without additives or chaptalization, reinforcing a distinct regional identity (Mosel Faszination Wein, n.d.).

The industrialisation and development of the railway in the 19th century boosted the economy further. After the German victory in the Franco-Prussian War, which demonstrated the strategic value of rapid troop transport by rail, the German government planned a railway line connecting Berlin with Metz, and the line was completed in 1879. Parts of the railway in Zeller Hamm are the Bullay railway bridge (Fig. 10) and the slope viaduct along Bullay (Fig. 11).

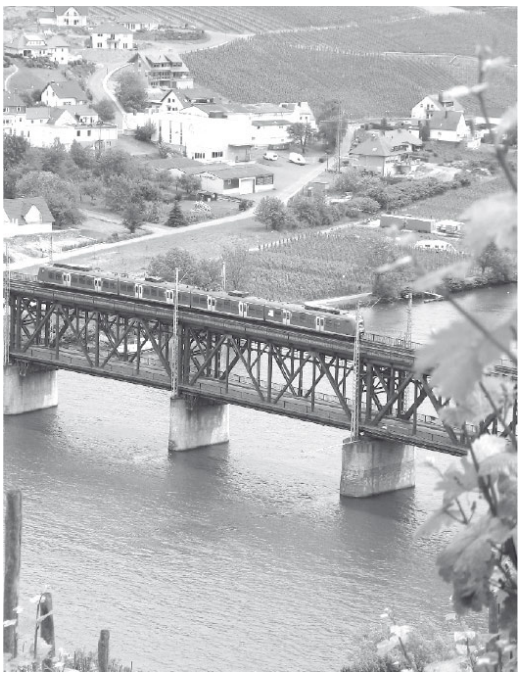


Fig. 10: Bullay railway bridge, the train crosses on the top while cars use the bottom lane.

The railway quickly became a central transport route for the Mosel region. Towns along the line experienced economic growth in industry and commerce. For wine producers and traders, railway transport significantly reduced costs compared to river transport, and tourism developed because the landscape could be experienced from a different setting for the first time: from the train. All these factors had a share in the economic development of the Mosel wine trade (Kanonenbahn, 2025).

In the 1880s, the consumers taste changed from heavy red wines towards lighter, white wines and several vintages were of premium quality in this decade. This elevated the reputation of the wines even further and interest in Mosel Riesling grew around Europe (Molitor, 2020). This period marked the beginning of a "golden era" for Mosel viticulture (Mosel Faszination Wein, n.d.).

Fig. 11: The slope viaduct is iconic in the landscape of Zeller Hamm.

Bulk landscape

The World Wars had a big impact on the Mosel region and brought an end to the region's golden era of viticulture by disrupting production, trade, and the broader cultural landscape of wine. The Bullay railway bridge and viaduct were repeatedly bombed (Fig. 12). Towns and vineyards were destroyed and the bombs left marks still seen today (Fig. 13).

Like stated before, Riesling was the dominant and most prestigious grape variety, but before the world wars, other grape varieties like Pinot Noir (Spätburgunder) were also cultivated successfully in the region. This ended in 1933 when the cultivation of French grape varieties was prohibited by the Nazis, forcing winegrowers to focus almost exclusively on the German Riesling in the Mosel area (Sautter, 2023). The restriction on this cultivar remained until the late 1980s and had long-lasting effects by leading to a near disappearance of red wine traditions in the region. The result is that the diversity of the Mosel's viticultural landscape was significantly reduced, and cultural practices associated with red wine production were largely lost (Molitor, 2020).

In response to economic pressures implicated by the wars, production in the Mosel Region shifted from quality toward quantity. Mosel Riesling became central to this transformation. Winemakers increasingly prioritized high yields, producing large volumes

Fig. 12: Doppelstockbrucke Bullay in 1945 after bombings.

of light, often sweeter wines to meet market demand (Molitor, 2020). Vineyard areas were expanded beyond the traditionally cultivated steep slopes (considered the most suitable terroir) onto flatter areas on the opposite side of the river. These sites were less labour-intensive and cheaper to cultivate, but they often produce wines of lower complexity and character. This resulted in Mosel wines gradually acquiring a reputation for being “sweet and cheap,” marking a significant change from their earlier status as high-quality wines (Sautter, 2023).

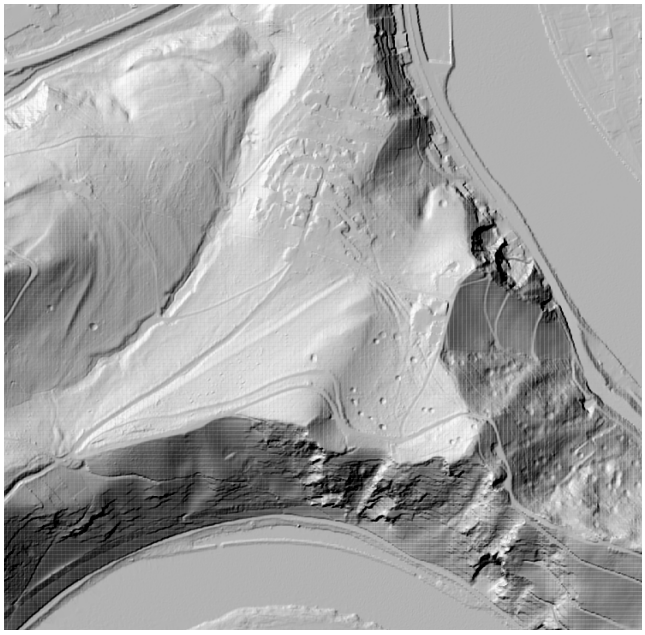
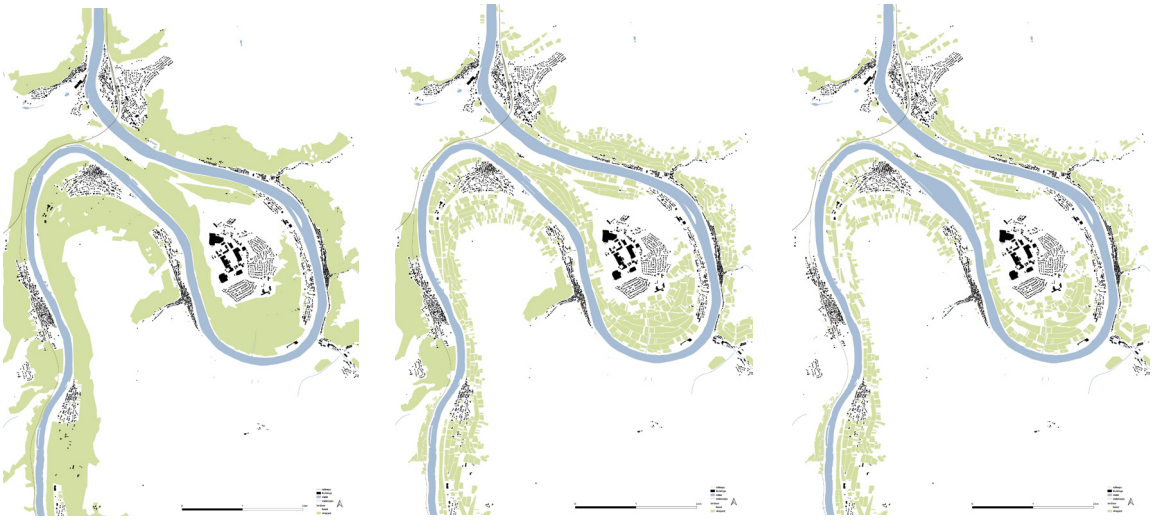


Fig. 13: DTM (Digital Terrain Model) of the area in 2021.

Open plots

In response to economic pressures implicated by the wars, production in the Mosel Region shifted from quality toward quantity. Mosel Riesling became central to this transformation. Winemakers increasingly prioritized high yields, producing large volumes of light, often sweeter wines to meet market demand (Molitor, 2020).

Vineyard areas were expanded beyond the traditionally cultivated steep slopes (considered the most suitable terroir) onto flatter areas on the opposite side of the river. These sites were less labour-intensive and cheaper to cultivate, but they often produced wines of lower complexity and character. This resulted in the abandonment of the traditional steep-sloped vineyards and the degradation of Mosel wine reputation (Fig 14, 15, 16). The wine acquired a reputation for being "sweet and cheap," marking a significant change from their earlier status as high-quality wines (Sautter, 2023).



1990 (estimation) 2020 2050 (prediction)

Fig. 14: Decline of viticultural plots at Zellier Hamm (1990--2050).

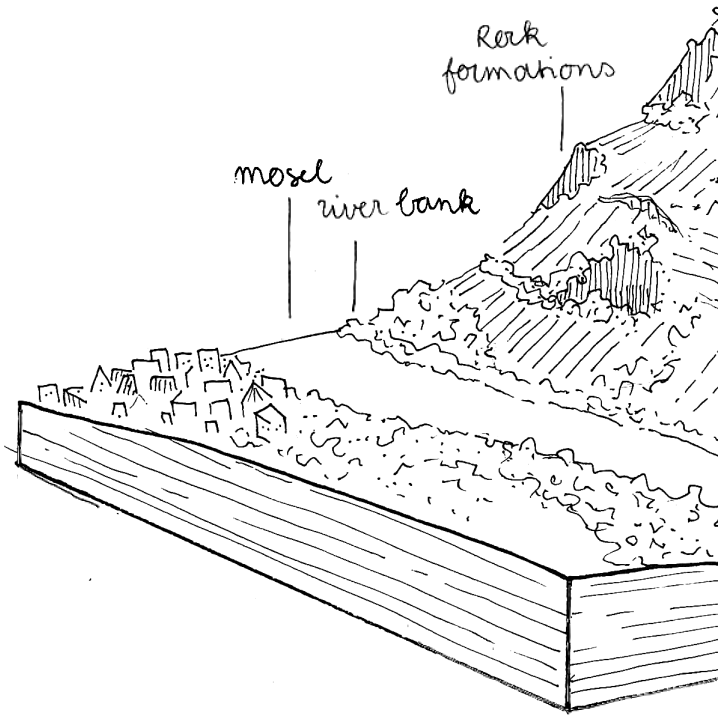
Fig. 15: Pündericher vineyards around 1930.

Fig. 16: Pündericher vineyards around 2020.

Vineyard Habitats

Characteristic of vineyard slopes in the Mosel area are the mosaic-like structure of various interconnected habitats (Fig. 17). Open and vegetated areas in different succession stages alternate. The species found in the vineyard landscape are adapted to a habitat favored by heat and dryness. They are heat- and drought-loving species whose main distribution area is often in the Mediterranean region. Many species were probably introduced to Central Europe by the Romans along with the grapevine. (Lebendige Agrarlandschaften, 2020).

The conditions for these species are ideal on the warm Mosel slopes. There are hardly any shaded areas, and slate soil, as well as the rocks and walls, heat up quickly and store the warmth. The animal species living here require a change between open and vegetated habitats. The open areas are used as sunbathing spots, for mating or movement, the overgrown areas as retreats, hiding places, for feeding and hibernating.



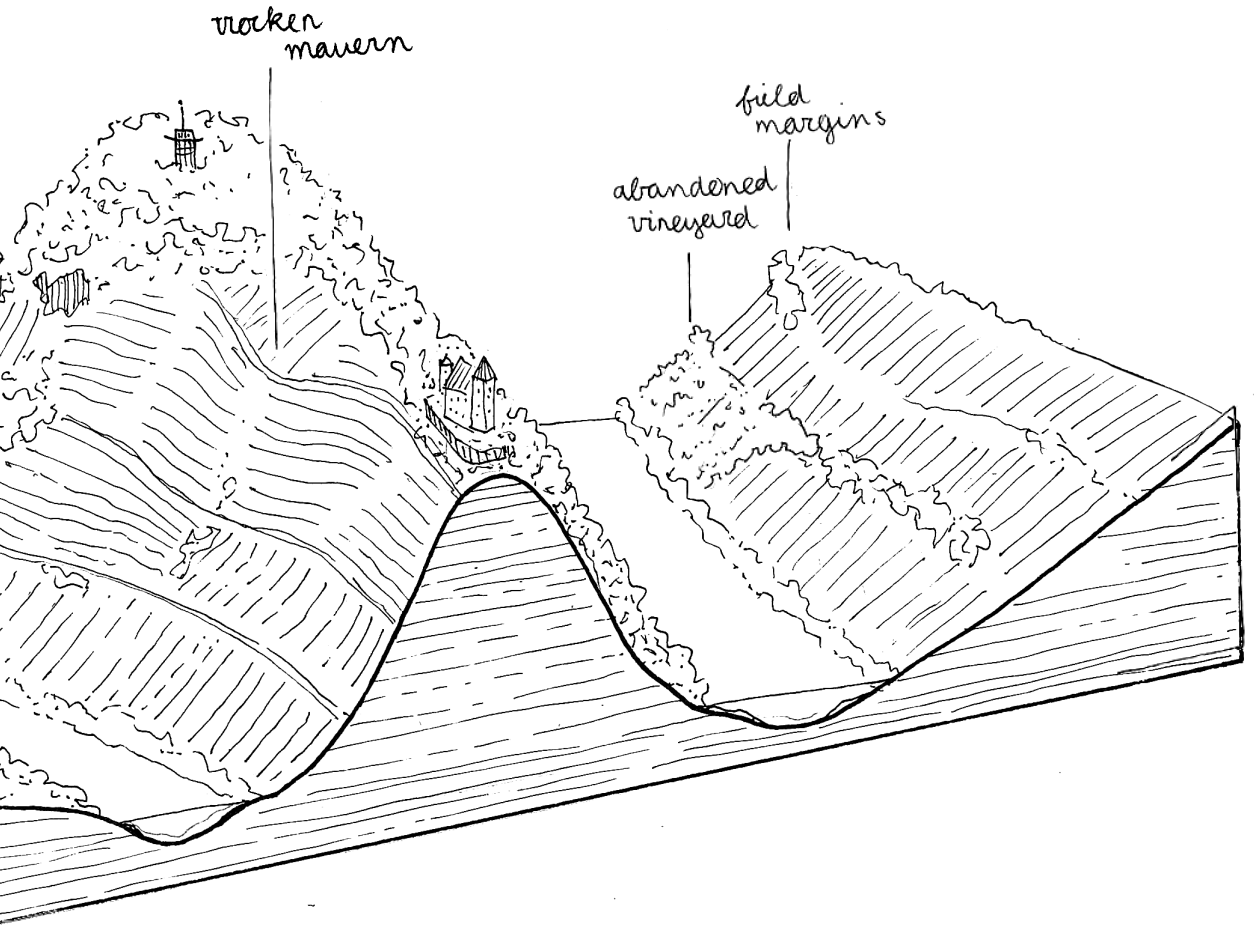


Fig. 17: Axonometry of Zeller Hamm showing different habitat types.

Many stable populations of species that are rare and sometimes highly endangered in Germany can still be found along the Mosel. These include animal species such as the Mosel Apollo butterfly (Fig. 18), Chequered blue butterfly (Fig. 19), European green lizard (Fig. 20), Cirl bunting (Fig. 21), Common Linnet (Fig. 22) and plant species such as dyer's woad (Fig. 23), houseleek (Fig. 24), and dittany (Fig. 25)(Ness & Haart, 2019).

Fig. 18: Mosel Apollo Butterfly *(Parnassius apollo).*

Fig. 19: Chequered Blue Butterfly *(Scolitantides orion).*

Fig. 20: European Green Lizard *(Lacerta viridis).*

Fig. 21: Cirl bunting *(Emberiza cirlus).*

Fig. 22: Common Linnet *(Linaria cannabina).*

Fig. 23: Dyer's woad *(Isatis tinctoria).*

Fig.24: Houseleek *(Sempervivum tectorum).*

Fig. 25: Dittany *(Dictamnus albus).*

Vineyards

Vineyards are dominated by grapevines, which themselves have limited direct ecological value but shape surrounding biodiversity (Fig. 26). Between the vine rows, known as vineyard lanes, grasses and herbs such as viper's bugloss (Fig. 27), toadflax (Fig. 28), and salad burnet (Fig. 29) provide food resources for insects and birds (Ness & Haart, 2019). These areas are often intensively managed and accessed by machinery, which favors fast-regenerating grasses adapted to frequent disturbance. However, through greening measures and reduced use of pesticides and fertilizers, a greater diversity of wild herbs can be maintained or re-established in these vineyard lanes. (Lebendige Agrarlandschaften, 2020).

Fig. 26: Biodiverse vineyard lane along the Mosel.

Fig. 27: Vipers Bugloss *(Echium vulgare).*

Fig. 28: Toadflax *(Linaria vulgaris).*

Fig. 29: Salad Burnett *(Sanguisorba minor).*

Abandoned Vineyards

When a vineyard is abandoned and the area left to its own devices, it undergoes natural succession (Hurajová et al., 2024). Initially, tall herbaceous vegetation develops, including oregano (Fig. 31), dyer's woad, wild carrot (Fig. 32), or elecampane (Fig. 33). This is followed by shrubs and bushes such as blackberry (Fig. 34), blackthorn (Fig. 35), dog rose (Fig. 36), hawthorn (Fig. 37), and even wild fruit trees can become dominant (Lebendige Agrarlandschaften, 2020). After more than 100 years, a site-typical dry forest community would eventually develop on such an area.

In many cases, however, succession becomes dominated by dense blackberry and clematis (Fig 37). This reduces biodiversity, as many species in vineyard ecosystems depend on low, open vegetation and a high diversity of flowering plants (Ness & Haart, 2019). Dense shrub layers displace typical dry grassland species and limit habitat quality (Fig. 38).

To maintain biodiversity, abandoned vineyards need active management to preserve heat-loving dry grassland communities. This includes regular mowing, removal of shrubs, and in some cases grazing (e.g. with goats). Soil aeration can also support habitat quality by improving water, air, and nutrient availability in compacted ground (Lebendige Moselweinberge, 2024). Properly managed fallow land enhances biodiversity, restores ecological balance, and can reduce pests in neighboring vineyards (Hurajová et al., 2024).

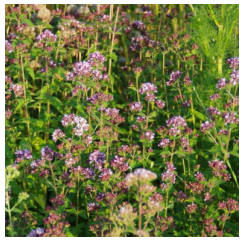


Fig. 30: Oregano
(Origanum vulgare).

Fig. 31: Wild carrot
(Daucus carota).

Fig. 32: Elecampane
(Inula helenium).

Fig. 33: Blackberry
(Rubus fruticosus agg.).

Fig. 34: Blackthorn
(Prunus spinosa).

Fig. 35: Dog rose
(Rosa canina).

Fig. 36: Hawthorn
(Crataegus monogyna).

Fig. 37: Clematis
(Clematis vitalba).

Fig. 38: Abandoned vineyards (left) next to vineyards that are still in use (middle).

Trockenmauern

Since the Middle Ages, vineyards along the steep slopes of the Mosel have been cultivated on terraces. To stabilize these terraces and protect them from erosion and landslides, drystone walls (trockenmauern) were constructed between the individual vineyard sections (Fig. 44).These walls were carefully built from precisely fitted stones without the use of mortar, reflecting a long-standing tradition of craftsmanship in the region (Fig. 39)(Lebendige Agrarlandschaften, 2024).

Dry-stone walls create highly diverse microhabitats within limited space. Their structure generates combinations of warm and cool, dry and moist, shaded and sunny conditions, making them ecologically valuable habitats for a wide range of species. The heat-retaining properties of the stones produce a hot microclimate that supports plants adapted to heat and drought, including white stonecrop (Fig. 40) and mullein (Fig. 41).

The walls also play an important role for wildlife. The vegetation growing in the crevices provides food sources and egg-laying sites for many insects, such as the Moselle Apollo butterfly. In addition, the warmed stones are used by reptiles including wall lizards (Fig. 42) and emerald lizards (Fig. 43) (Ness & Haart, 2019).

Beyond their ecological role, dry-stone walls significantly influence the microclimate of the vineyard terraces. Due to their thermal mass, the stones absorb heat during the day and slowly release it at night, moderating temperature fluctuations and creating favorable conditions for viticulture (Faszination Mosel, 2026). The terraced structure additionally improves water retention and contributes to a more balanced local hydrological system.

In recent decades, many traditional dry-stone walls have gradually been replaced by prefabricated materials and concrete blocks, leading to a decline in both traditional building practices and ecological habitats (Bitz et al., 1996).

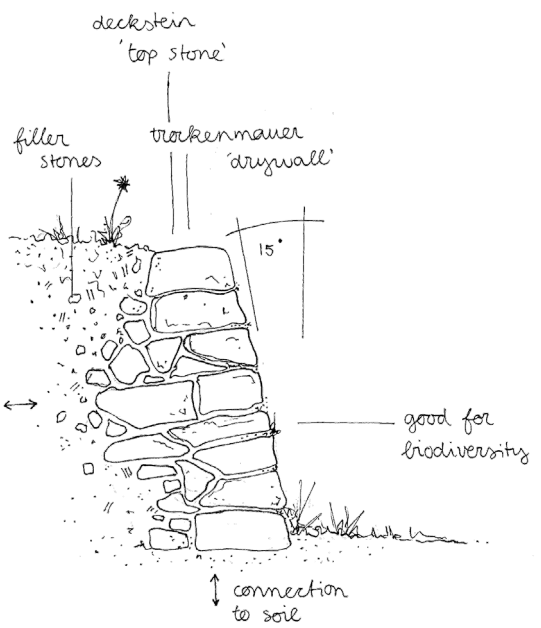


Fig. 39: Section of drywall.

Fig. 40: White stonecrop *(Sedum album)*

Fig. 41: Mullein *(Verbascum thapsus).*

Fig. 42: Wall Lizard *(Podarcis muralis)*

Fig. 43: Emerald lizard *(Lacerta bilineata)*

Fig. 44: Drywall overgrown with moss and vegetation.

Rock formations

Even before viticulture began on the Mosel slopes, the forests covering these were interspersed with larger rock formations. These rocks are still part of the landscape today (Fig. 48). Just like the dry-stone walls, the rock creates a hot and dry microclimate, and the plant species found here must be well adapted to it. Both herbaceous plants, such as white stonecrop, carthusian pink (Fig. 45), round-leaved bellflower (Fig. 46), and cypress spurge (Fig. 47) grow here, as well as heat-loving rock scrubs that grow directly on the rocks or in the deep rock crevices.

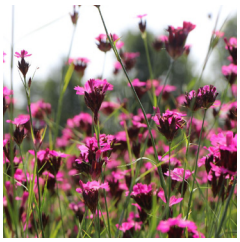


Fig. 45: Carthusian pink *(Dianthus carthusianorum)*

Fig: 46: Round-leaved bellflower *(Campanula rotundifolia).*

Fig. 47: Cypress spurge *(Euphorbia cyparissias).*

Fig. 48: Rock formation and drywall in a vineyard of Clemens Bush, Pünderich.

Field margins and wedges

Various marginal structures can be found between the individual sub-habitats in the vine-yard. Field margins thrive at the edges of the vineyards and along the paths.
Typical herbaceous plant species of dry grasslands usually grow here, such as wild carrot or carthusian pink. The flowering plants found here serve as a food source for numerous birds and insects. Which are in their turn food for reptiles. The hedgerow vegetation also serves as a refuge for many animals (Bitz et al., 1996).

Habitat Mosaic

Maintaining the Mosel's cultural vineyard landscape is essential from an ecological perspective because it preserves a unique mosaic of habitats that support high biodiversity. Many species in this region depend on open, warm, and structurally diverse environments created by traditional land use, such as vineyards, dry-stone walls, field margins, and abandoned terraces. Without active management, these habitats would gradually disappear through natural succession, leading to a loss of light-demanding and heat-adapted species. Conservation of this landscape therefore helps maintain ecological diversity, protects specialized species, and sustains the balance between semi-natural habitats and human land use that has developed over centuries.

Terroir of the Mosel Valley

The sub-question that is linked to the Landscape Biography is "*What geological and anthropogenic processes shaped the Mosel Valley through time*?"
The chapter "*Geographical context*" shows that non-human factors in the landscape took thousands of years to develop. Ice ages, droughts, tectonic shifts and water changed the landscape into the Mosel Valley that we have become familiar with. In comparison, the Human Influence is only a fraction of this timeline. Despite this relatively short time span, humankind has managed to alter the landscape through excavation, warfare, construction and reconstruction, and most importantly: viticulture. This has gone to such extremes that species have evolved with it and need the openness of the hillsides to survive.

Just like the wine-term "terroir", the landscape of the Mosel Valley cannot be captured in a single word. It is the result of countless layers of history that converge within the landscape, and by extension, within a glass of wine. Each meander in the landscape reflects not only the soil and climate, but also the accumulated imprint of geology, time and human intervention. Both the ecological side and wine culture heritage are reasons why this is an important landscape to preserve. From an ecological perspective, maintaining this landscape is crucial because many species depend on the open, warm and diverse mosaic of vineyards, dry-stone walls and semi-natural habitats. Without active management, these habitats would gradually disappear through natural succession, leading to a loss of specialized biodiversity.

Part II

Romantic Mosel

Landscape

"From the very beginning, landscape locates the viewer at its center, as its point of origin. There is no possibility of looking at landscape free from a cultural framing or a subjective lens, for there is no landscape *out there*, landscape is always already *in here*."

Vittoria di Palma, 2016.

Romantic Mosel

This chapter explores romanticism, romantic landscapes, and what contributes to the perception of the picturesque in the Mosel landscape. It studies how spatial relationships, sequences and views of the river, vineyard landscape, and cultural elements contribute to the romantic experience of the landscape.

Romanticism

The Mosel Valley is often described as Romantic and picturesque in tourist folders, on wine labels, in books and on websites. Its dramatic curves and vineyards have long inspired painters, poets, and travellers (Job & Murphy, 2006).

> "The many villages along the river are romantic and the scattered castles make the landscape look straight out of a fairytale." (ANWB Travel Guide, 2024)

But what makes a landscape romantic is not simply the use of the word "romance", but its connection to the movement of Romanticism (1800–1850). Romanticism was both an artistic movement and a broader attitude toward life in which emotion and the individual were placed at the centre (Kunstmuseum, n.d.). Its influence extended across politics, philosophy, and science, but found its strongest expression in literature, music, and the visual arts (Dupré, 2013). Historically, Romanticism emerged from tensions within the Enlightenment and the disturbances of the French Revolution. It arose from a mixture of hope and disillusionment, transforming Enlightenment ideals into a more imaginative and emotionally charged vision of human existence.

Where Enlightenment thinking emphasized reason and order, Romanticism shifted attention toward perception, feeling, and subjectivity (Dupré, 2013). Until the mid-to-late nineteenth century, artists largely sought to depict the world as it appeared, trying to be accurate and realistic. Romantic artists broke from this tradition by adopting a more individual perspective. Rather than reproducing objective reality, they painted their impressions of it. They were often seeking escape in their work, favouring exotic and dramatic subjects such as mountains, waterfalls, and stormy seas. Their art frequently expressed a longing for the past while idealizing the present (Olmstead, n.d.).

Romanticism places the human subject at the centre of meaning. Reality is no longer seen as something objective and rational, but as something shaped by imagination and emotion (Fig. 49). A defining feature of this perspective is its orientation toward the infinite. Romantic artists and writers are driven by a deep sense of longing for something beyond the finite world (often described by the German term Sehnsucht). This longing may appear as nostalgia for a lost past, a desire for harmony with nature, or a search for spiritual or artistic perfection (Dupré, 2023). Yet the object of this desire always remains out of reach, making Romanticism a movement defined by yearning and not by fulfilment.

Ultimately, Romanticism reflects the awareness that humans are separated

from an ideal unity, whether with nature, the past, or the divine, while still being driven to recover it. This unresolved tension between limitation and aspiration gives Romanticism its enduring emotional depth or 'yearning' for something that is unreachable (Dupré, 2013).

Fig. 49: "The Burg at Cochem on the River Mosel from the South-East, beyond Sehl" by Joseph Mallord William Turner (1775 – 1851). Turner was an English Romantic painter known for his expressive coloring and marine paintings. He sketched this specific picture while traveling in 1840.

Landscape Garden

In Landcape Architecture, the Romantic movement showed in Landscape Gardens like Stourhead in Wiltshire, England (Fig. 50). These gardens emerged from gardeners imitating landscape paintings (Di Palma, 2016) (Fig 51).

The development of these gardens was closely linked to the Grand Tour, an educational journey undertaken by upper-class British men, which trained travellers to perceive foreign landscapes through established pictorial conventions. Paintings by romantic artists shaped how monuments and ruins were viewed, and the circulation of these images produced an "ideal" landscape defined by painterly composition, framing, and atmosphere. This translated into the Landscape Garden, which functioned as a miniature Grand Tour, designed through sequences of views, panoramas, and carefully framed scenes that reinforced landscape as a constructed way of seeing rather than a direct encounter with nature. There is a resemblence between the photo of Stourhead and the painting by Gilpin. The framed view, calm water and ruins in the background. Even the trees in the garden act as if they were mountains. (Steenbergen & Reh, 2003).

Fig. 50: The garden at Stourhead, Wiltshire, England.

Fig. 51: "Landscape with a Ruined Castle" (1790). Picturesque watercolour painting by William Gilpin.

Beautiful, Sublime, Picturesque

The concepts of the picturesque, the sublime, and the beautiful emerged during the Romantic period as key aesthetic categories through which landscapes were understood and evaluated. While closely related, each term describes a distinct mode of perception and emotional response, particularly in relation to nature.

The Beautiful is the oldest and most defined of the three. In his '*A Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful*' (1757), Edmund Burke describes beauty as that which evokes pleasure, harmony, and affection. Beautiful landscapes are typically smooth, balanced, and gentle: rolling hills, soft vegetation, and calm waters. They invite contemplation without disturbance, producing a sense of ease and comfort. Beauty is associated with proportion, clarity, and order.

In contrast, the sublime refers to experiences that overwhelm the observer, combining awe with a degree of fear or terror. For Burke, the sublime is linked to vastness, obscurity, and power, which are qualities that exceed human comprehension and control. Towering mountains, violent storms, deep chasms, and dark forests exemplify the sublime in nature. The sublime arises when the imagination fails to fully grasp what is perceived, yet reason asserts a sense of inner superiority. The result is a complex emotional state in which fear is transformed into admiration (Fig. 52) (Steenbergen & Reh, 2003).

Between these two lies the picturesque, a concept developed most notably by William Gilpin in the eighteenth century. The picturesque describes landscapes that are visually interesting, irregular, and compositionally rich. Essentially landscapes that resemble a painting. Unlike the smooth harmony of the beautiful or the overwhelming intensity of the sublime, the picturesque values variety, texture, and contrast. Ruins, winding paths, broken ground, and asymmetrical forms are central to this aesthetic. The picturesque often incorporates signs of human presence (such as cottages, bridges, or decaying castles) which add narrative and historical depth to the scene.

These three categories are not mutually exclusive but rather form a spectrum of aesthetic experiences. A single landscape can shift between them depending on viewpoint, weather, or interpretation. In the Mosel valley the landscape might be perceived as beautiful in soft sunlight, picturesque when framed by irregular vineyards and ruins, and even sublime under great height or conditions of fog or storm.

Fig. 52: "The Wanderer Above a Sea of Fog" evokes the sublime in the observer. Painted by Caspar David Friedrich in 1817.

Romantic Mosel Valley

The previous framework helps explain why the Mosel Valley can be understood as a romantic landscape. The Mosel is not a wide, open Valley. It is narrow and enclosed. The slopes rise steeply and abrupt from the river edges. Following the river, views are constantly blocked and revealed again as the river bends, leaving curiosity to the visitor. The spectator never sees the whole picture at once, which results in the landscape feeling like something to be discovered. Old castles and abandoned structures suggest the passing of time and lost histories. Each bend of the river introduces a new composition of villages, vineyards, castles and water, forming a continuous visual narrative.Atmospheric conditions further enhance the romantic quality of the valley. Mist gathers due to the steep slopes, sunlight varies between shaded (north side of hillside) and sunlit (southern side of hillside) areas. This contrast is intensified by the pattern of viticulture on sunny slopes and forestation on shaded ones, creating a dynamic interplay of light and texture.

Nothing in the landscape needs to be exaggerated, it already operates as a romantic composition. Nature, history, and human presence are combined in a way that feels poetic rather than purely functional. Compared to more monumental landscapes such as the Rhine Valley or the Alps, which present nature as overwhelming and sublime, the Mosel Valley is quieter and more intimate. It is defined by continuous interaction between river, slopes, and settlements, without a single dominant viewpoint. Instead, everything unfolds gradually, carried along by the flow of the river.

In the context of designing in the Mosel Valley with a romantic lens means translating these ideas into spatial principles (Fig. 53):

- Passing of time: Awareness of seasonal changes, shifting water levels of the Mosel River and the gradual transformation of vegetation.
- Contrast: Between culture and nature, the organic flow of the river and geometry of vineyard rows.
- Limited visibility: Open and closed vegetation, framing views and guiding sightlines.

Fig. 53: Design principles for designing in the Mosel valley.

Beautiful

The landscape at Zeller Hamm is balanced and gentle: rolling hills, soft vegetation, and a calm river. The viewer gets a sense of ease and comfort.

Sublime

The Prinzenkopf tower lets the viewer see the landscape from great height, combining awe with fear.

Picturesque

The Marienburg church in the background, together with the texture of vineyards in the front, winding paths, and the slope viaduct in the background create asymmetrical forms that are picturesque.

Fig. 54: Three concepts of Beautiful, Sublime and Picturesque in the Mosel landscape.

Conclusion Theoretical Framework

Romanticism, though rooted in nostalgia and a longing for the past, can offer a surprisingly relevant perspective for modern times. It can encourage an appreciation of small, meaningful elements of everyday life. In this sense, a renewed form of “romanticism” can be understood as valuing nature, embracing slowness of seasons, and finding hope in subtle experiences. Nature can become the new object of admiration in this era, not as something to control, but as something to give space to and coexist with. This way, the landscape will not just be productive but also emotional and symbolic.

The analysis shows that although the landscape has evolved and adapted to human influences, there is a big change going on in the Mosel Region. While vineyards are increasingly being abandoned due to high production costs, plots become overgrown by invasive species and biodiversity declines. The cultural heritage of the vineyard landscape is under pressure. Taking the form as the renewed romanticism in this landscape and treating these plots in the right way, they can become the puzzle pieces in the mosaic of the Mosel landscape.

While species have adapted to the openness of the vineyard slopes and variability of drywalls, a form of nature needs to be introduced that mimics the openness and rhythm of the vineyards visually, while at the same time being biodiverse. This will be discussed in the following chapter: Vision for the Mosel Valley.

Part III

The Design


LAY

Design Assignment

"Designing landscape interventions at Zeller Hamm that create awareness for change and increase landscape resilience. The design should critically reinterpret the Romantic Mosel landscape and translate its qualities into contemporary spatial strategies."

Part III - The Design

As landscape is something that is perceived on a smaller scale, a small-scale design intervention is developed at Zeller Hamm. It is essential to embed this smaller design within a broader vision to address the general problems of abandonment of vineyards and disconnection from the river. The proposed design explores alternative uses for abandoned vineyards while also reintroducing floodplains to the river in selected areas. This approach aims to support and enhance biodiversity and ecological resilience, while simultaneously reshaping the vineyard landscape.
Rather than maintaining a purely nostalgic image of the Mosel that is centered on its historical peak in viticulture, a new “romantic” narrative emerges. This renewed perspective shifts the focus toward the beauty of the valley itself. In this vision, nature is not secondary to cultural production but becomes the primary driver of landscape identity, something that can be percieved in the smaller scale design at Zeller Hamm.

A Romantic Mosaic

The Vision for the Mosel valley consists of a spatial plan for the Mosel River and the vineyards of the region, using the slope of vineyards to determine the type of intervention that is needed. This helps to preserve both the romantic elements of the valley and biodiversity.

Walking Route

The design is intended to test the vision in a small scale plan, making it an experience for visitors trough a walking route and design intervention.

A Romantic Mosaic

The vision is split up in two parts; one for the Mosel River and one for the vineyards. Where spatial conditions allow, floodplains can be (re)introduced along the Mosel. This restores a part of the river's natural dynamics, making seasonal fluctuations in water levels visible again, helping with perceiving the river less as a contained line and more as a fluctuating system. In addition to reducing flood risk, these areas create valuable habitats and increase ecological diversity, reinforcing the river's role as a living system rather than a fixed infrastructure.

As viticulture declines in certain areas, especially on steep and less economically viable slopes, a range of adaptive strategies can be introduced depending on the slope of these empty plots (Fig. 53). The interventions aim to maintain the visual identity of the vineyard landscape while giving space for species to thrive.

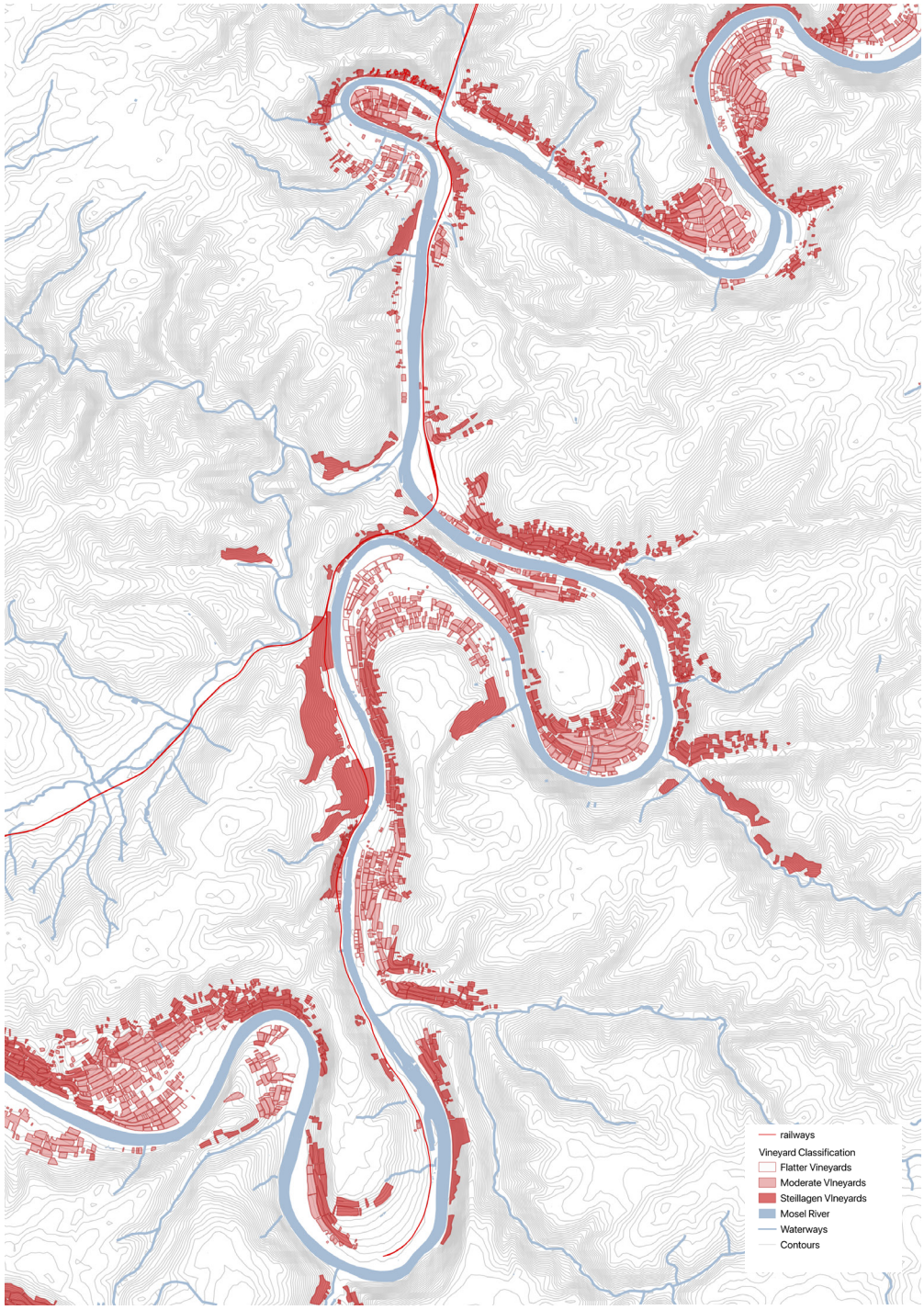


Fig. 55: Steepness of vineyards along the river.

Mosel Floodplains

Along the Mosel, there are areas of vineyards that originated from the period of mass production. These lower, flatter areas offered a more economical alternative for producing large volumes of cultivating sweeter wine. Because of the low slope, they are not constrained by hillside orientation, unlike steep or sloped sites that are facing south for optimal sunlight exposure. As a result, flat vineyards do not benefit from the same level of solar advantage.
This difference in topography is also reflected in vineyard layout. Rather than following the contour lines of a hillside, flat vineyards are typically planted in a more regular, geometric pattern, often with rows running perpendicular to the river. This allows for easier mechanisation and more efficient vineyard management, reinforcing their role in higher-volume, lower-cost wine production (Fig. 56).

One potential site for floodplain restoration can be found at Zeller Hamm. Historical maps show that parts of the floodplain were already converted into polders around 1800 (notably on the southern side of Petersberg) (Fig. 57), while other areas remained natural floodplain until the late 19th century. Over time, these floodplain areas disappeared and have since been transformed into vineyards (Fig 58, 59, 60).

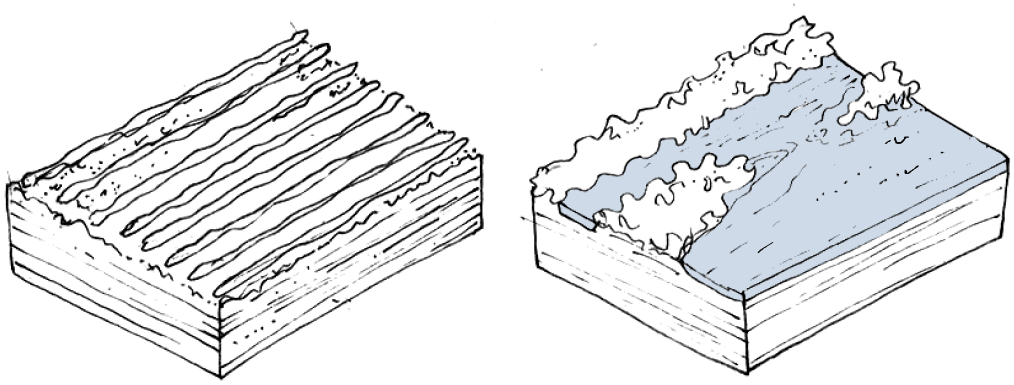


Fig. 56: Flat vineyard (left) becomes floodplain (right).

Fig. 57: Historical map of Petersberg around 1803 -1820.

Fig. 58: Historical map of Petersberg around 1843 - 1878.

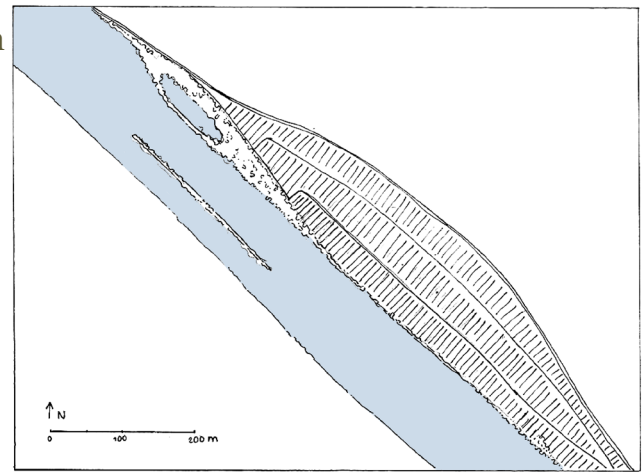
Fig. 59: Steepness of vineyards at the Petersberg.

Fig. 60: Satellite Photo of 2025.

These vineyards can become part of the river by removing the harsh river sides and digging a side channel through the area (Fig 61). The river water will slowly overtake the new area, eroding the parts in between (Ruimte voor de Rivier 2.0, 2026). This intervention restores a part of the river's natural dynamics and it helps the river function better as a single, cohesive system.

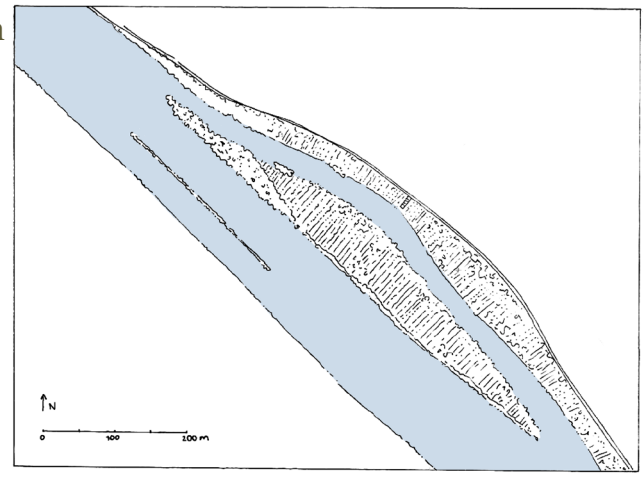
Current situation

Flat vineyards, minimal species diversity and abrupt river edges.



Initiation

Initiation phase: The design is implemented and a side channel is dug in the flat area. The river can move freely in this area, both in sedimenting and eroding.



In 10 years

The river has taken over the area, different types of vegetation and species are thriving.

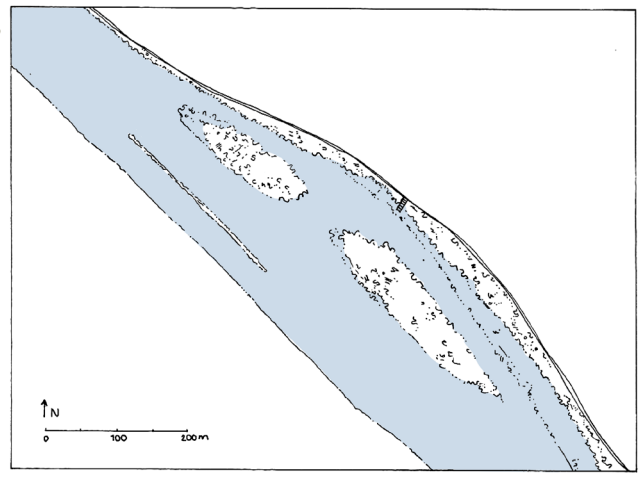


Fig. 61: Transformation of the floodplain over time.

Post-vineyard life

Moderate slope vineyards

Moderate sloped vineyards represent a middle ground between flat and steep vineyard sites. They are generally easier to manage and allow for partial mechanization, which helps reduce labor costs while still benefiting from some slope-related advantages (Fig. 62).

Although the wines made from these vineyards do not achieve the same intensity and complexity often associated with the steepest slopes, moderate vineyards offer a reliable balance of quality and economic viability. This makes them the most important for producers aiming to combine sustainable production with good overall wine quality. These sites are often less prone to erosion and extreme runoff than very steep slopes, and they can retain moisture more effectively, an advantage becoming increasingly relevant with climate change.

Moderately sloped vineyards can serve as important transition zones within a changing landscape. Rather than being used solely for viticulture, these areas offer opportunities for mixed-use systems with biodiversity corridors, low pesticide use or diversifying inter-lanes (Fig 63, 64). Their relatively manageable terrain allows for flexibility, making them ideal for integrating ecological functions with continued, but more sustainable forms of production.

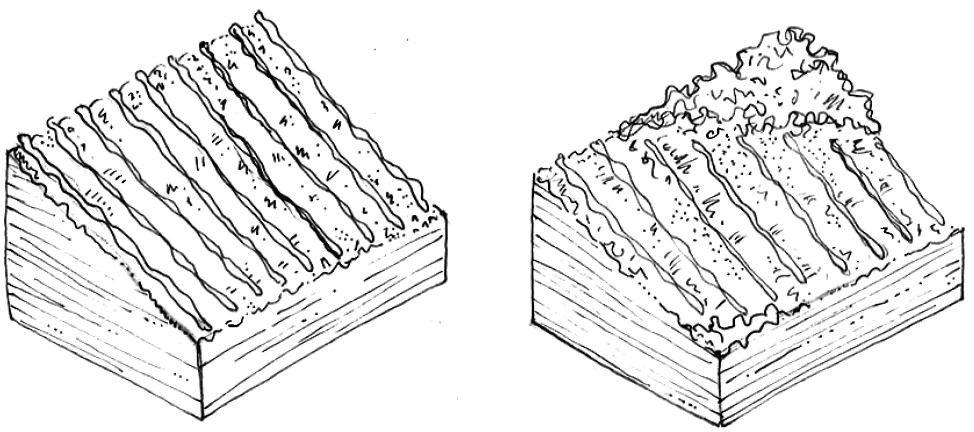


Fig. 62: Moderate slope vineyard (left) implements vineyard lanes as transition zones and biodiversity corridors (right).

Fig. 63: Exposed soil in a vineyardlane at the Marienburg. These parts are prone to erosion and runoff.

Fig. 64: VDP. Winery Clemens Bush in Punderich, Mosel, uses different herbal mixes in vineyard lanes that serve as plant protection against fungal diseases.

Steillagen (30% and up)

The steepest slopes in the Mosel Valley, known as “Steillagen,” are the most prized vineyard sites due to their optimal terroir. There is great sun exposure and unique soil conditions, which contribute to the production of high-quality wines.

The extreme incline of the terrain makes mechanization nearly impossible, requiring intensive manual labor for all vineyard tasks. Production costs are significantly higher than in flatter regions. This creates a duality: while these sites are highly sought after by premium wine producers for their potential to yield exceptional wines, they are also the first to be abandoned when economic pressures increase despite their outstanding qualitative potential. An alternative for these sites is to shift from wine production to landscape management. One approach for this is managed grazing, for example using Thuringian Forest goats, to control vegetation and prevent overgrowth on the steepest, rocky slopes (Fig. 65).

Keeping the visual value of these slopes involves maintaining the landscape’s structure. Low-intensity maintenance, such as mowing, can prevent overgrowth. This can be done in linear manner, allowing two rows of annual and bi-annual plants to develop, while keeping the linear quality of the vineyards ((De Cauwer et al., 2005) (Fig. 66). On top of this, materialization of existing vine rows, like vineyard poles, may be preserved as spatial and cultural elements within this evolving system, maintaining the historical identity of the vineyard.

Fig. 65: VDP. Winery Clemens Bush uses Thuringian Forest goats to counteract invasive shrubs on un-used land.

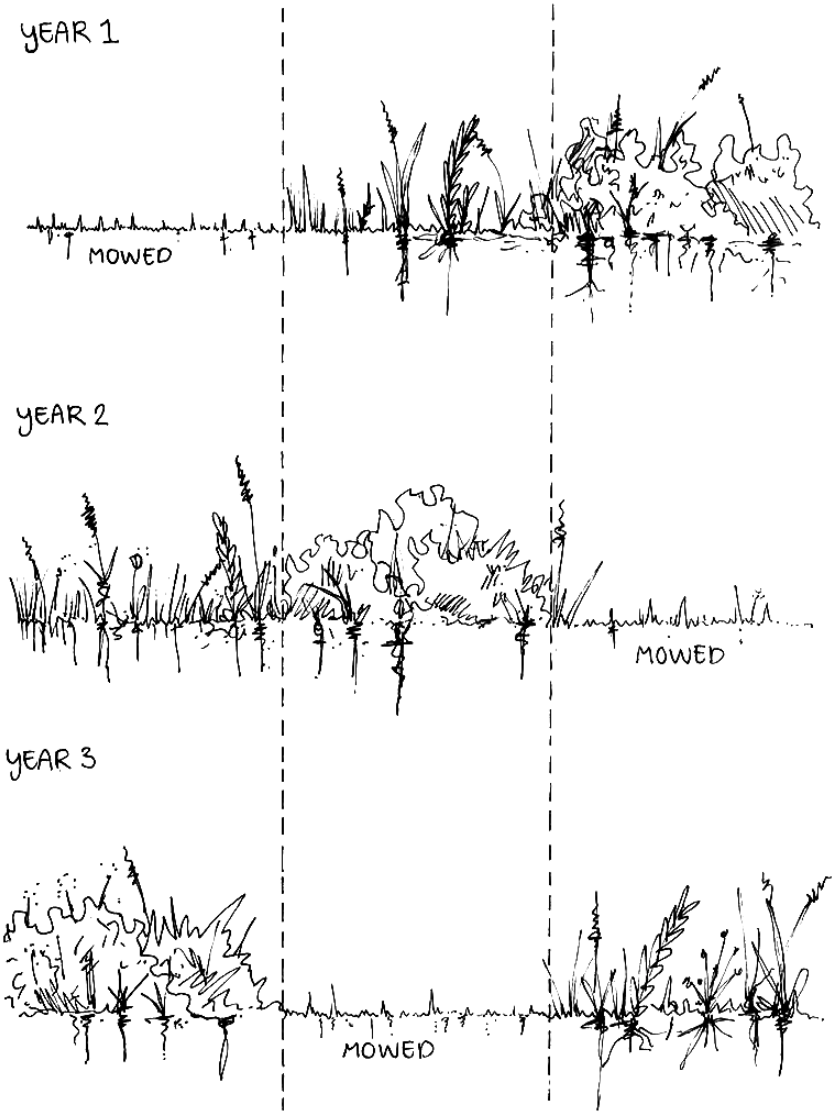
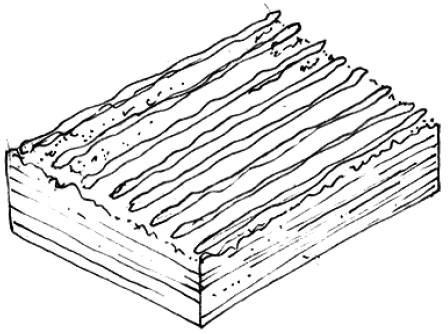


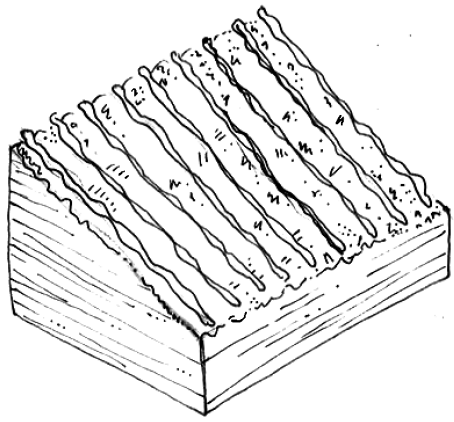
Fig. 66: The area is devided into linear sections, only one section is mowed each year, so each section is cut once every 3 years during winter. This is done to give different species a chance to thrive.

Floodplains

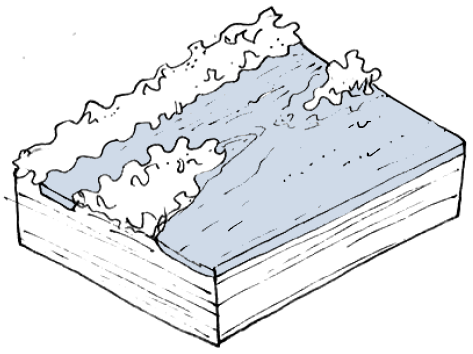
Moderate vineyards (5-30%)

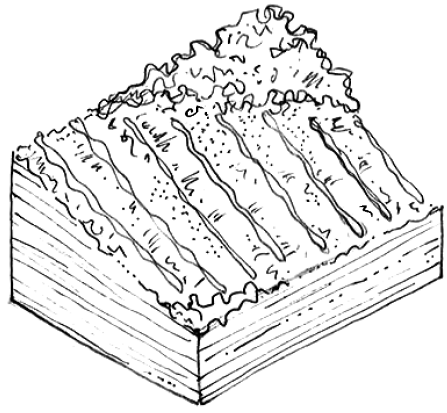
Vineyard structure





Vineyard alternatives

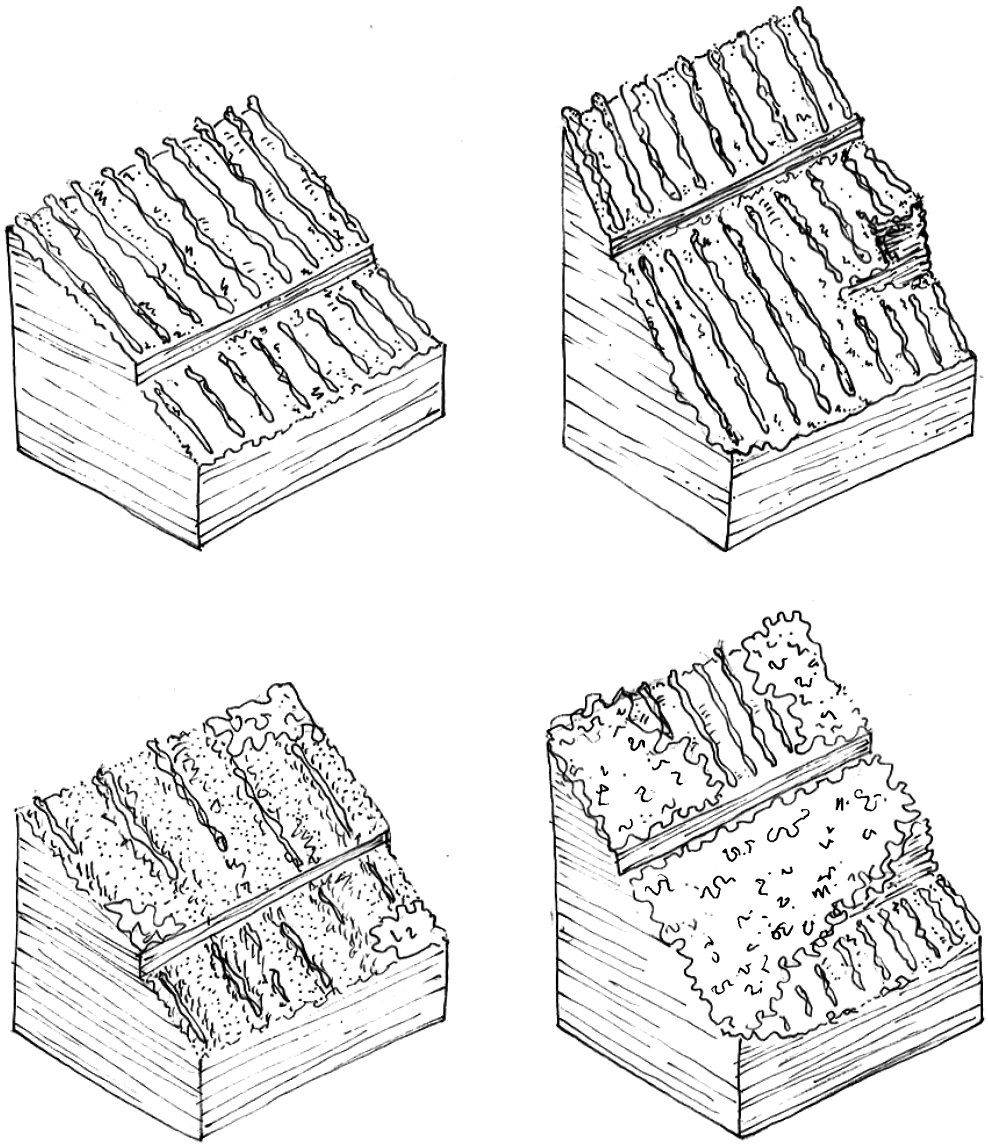




Floodplains are (re)introduced to the Mosel river.

Vineyard lanes as transition zones and biodiversity corridors.

Steillagen (30% and up)



Mowing as a form or maintenence - these plots stay relatively open.

Keeping vineyard structures while letting natural sucession go - these plots will turn into forest after a long time.

Fig. 67: Overview of different vineyard alternatives.

The Walking Route

Hiking plays an important role for both residents and visitors in the Mosel Region. The network of trails allows people to experience the landscape at a slow pace. Walking shows the landscape as a sequence of changing perspectives, not like one panoramic view. It allows gradual engagement with the landscape. Experiencing landscape through movement is, therefore, an important tool for understanding the Mosel beyond the Picturesque.

At Zeller Hamm, the river has shaped the penincula and the Petersberg. At this specific point, the lowest part of the hill, both sides of the river can be seen. This is a key element in understanding the landscape and its layers. This specific location becomes the heart of the detailed design, and the destination of the route.

Different trails can be found along the river, ranging from longer multi-day routes to shorter paths that can be completed within a few hours. Many of these trails are organized around history, culture, or ecology. There are clear instructions on parking and other necessities in the area. In the area around Petersberg and Zeller Hamm, two hiking trails are particularly important.
The Kanonenbahn Trail is a cultural-historical route of about 25 km that begins at the railway station in Bullay and highlights various aspects of the region's railway history (Fig. 68). Along the route, hikers encounter several culturally significant sites, including the Marienburg, a Prinzenkopf tower, and the Prinzenkopf memorial cemetery (Kanonenbahnweg.de, n.d.) The Moselweinbahn Wanderweg partially overlaps with the Kanonenbahn Trail. This route is 21 km long and runs between Traben-Trarbach and Bullay (Fig. 69)(Moselwein-bahn.de, 2026).

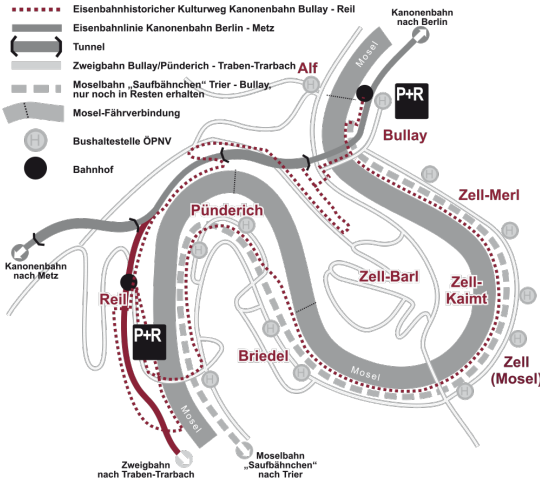


Fig. 68: Map of the Kanonenbahn trail.

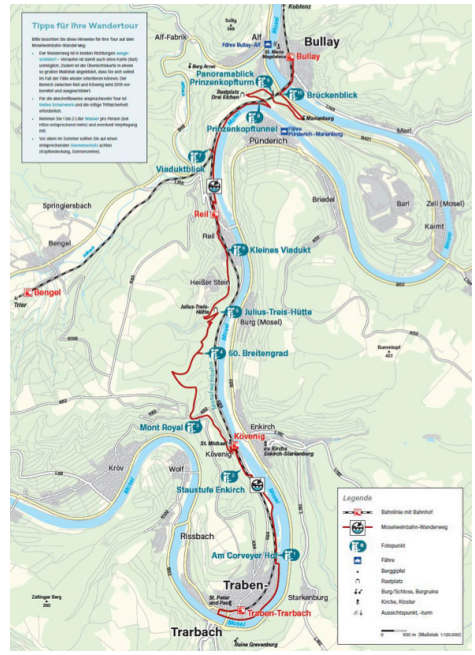


Fig. 69: Map of the Moselweinbahn trail.

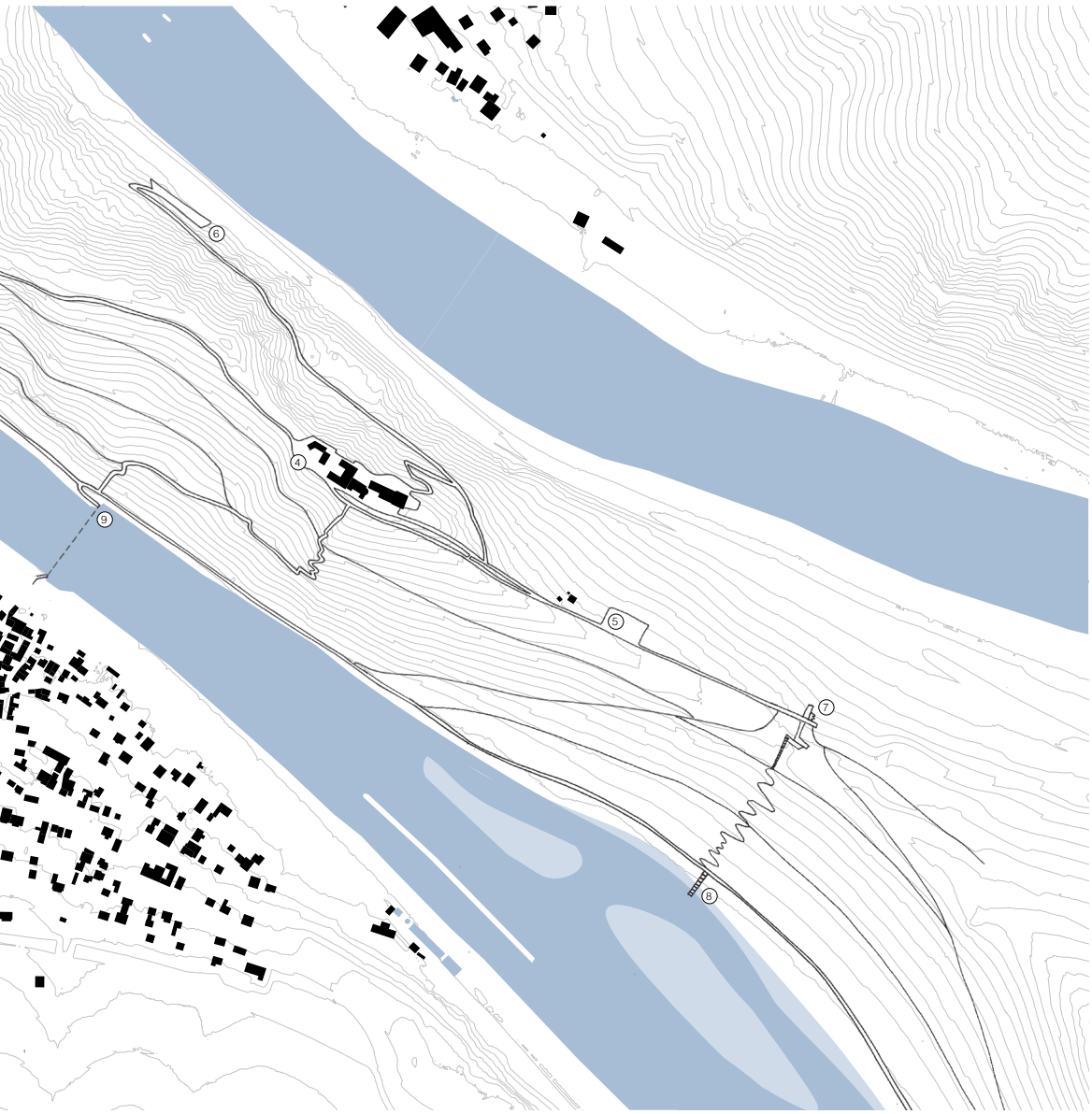
Fig. 70: The different hiking routes are recocnizable by the signs with icons along the route. This one is of the 'Moselweinbahn wanderwerg'.

The Walking Route

The route can be seen as an extension of the existing trail structure rather than as a separate route (Fig. 71). Traditionally, images of the Mosel Valley show romantic vineyard landscapes and picturesque views. The proposed path proposes a new picturesque image in which the Romantic Mosaic vision is implemented and has become the new romantic subject. The walking route enables visitors to experience the different layers of the landscape and "collect" new postcard moments.

1	Drieshutte
2	Soldier Cemitary
3	Prinzenkopf tower
4	Marienburg Church
5	Parking
6	Parking
7	Detail Design
8	Floodplain Stairs
9	Ferry
10	Kanonenbahn

Fig. 71: Map of the Walking Route.


6
4
9
5
7
8
Main path
Side paths
N
0
100
200 m

Main path

The main path of the route is recognizable by the use of cobblestone. These paths are the leading paths along the trail; they are straight, broad, and easy to recognize.

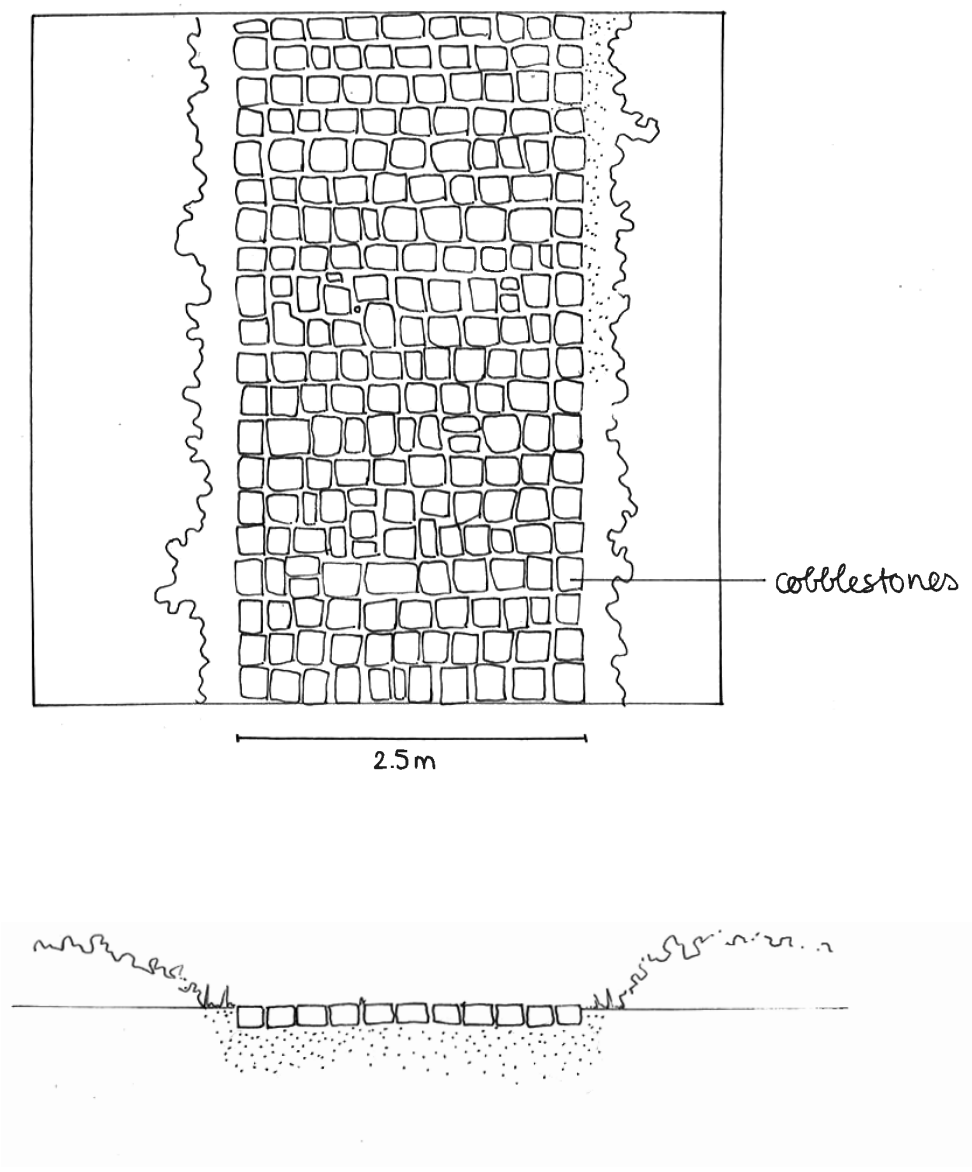


Fig. 72: Top view and section of the main path.

Fig. 73: Visualization of the main path in the Mosel landscape.

Side paths

The secondary paths are part of the trail but are not necessarily part of the main routing. They may lead to different viewing points, benches or a specific specie to be discovered. They are curving, unpredictable and narrower than the primary path.

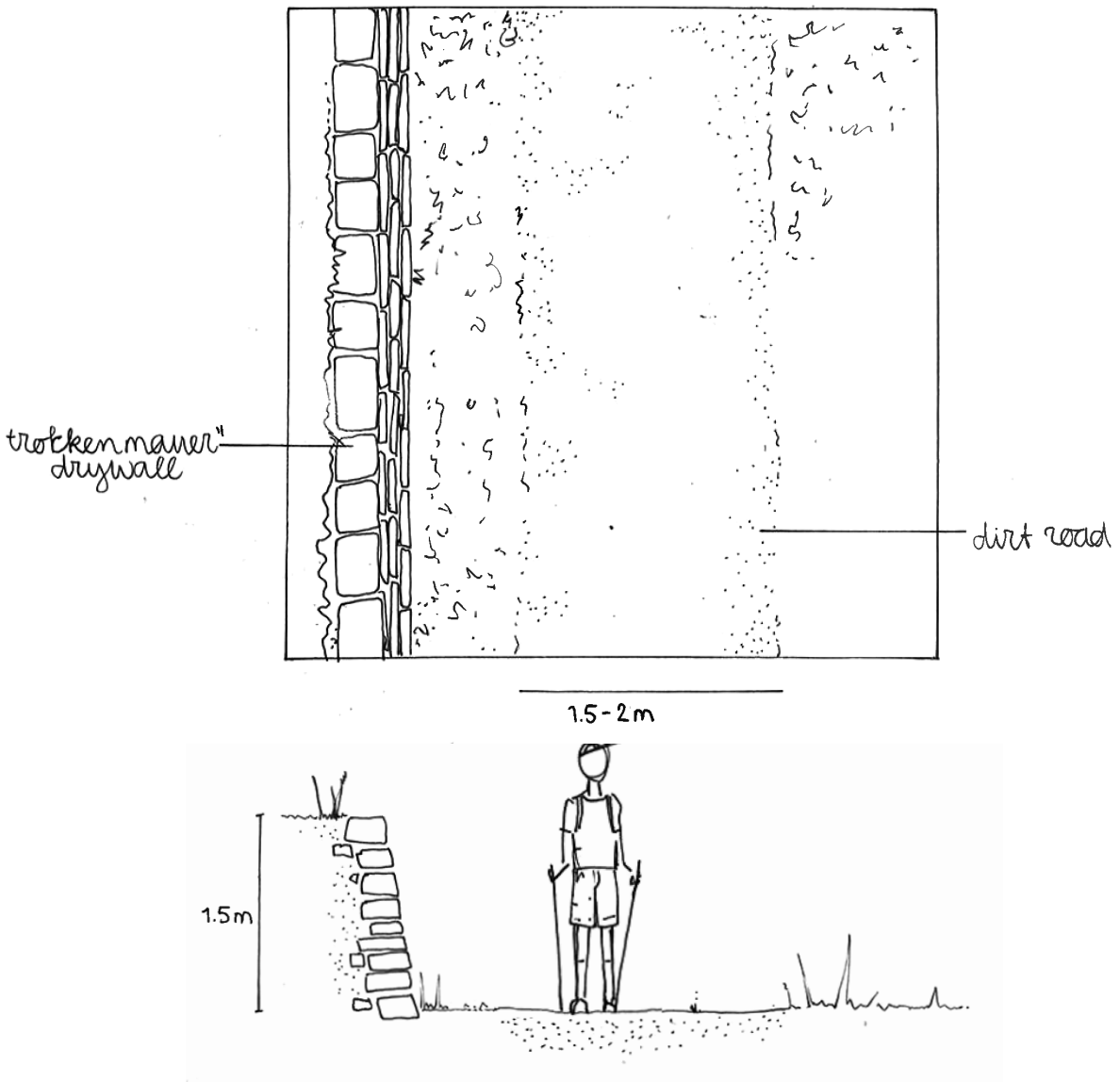


Fig. 74: Top view and section of the side paths.

Drywall seats

To experience the landscape at different points, in some areas a part of the drywall is taken out. Wooden seats are placed to create a bench. This is not a traditional intervention but uses the same priniple of the drywall stairs in the cultural landscape by adapting the drywall to the need of the user.

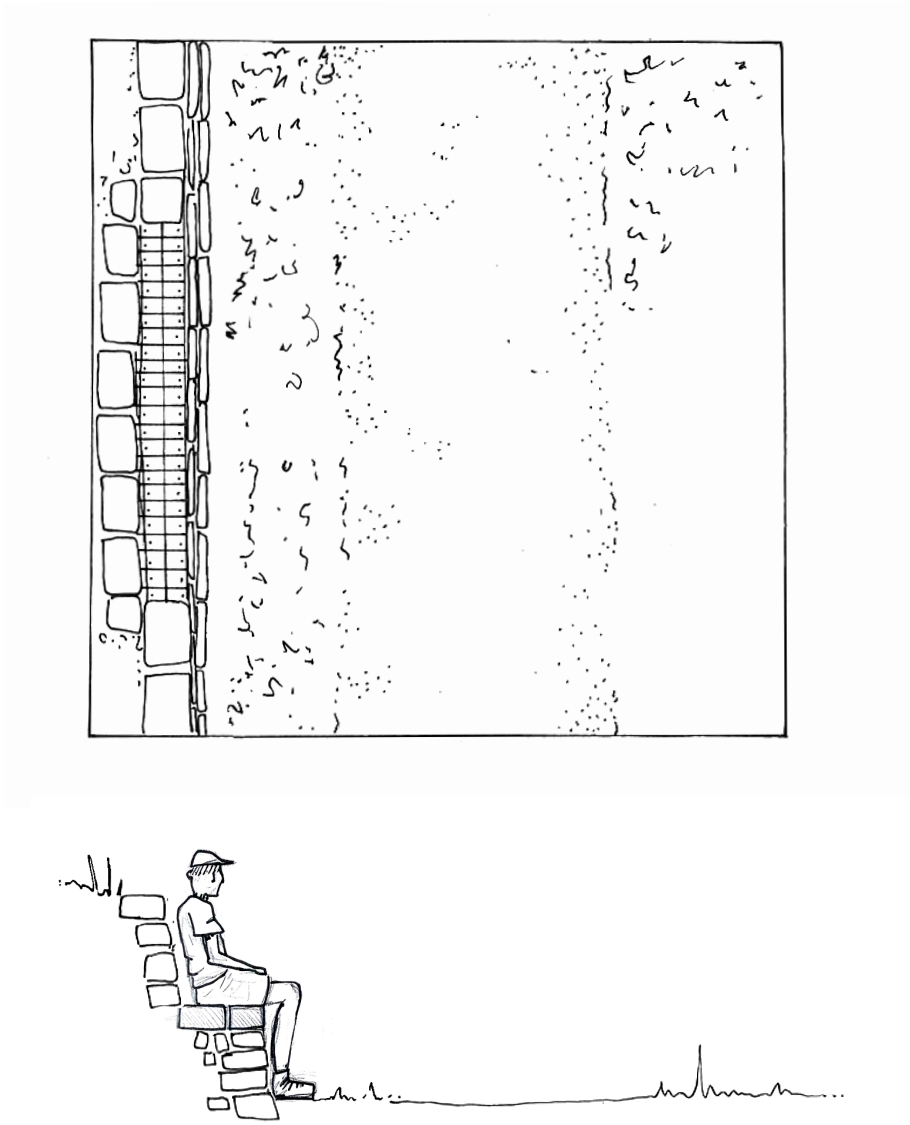


Fig. 75: Top view and section of the drywall bench.

Detail Design

The design intervention is situated at the center axis of the Petersberg, on the passage of the lowest part of the peninsula. It shows contrast between the south facing slope (typically used for viticulture) and the north facing slope (typically forested) (Fig 76). This contrast is exaggerated by a tunnel through the hill, showcasing the slate soil of the Mosel Valley. From here, a route is followed to the bottom of the hill through the Romantic Mosaic landscape.

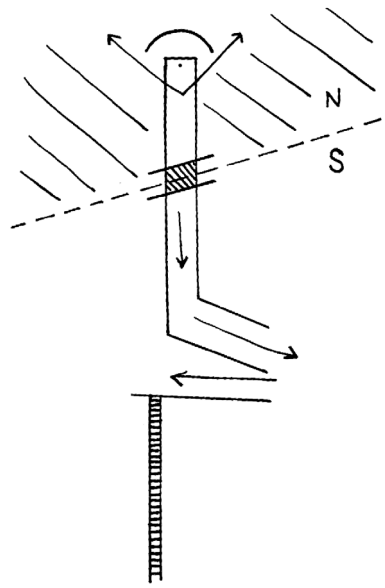
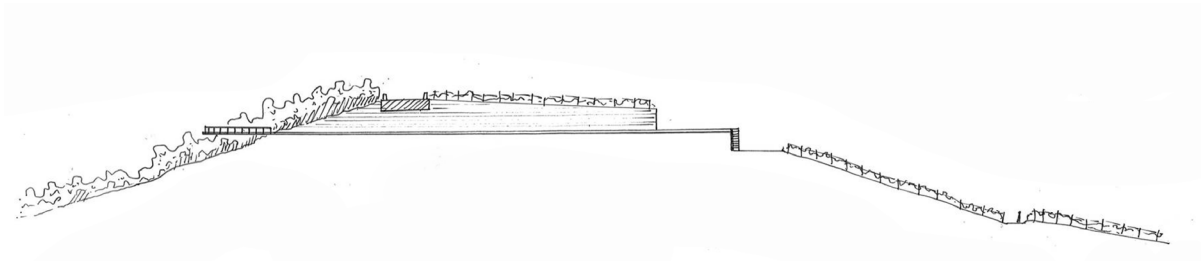
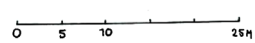


Fig. 76: Concept drawing of the design.



A A'

Fig. 77: Section of the intervention.



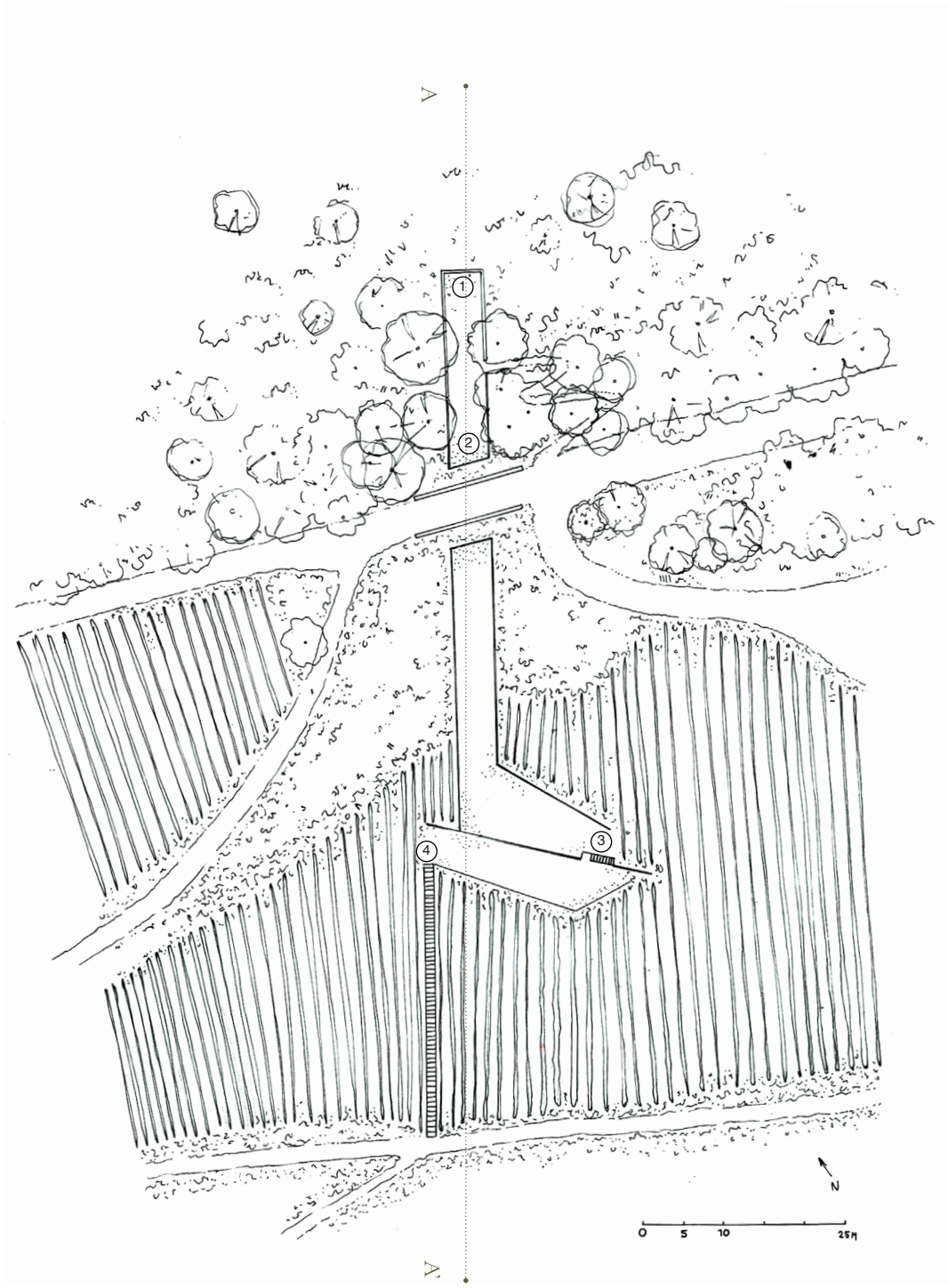


Fig. 78: Detail Design of the intervention.

1. Viewing Point

On the north side, a small path from the main path leads to a viewing point, drawing inspiration from the Snøhetta “Path of Perspectives” in Innsbruck, Austria (Fig. 79). This construction uses the slope of the mountain and extends above the landscape, exaggerating it and creating a “sublime” emotion of fear mixed with awe. Having a viewing platform on the north side of the Petersberg means that the viewer is enclosed by forests (Fig. 80). The view from the platform is the south facing vineyards from bove the Mosel River.

Fig. 79: Snøhetta “Path of Perspectives” viewpoint in Innsbruck.

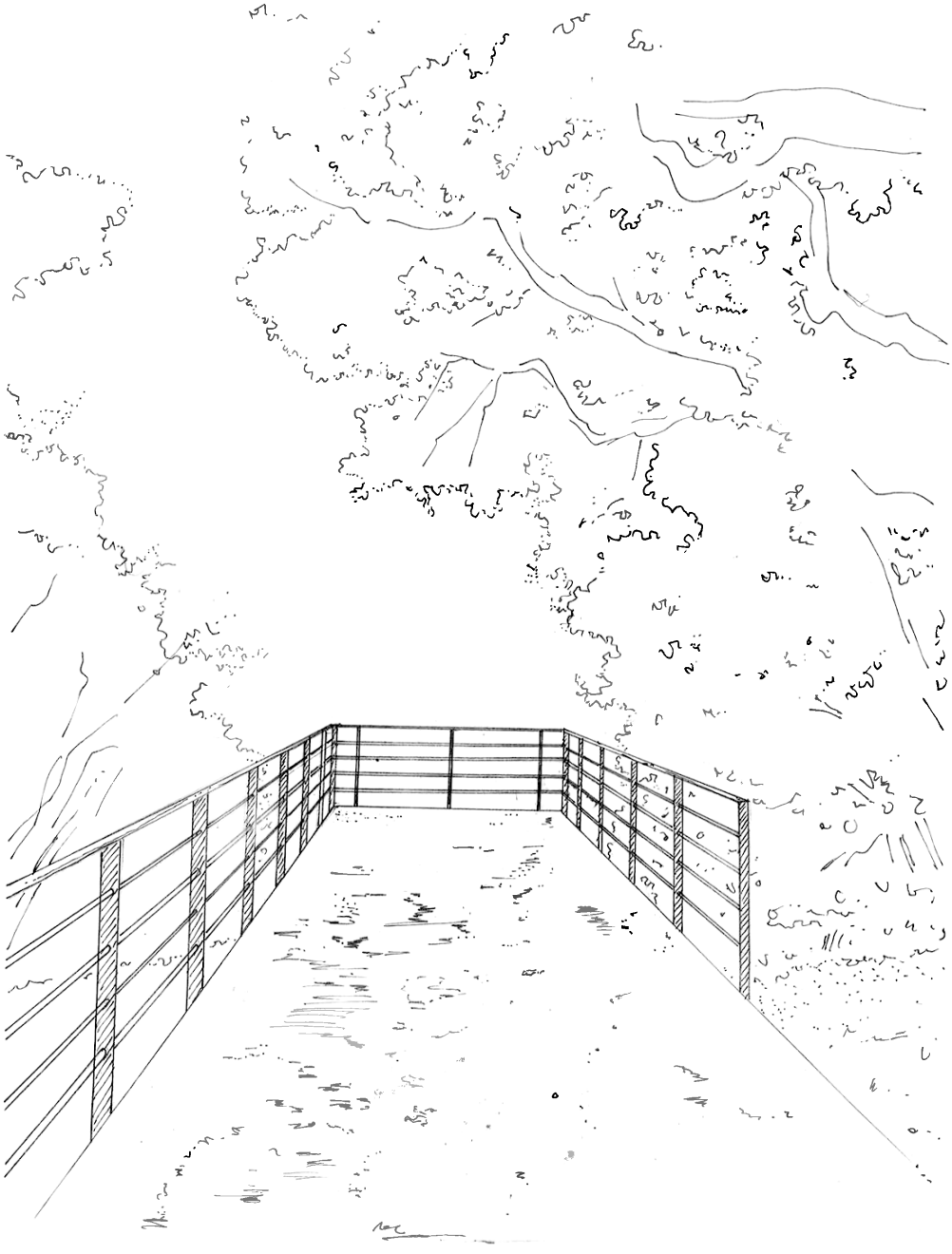


Fig. 80: Visualization of the viewing point on the north side of the mountain.

2. Passage

Walking through the passage to the south side of the hill, the contrast will be made between the darker, forested north side and the sunny, open character of the south facing side of the Petersberg. In the tunnel, the view frames only a small part of the opposite side of the mountains (Fig. 82, 83). As the visitor approaches the end of the tunnel near the terrace, the frame opens up to the left side, overlooking the Mosel river towards Briedel and Zell. From the terrace, a set of narrow, drywall stairs in the terrace force the visior to look in the opposite direction while walking towards a lower terrace.

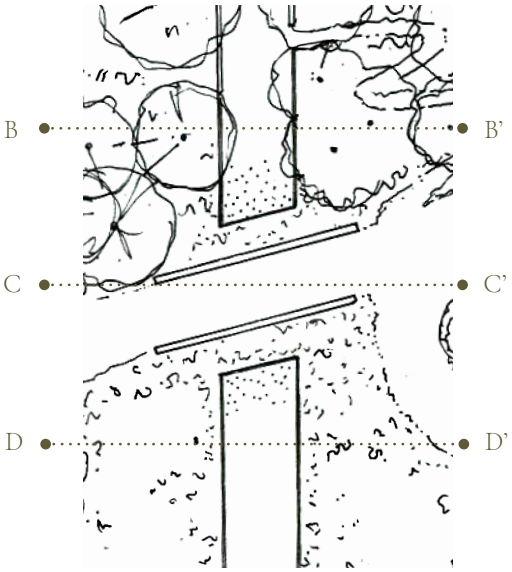


Fig. 81: Detail of the passage.

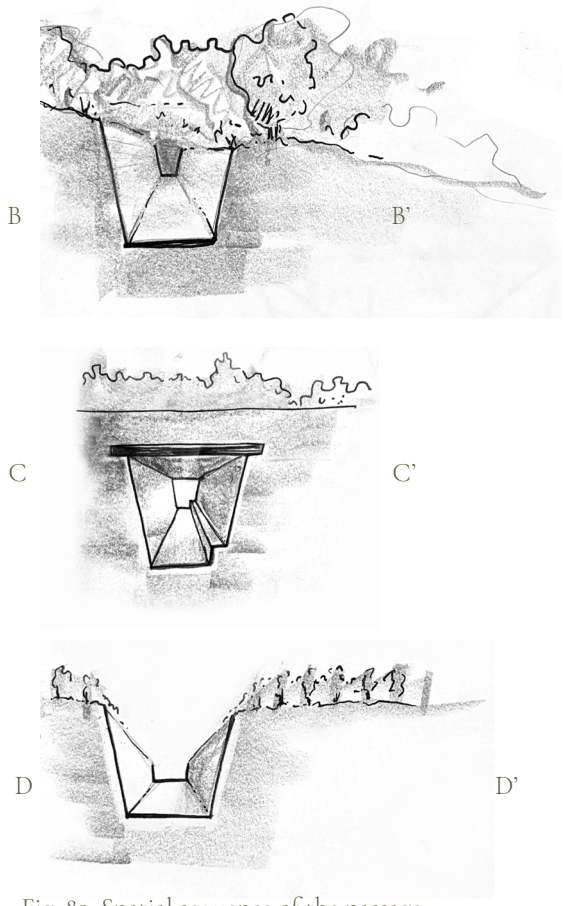


Fig. 82: Spatial sequence of the passage.

3. Drywall Stairs

In the traditional landscape, individual terraces are accessed via staircases. These staircases commonly run parallel to the wall. In the area of the staircase, the wall is set back by the width of the staircase. They are often narrow, rarely wider than 40-50 cm (Fig. 83) (Lebendige Moselweinberge, 2024). For the stairs leading down from the viewing terrace, the principle of these stairs is used, only is the set of stairs wider. It is 1.5 m wide (Fig. 84).

Fig. 83: Traditional drywall stairs.

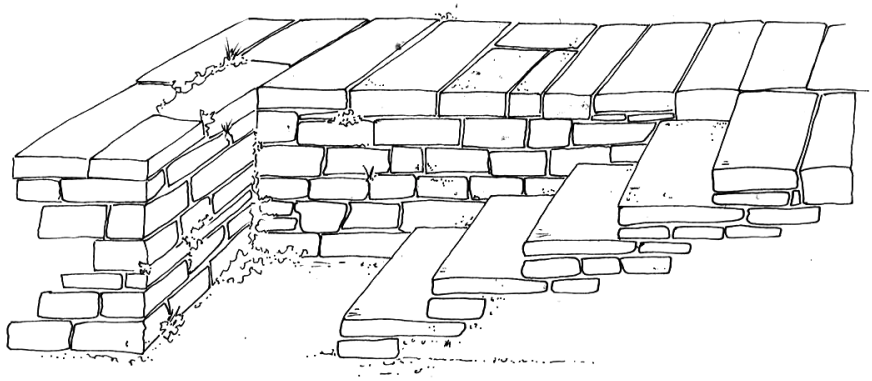


Fig. 84: Drywall stairs leading down from the terrace.

4. Vineyard Stairway

Leading from the lower terrace, a set of cortensteel stairs of +- 30m is constructed between the vine rows. These stairs are long, straight, and narrow (1.5m wide), resembling the work that workers have to do during their days working in the vineyard (Fig 87).

The materialization of the stairs is inspired by the stairs of the Grebbeberg design by Michael van Gessel in Rhenen, The Netherlands (Fig. 85, 86). These are made from weathered steel and are constructed in such a way that they lay on top of the landscape. This way, the staircase shows a clear separation from the surrounding landscape. It creates contrast and shows the different seasons, as the visibility from these stairs will be higher during winter months and lower during summer months.

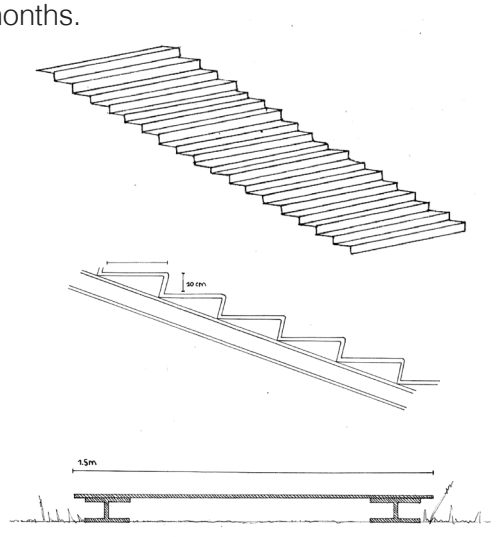


Fig. 85: Precedent study of the cortensteel stairs used at the Grebbeberg.

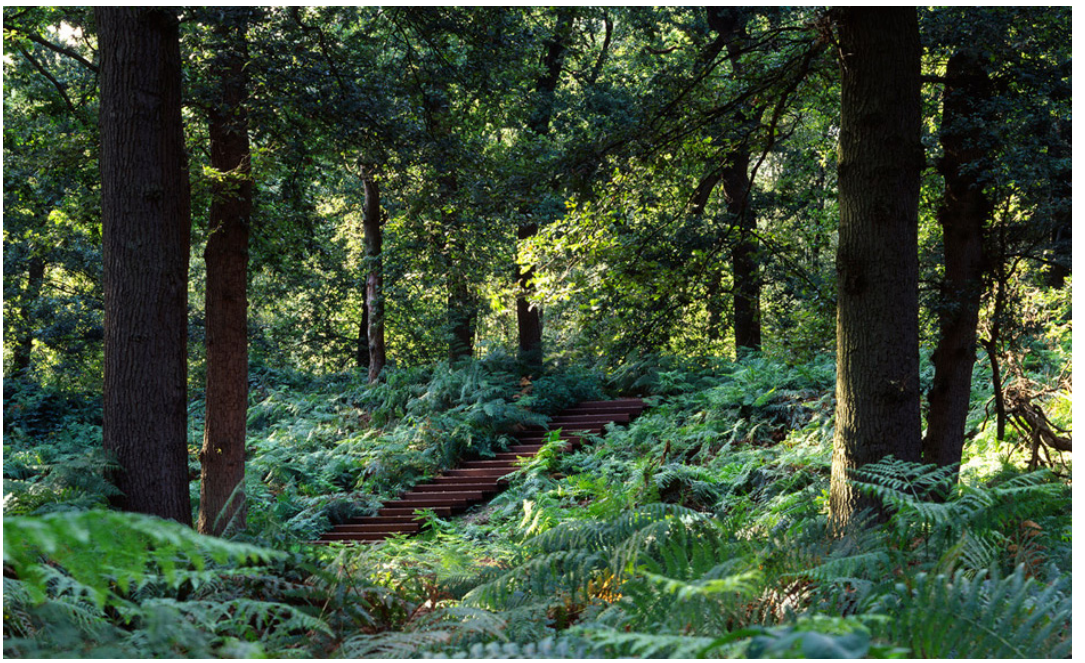


Fig. 86: Stronghold Grebbeberg by Michael van Gessel.

Fig. 87: Visualization of the vineyard stairway.

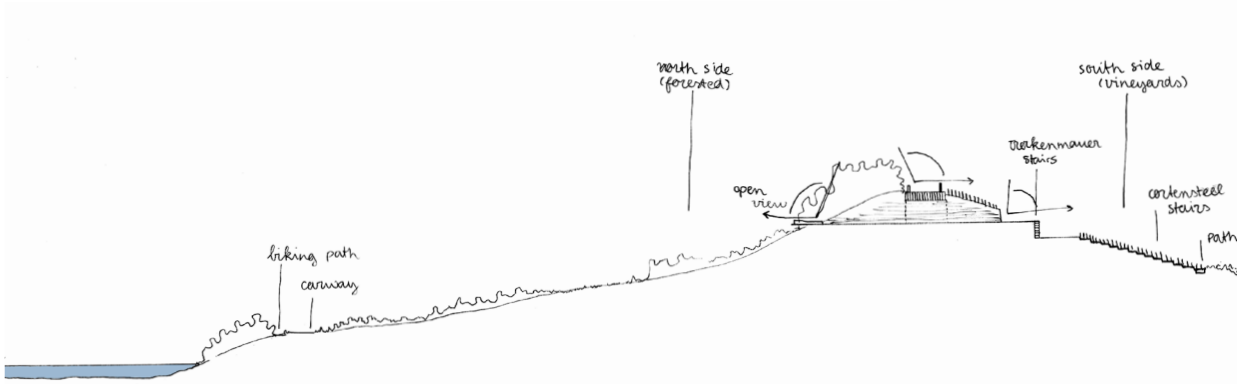


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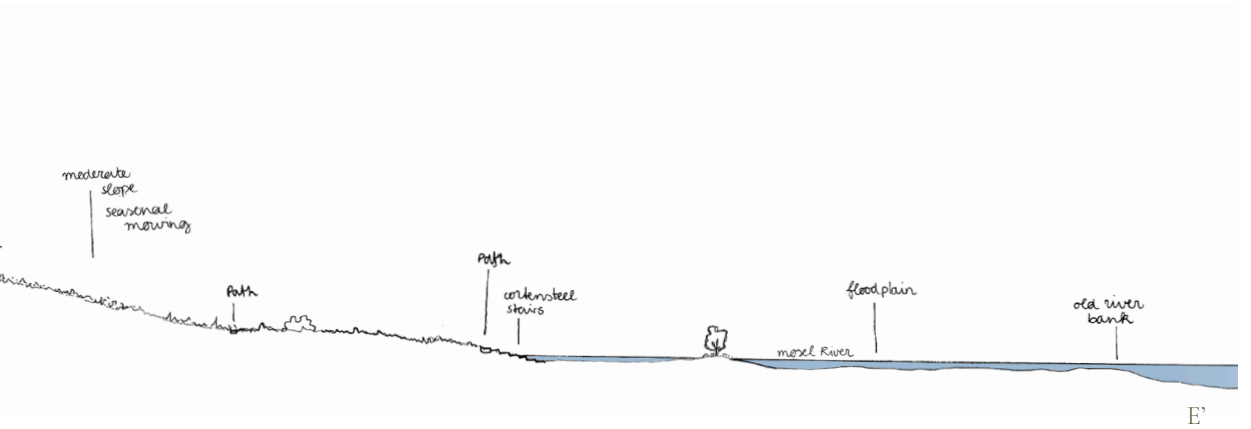
Fig. 88: Section of Petersberg from riverbank to riverbank.

Fig. 89: Design of route from top of the Petersberg towards the floodplain.


moderate slope
seasonal mowing
Path
Path
corkensteel stairs
floodplain
old river bank
mosel River

E'


mosel river
mosel river
mosel river
current vegetation
current treeline - slowly degrading
low vegetation
grass
5
0 5 10 20 30 50m
1:1000

5. Floodplain Stairway

At the foot of the hill, the floodplain is re-implemented (Fig. 91). For visitors, this area is accessible via the same cortensteel stairs used at the top of the hill. The stairs lead into the water toward concrete stepping stones (Fig. 90). As the water level fluctuates across seasons, these stepping stones are not always visible, making the experience different each time.
There are multiple sets of these stairs along the stretch of the river, as they provide access to the water for swimming during the summer season.

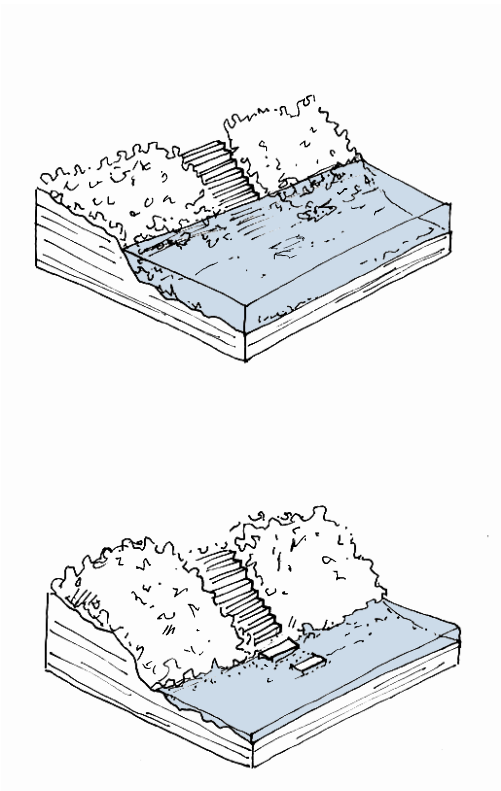


Fig. 90: Floodplain stairs during high water (top) and during lower water (bottom).

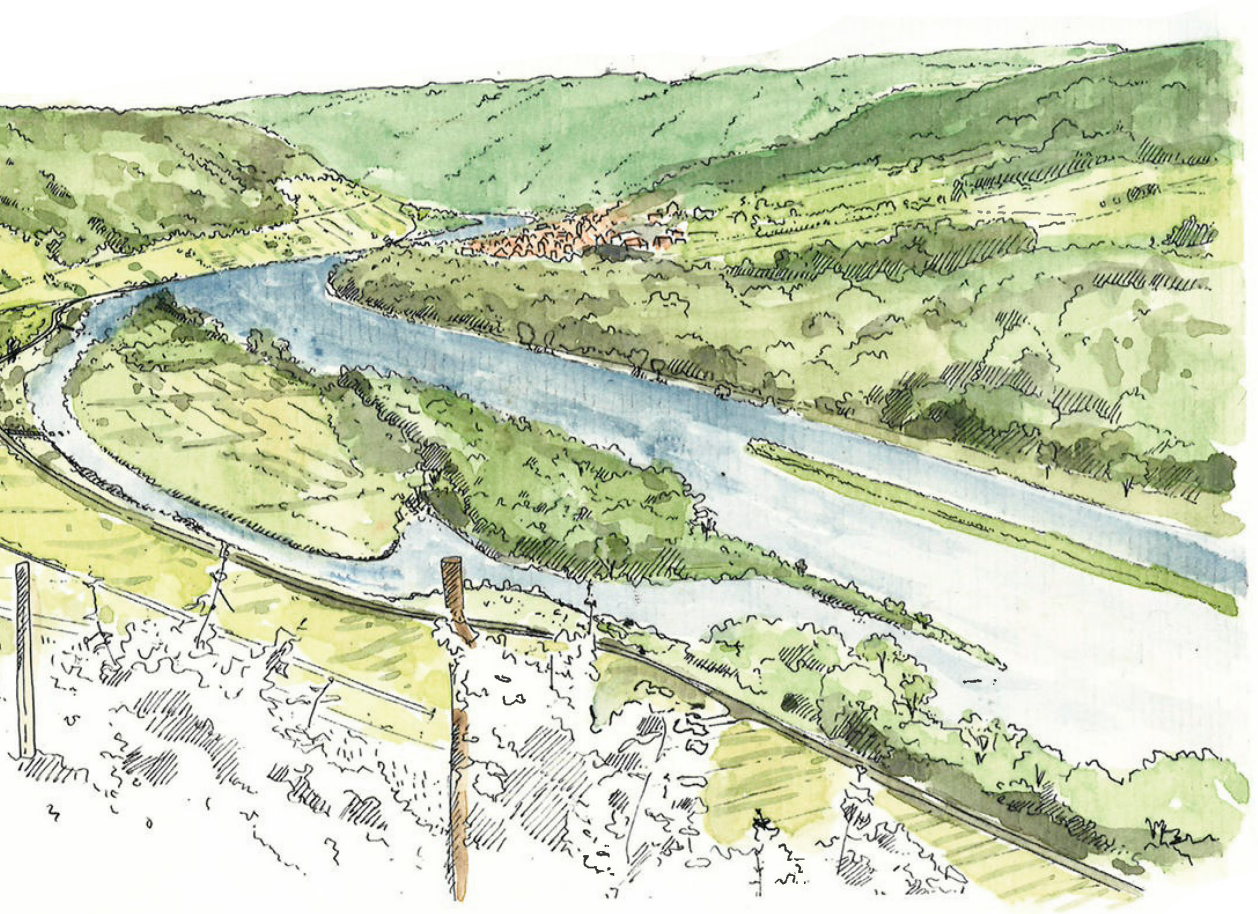


Fig. 91: Floodplain visualization.

Conclusions

Mosel Beyond The Picturesque demonstrates that the Mosel region is more than the romantic imagery on tourist websites. The project explores how landscape architecture can improve resilience while strengthening cultural landscape. It builds on the valley's problems of disconnection with the Mosel River and the increasing challenges posed by abandoned vineyards and the loss of the cultural landscape. The project intends to add a layer of understanding that makes the Mosel Valley's processes and systems both legible and experiential, while enriching the valley's existing romantic identity.

The first part of the research investigates the Mosel Valley as a palimpsest. The terroir analysis shows how the landscape layers have accumulated over time, shaping soil, rock formations, meanders, and valleys. On these geological and ecological foundations, anthropogenic elements of vineyards and settlements were built. These accumulated layers shape the 'terroir' of a landscape and define its spatial identity.

The second part of the thesis explores what a romantic landscape is and how cultural and environmental elements can influence the perception of landscape. Spatial relationships, sequences, view lines, weather conditions and obstruction of view all contribute to the romantic experience in the Mosel Valley. From this conclusion, it is argued that the region should not merely rely on the nostalgic, romantic image. A proposal is made for a broader romanticism in which ecological processes and nature enrich the landscape.

The research on terroir and romantization translates into a design proposal for the Mosel Region. The landscape-architectural strategy for abandoned vineyards demonstrates how small interventions can enhance ecological resilience. By creating floodplains for the Mosel River, its fluctuating character becomes more visible and experiential in the landscape, reducing flood risk and enhancing biodiversity along the riverbanks. The design intervention builds on the design principles: Passing of time, contrast and limited visibility. These principles are used at the design of Zeller Hamm and introduced a trail through a reinterpreted Mosel landscape. Visitors can explore this transformed landscape and engage with the mosaic of ecological and cultural elements while experiencing different romantic perceptions.

The research question for this thesis is:

"To what extent can the romantic image of the Mosel Valley be maintained and enhanced through the transformation of its monocultural landscape into a dynamic, resilient landscape?"

The romantic image of the Mosel valley can be maintained and enhanced by building upon its existing cultural and spatial qualities while integrating biodiversity and ecological processes into the landscape experience. Nature itself becomes part of the romantic narrative, shifting the valley from a monocultural landscape facing abandonment towards a resilient and ecologically rich landscape. Ecological diversity introduces a new dimension to the landscape, making nature the central romantic subject.

Fig. 92: Fieldwork in the Mosel Region during different seasons. February 2026 (left) and May 2026 (right).

Implications and Recommendations

- An important aspect of the vision is that the transformation of the abandoned vineyards should not be approached as separate interventions, but as a regional strategy for the Mosel Valley. Ultimately, abandoned vineyards will not represent recession and cultural decline but show ecological and spatial qualities in the landscape.

- Extending beyond the intervention proposed in this thesis, the design intervention at Zeller Hamm could become part of a larger Romantic Mosaic (Fig. 91). As more vineyards are abandoned and transformed into ecological stepping stones of the mosaic, a biodiverse, spatially rich landscape can emerge. This creates opportunities: the mosaic could become part of a larger protected natural area and the walking route could extend to other sections of the Mosel River. Other interventions can be implemented where river dynamics, vineyards and cultural landscapes are readable for the visitor.

- As mentioned previously, two site visits were conducted for this thesis, one in February and one in May of 2026 (Fig. 90). At the second site visit, implications emerged because conclusions were drawn from the site as it appeared during winter. At that time, the site was quiet and cold, and the only visitors were on foot. While developing this thesis, the attention was mainly on visiting and experiencing the Mosel in this way. During the second site visit, it was warm and busy. The most notable difference was the mode of transportation; most visitors used (e)bikes to get around. The problem is not necessarily the way the landscape is enjoyed, but the materials chosen for the paths. Both the cobblestone main path and the secondary dirt road are impractical for bikers. This implication has a brighter side as it might encourage visitors to park their bikes, experience the intervention and the landscape by foot.

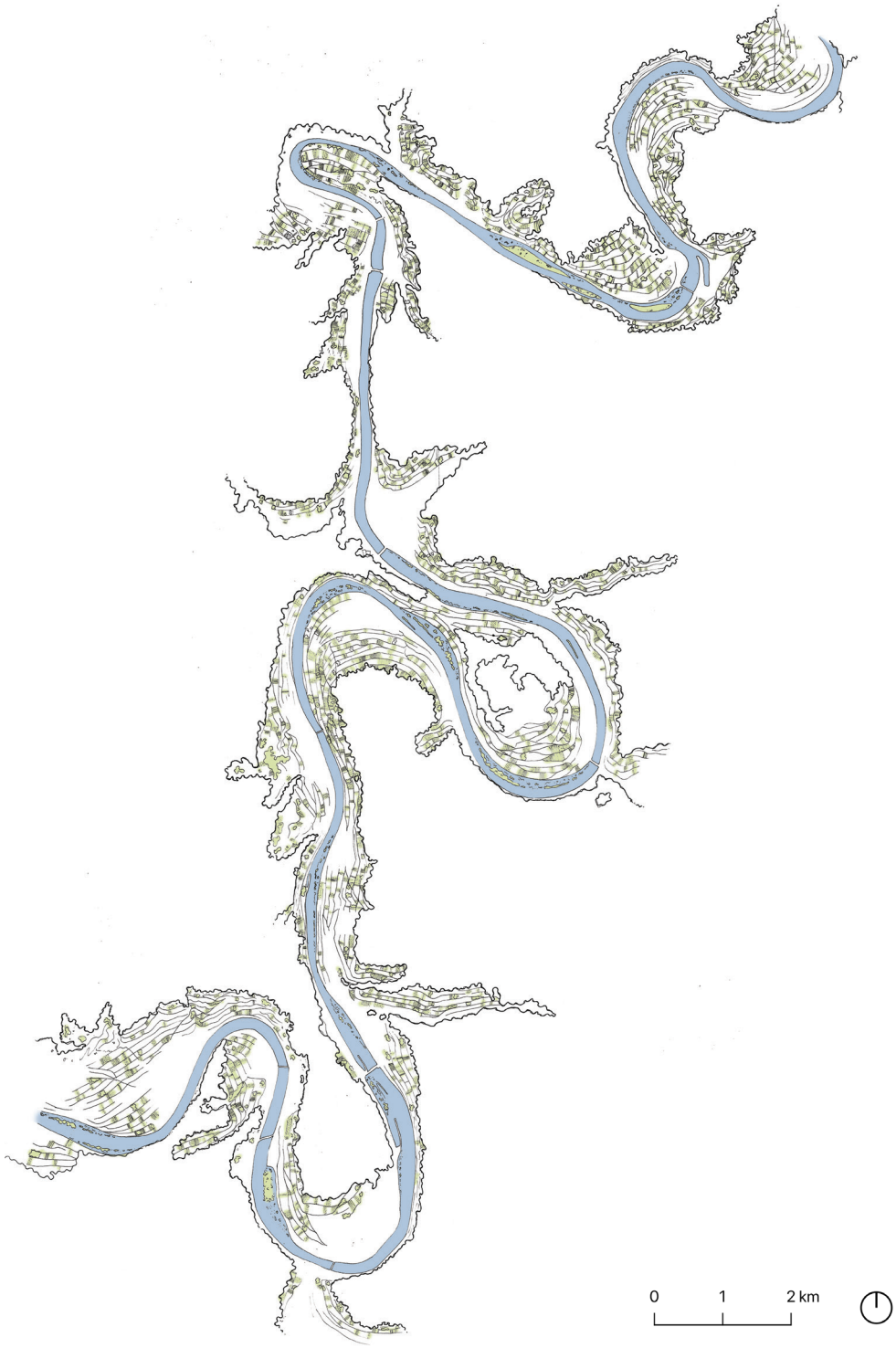


Fig. 93: Romantic Mosaic vision with suggestions for multiple floodplain expansions.

Discussion

Studies show that traditional winegrowing regions are increasingly affected by vineyard abandonment and climate change (Sgubin et al., 2022; Leeuwen, van, et al., 2024). It is therefore important to reimagine these landscapes by finding ways to both preserve their cultural identity and develop future visions for them. Although winegrowing regions differ in climate, scale and cultural context, they also share similar characteristics. The vineyards are located on sunny slopes, in valleys and on terraced terrain. This suggests that the Mosaic concept could be adapted in regions as well.

However, the feasibility of transforming the Mosel landscape is uncertain. The project assumes that increasing ecological resilience and biodiversity are desirable outcomes for this landscape. This perspective originates from a landscape design and research position and may not align with the priorities of stakeholders such as winegrowers, landowners or municipalities. Furthermore, the project is mainly oriented toward visitors who experience the Mosel landscape by foot, addressing a specific user group and mode of landscape perception.

For farmers, abandoned vineyards may not be perceived as an urgent spatial problem, but rather a consequence of changes in the viticulture sector. The proposed interventions may conflict with existing values, economic interests and landscape values.

While landscape architecture often operates through long-term visions and strategies, it cannot predict or control how landscapes are used and valued. The project should be understood primarily as an exploration of options rather than an directly implementable masterplan. Several important aspects are outside the scope of this thesis; no economic feasibility or stakeholder studies were conducted, and no hydrological research was done on the effects of floodplain implementation and flooding dynamics. The scenarios presented in the project are speculative and do not intend to predict exact outcomes.

The speculative nature of this project should be seen as a strength. The design can visualize possible futures and imagine environmental processes; it does not provide definitive solutions but is part of an ongoing discussion about how cultural landscapes can adapt to changes while maintaining their identity and spatial qualities.

Reflection

This thesis began with the selection of the design studio Circular Water Stories. The lab focuses on traditional water systems and the relationships between water, humans, and flora-fauna, as well as blue infrastructure. My motivation for joining the lab stemmed from previous projects in which I became interested in the Dutch polder landscape and its complexity. Since I had never worked on projects outside the Netherlands, I assumed other water systems would have similar conditions. By choosing the Mosel River as a study area, I expected to understand its system in the same way.

During the research process, I realized that my interest in the Mosel River was not because of the river itself, but because of the romantic image I associated with the landscape. This shifted the focus from water systems to their cultural landscape. My interest gradually moved toward understanding how the river shaped the valley over time, how viticulture transformed its slopes, and how natural and cultural layers come together in the region's identity. From this shift in perspective, my research question emerged.

At the start of the project, my instinct as a designer was to work on a small-scale intervention, like a garden or a localized intervention. But as I did more research, it became clear that tackling the region's challenges required a broader vision. Developing a meaningful small-scale design required understanding the larger landscape systems One of the biggest lessons throughout this project was the importance of designing across scales. Zooming out to develop a regional vision and zooming in to test how the concept performs at a specific site are very important steps to take while designing.

Throughout the process, I particularly enjoyed working with the narrative of the Romantic lens on the Mosel Valley and using this lens as a method to design. Researching viticulture, studying art history, hand-drawing and visualizing the ideas into this book were all things I really enjoyed while working on the project.

The most challenging part of this project was translating the complexity of the Mosel landscape into a spatial design that is understandable and feasible. The research covered a lot of different themes: ecology, heritage, tourism, hydrology, viticulture and perception. This made it difficult to decide what the

main goal of the project was. The process felt like quicksand; staying too long on a particular subject made the overall direction of the project unclear. It was challenging to recognize when to take a step back and return to the original path of the project.

Reflecting on the past six months, I am happy with the outcome of this project and the perspective it has given me on the way we perceive landscapes. I hope this thesis encourages readers not only to romanticize the Mosel valley but also to reflect on the value of romanticism more broadly. The Romantic era reminds us of the importance of emotion, imagination and relationship with nature in a changing world. Romanticizing landscapes and life itself can help us develop a sense of appreciation for the environments that we inhabit.

Acknowledgements

My Acknowledgements go to all the loving people around me who showed interest and support of my work, who shared their thoughts and helped me through the months of graduation.

I am grateful for the support of my supervisors Inge Bobbink and Mieke Vink, who helped me shape my thoughts and ideas on this subject and guided me through the graduation process, from writing to designing to finalizing.

Thanks to my fellow students of the “study club” in the Landscape Architecture studio who kept showing up every day. Thanks for the hours we spent working together, thanks for all the walks to the coffee machine and the lunch breaks at “our” spot on the white couches in the studio.

A very special thanks to my parents for supporting me through my student career, for believing in me and helping me with my fieldwork in the Mosel region. Although the subject might have been somewhat ‘abstract’, the wine tasted good, and the walks were beautiful, and I am glad to have shared that experience with you.

Appendices

Model I - Zeller Hamm

Size A0
Scale 1:10.000
Material Cardboard 3mm

Model II - Intervention

Size A3
Scale 1:500
Material: Cardboard 1mm

South facing side.

North facing side.

Glossary

This glossary presents key terms relevant to this thesis in alphabetical order. These terms are used throughout the text and based on both literature and the author's own interpretations.

A

Annuals
Plants that grow, flower, seed, and die in one season.

B

Beautiful
Edmund Burke would describe a beautiful landscape is one whose forms, textures, and movements produce calm pleasure by their smallness, smoothness, clarity, and gentleness, encouraging intimacy rather than awe.

Biannuals
Plants that develop roots and leaves in the first year and bloom and die the second.

Biodiversity
All the different kinds of life in one specific area. It is the variety of animals, plants, fungi, and microorganisms like bacteria that make up our natural world. Each of these species and organisms work together in ecosystems, like an intricate web, to maintain balance and support life. (World Wildlife Fund, 2026)

C

Catchment
The natural area of land from where all water collects and drains into a common river, often bounded by hills. Also known as drainage basin or river basin

Culture
The shared practices, knowledge, values, traditions, and expressions through which a community relates to its environment. In landscape contexts, culture is reflected in land-use patterns, agricultural practices, architecture, and rituals that shape and are shaped by the landscape over time.

Cultural Landscape
Places where the landscape and culture/community have continually shaped each other (Aimar, 2024). They illustrate the evolution of human society and settlement over time under the

influence of physical constraints and cultural, economic, and social forces (UNESCO World Heritage Convention, 2026).

Climate
The long-term pattern of weather in a specific area, typically averaged over a period of 30 years or more. (National Georgaphic Society, 2026).

Climate Change
Shifts in temperatures and weather patterns over time. Since the Industrial Revolution, human activity has begun to impact climate, the climate is getting warmer. The current period of climate change is often called “global warming.”

E

Erosion
Geological process where natural forces (water, wind, and ice) wear away and transport soil, rock, and sediments from one location to another.

Experience
A subjective, emotional, and sensory interaction between a person and their environment, shaped by cultural, social, and evolutionary factors.

F

Fermentation
The process in winemaking that turns the must (grape juice) into the alcoholic drink called wine.

Floodplain
Flat area of land next to a river that is regularly flooded when the river overflows.

G

Genius Loci
Latin for *‘sense of place’* . Romans believed that places had their own protecting spirits. In Landscape Architecture, It posits that every site possesses a distinct character that design should reveal or reinforce (Landezine, 2026).

Grapevine
Vitis vinifera. Plant from where grapes grow. Grapevines usually only produce fruit on shoots that came from buds that were developed during the previous growing season.

H

Habitat
The natural environment where an organism lives. It provides the organisms that live there with food, water, shelter and space to survive

Heritage Landscape
Landscape that is valued because of its historical, cultural, or natural importance and has been shaped by people and nature over time.

L

Landscape
An area, as percieved by people, whose character is the result of the action and interaction of both natural and/or human factors. It is both something physical and something that is percieved by people. (Thompson, 2014). In the field of architecture, the landscape is generally regarded as the natural backdrop for the built forms. (Harea & Simon, 2019).

Landscape Architecture
Landscape architects conduct research and advise on planning, design and stewardship of the outdoor environment and spaces, both within and beyond the built environment, and its conservation and sustainability of development. (Thompson, 2014).

Landscape Resilience
The ability of a landscape to adapt and recover from disturbances or crises while maintaining its essential functions, structure, and identity; and ideally emerging stronger afterward (Schmidt, 2022).

M

Meander
(Du: Hamm) A winding, sinuous, or indirect course taken by a river or stream as it flows. It involves a continuous, slow process of erosion on the outer banks of bends and sediment deposition on the inner banks (Seifert, 2023).

Micro Climate
The climate near the ground, in which plants and animals live. It is very different from the climate a few meters above ground, as that is more influenced by atmospheric processes. Micro climate is influenced by the surface: wether it is bare or vegetated, what kind of soil etc. (Rosenberg et al. 1983).

Mittel Mosel
Also known as the Central Mosel, it is the centre of the German Mosel Wine Region, from Trier to Zell.

Mosel Region
Wine region in Germany, known for its Riesling wines, Mosel River and steep vineyard terraces.

Mosel River
(DU: Mosel, FR: Moselle NL: Moezel) rain-fed river that originates in the Vosges Mountains in France and flows northward into Germany. In this thesis, the focus is on the final 100 km of the river, from Trier to Koblenz, where it meets the Rhine and continues under the same name.
In Latin, Mosella is translated as '*Little Meuse*' in reference to the longer River Meuse (Dutch: Maas, Latin: Mosa), to which the Mosel is parallel.
In this thesis, the river is called Mosel: since the thesis is about the German section of the river, the German name is used.

Mosel Valley
Curving valley shaped by the Mosel River in Rheinland-Pfalz, Germany.

Mosel Paradox
Winegrowers in the Mosel Region suffer from the image of the area as a

producer of cheap bulk wine, which was the case in the 1960s.

N

Nature
Includes everything natural in the world: both geodiversity (the variety of non-living natural elements such as rocks and soils) and biodiversity (the variety of life) (National Georgaphic Society, 2026).

P

Palimpsest
Landscape architects seek to understand landscapes not as static scenes, but as a palimpsest: layered expressions of natural processes and human activities that have accumulated over time (Bailey, 2007). Reading a landscape in this way shows how geological conditions, such as the Mosel's slate soils, river dynamics, and centuries of viticulture have jointly shaped the landscape.

Perennuals
Plants that survive winters and return for multiple years, often blooming for 2–4 weeks.

Phylloxera
Grape phylloxera is a tiny insect that feeds on roots of Vitis vinifera grape and certain rootstocks, stopping growth of vines or killing them. This is why almost all vines are grafted onto American rootstock, which are resistant to the insect.

Pünderich
A small village situated directly along the Mosel River. Unlike many other settlements in the region, it is not separated from the river by a major road, as the main regional route (B53) bypasses the village on the landward side (puenderich.de).

Pündericher hangviadukt
On the opposite bank of the Mosel near Pünderich, a slope viaduct was constructed around 1870. This structure, has had a substantial impact on the surrounding vineyard landscape by offering both a scenic ride along the river (KuLaDig, 2026) and bringing economic growth to the region.

Picturesque
A concept developed during the Romantic period, it represents an ideal type of landscape that has artistic appeal: in that it is beautiful but also has some elements of wildness.

R

Rewilding
A way of protecting nature by letting ecosystems become more natural again, bringing back plants and animals, and reducing human interference (Lorimer et al., 2015).

Rhine
(Du: Rein, Nl: Rijn) River that rises in the Swiss Alps, flowing north through Germany and the Netherlands into the North Sea. It is one of Europe's busiest, most historically significant waterways and shipping route, and a scenic route lined with castles and

cities like Basel, Strasbourg, and Cologne.

River
A natural stream of flowing water that moves across land toward lake, sea, or another river.

River Landscape
The natural environment formed by a river and the surrounding land, including features like floodplains, banks, vegetation, and wetlands.

Romanticism
Cultural and artistic movement (1800–1850) emphasizing emotion, imagination, and individual experience over reason. It values subjectivity, longing (Sehnsucht), and the sublime. Romanticism showed in Landscape Architecture as the Landscape Garden (Steenbergen et al., 2003).

Romantic landscape
Llandscape characterized by atmosphere, emotion, and a sense of discovery rather than clarity or control. In the Mosel Valley, it includes historical traces, natural elements, varied light and partial views. It is a landscape that feels immersive and narrative, inviting personal interpretation rather than presenting a single, fixed viewpoint.

S

Sedimentation
Geological process in which particles like sand, soil, or clay settle and build up in a place, often carried there by water, wind, or ice.

Sehnsucht
German Romantic idea describing a deep longing for something ideal, distant, or unattainable.

Sightline
clear line of vision from one point to another in a landscape

Slate
Metamorphic rock formed from clay that is sedimented and compacted. Due to the high temperatures suffered over time, the soil forms thin sheets or layers. Slate tends to be dark in color, usually blue-ish, but there are also shades with red colors due to oxidised iron.

Sublime
Refers to experiences that overwhelm the observer, combining awe with a degree of fear or terror. Following the reasoning of Edmund Burke, the sublime is linked to vastness, obscurity, and power, which are qualities that exceed human comprehension and control. Towering mountains, violent storms, deep chasms, and dark forests exemplify the sublime in nature. The sublime arises when the imagination fails to fully grasp what is perceived, yet reason asserts a sense of inner superiority. The result is a complex emotional state in which fear is transformed into admiration.

T

Terrace
Flat step-like area built or formed on a slope or hillside, often used for farming

or shaped naturally over time.

Terrassen Mosel
Part of the Mosel river from Zell to Koblenz. It is known for its very steep, terraced vineyards.

Terroir
A wine region is defined by its unique combination of terroir. Terroir includes specific soil, topography, climate, landscape characteristics, and biodiversity features. It is also largely defined by and human factors such as tradition and regulations. These factors create a specific environment where grapes grow distinctively, resulting in characteristic wines (Bonfante & Brillante, 2022).

Trockenmauer
(En: Drywall) Human-built dry wall that holds the terraces in the Mosel region. It is part of culture heritage and is made without cement. It does not collapse due to witty craftmanship and using the right forces. It holds the soil of the vineyards and is great for microclimate, biodiversity and water management.

V

VDP. Wines
High quality German wines from top estates belonging to the '*Verband Deutscher Prädikatsweingüter*'. The association sets stricter standards than the German Wine Law, and is recocnizable by their eagle logo on the wine bottle. (VDP. Die Prädikatsweingüter, 2026).

Vineyard
Agricultural and often monocultural land dedicated to the cultivation of grapevines for winemaking, typically located on steep, south facing river slopes in the Mosel valley.

Vineyard lane
(Inter-lane) area between vineyard rows.

Viticulture
The cultivation and harvesting of grapes specifically for vinification.

Vinification
Winemaking.

Vintage (wine)
Wines that are made from grapes harvested during one growing season. Nonvintage wines can blend different harvests.

Viticulture
The cultivation and harvesting of grapes which deals with everyting that occurs in the vineyard.

W

Water
Water is a transparent liquid essential for all forms of life and found in rivers, lakes, oceans, rain, and groundwater. It exists in multiple states: liquid,

solid (ice below 0 °C), and gas (water vapor through evaporation). Flowing freshwater shapes landforms through erosion and sedimentation, supports plant growth and agriculture, and enables human settlement. Rivers transport water toward the sea, where it becomes part of the saline ocean system, linking local landscapes to global cycles.

Wein Kulturlandschaft
(Wine Culture Landscape) Landscape that is shaped by wine growing, including vineyards, terraces, villages, and traditions connected to wine production.

Wine
(Du: wein) Alcoholic beverage made of fermented grape juice. It varies in color, sweetness, and style due to grape type, climate, and winemaking techniques (terroir). It's a complex product of nature and human intervention. (Harea & Simon, 2019).

Wine label
A printed or attached identifier on a wine bottle that provides information about the wine, including the producer, region, grape variety, vintage, and quality classification. Wine labels communicate both practical details for consumers and are part of the marketing of cultural, historical, or regional identity associated with the wine.

Winemaking
Vinification. The process of producing wine from grapes, involving harvesting, crushing, fermenting, aging, and bottling. Winemaking encompasses both scientific and cultural practices, with methods and techniques shaped by climate, grape variety, tradition, and regional identity.

Wine region
Specific geographic area known for producing wine, defined by its unique terroir. These regions, like Bordeaux or Tuscany often have specific rules governing grape varieties and production, leading to distinct wine styles.

Winescape
The total environment where wine tourism occurs, from the natural landscape and vineyards to wineries with social, cultural, and atmospheric elements (Bruwer & Lesschaeve, 2012).

Z

Zeller Hamm
River meander of Zell, where the Middle Mosel ends and the Terrassen Mosel starts.

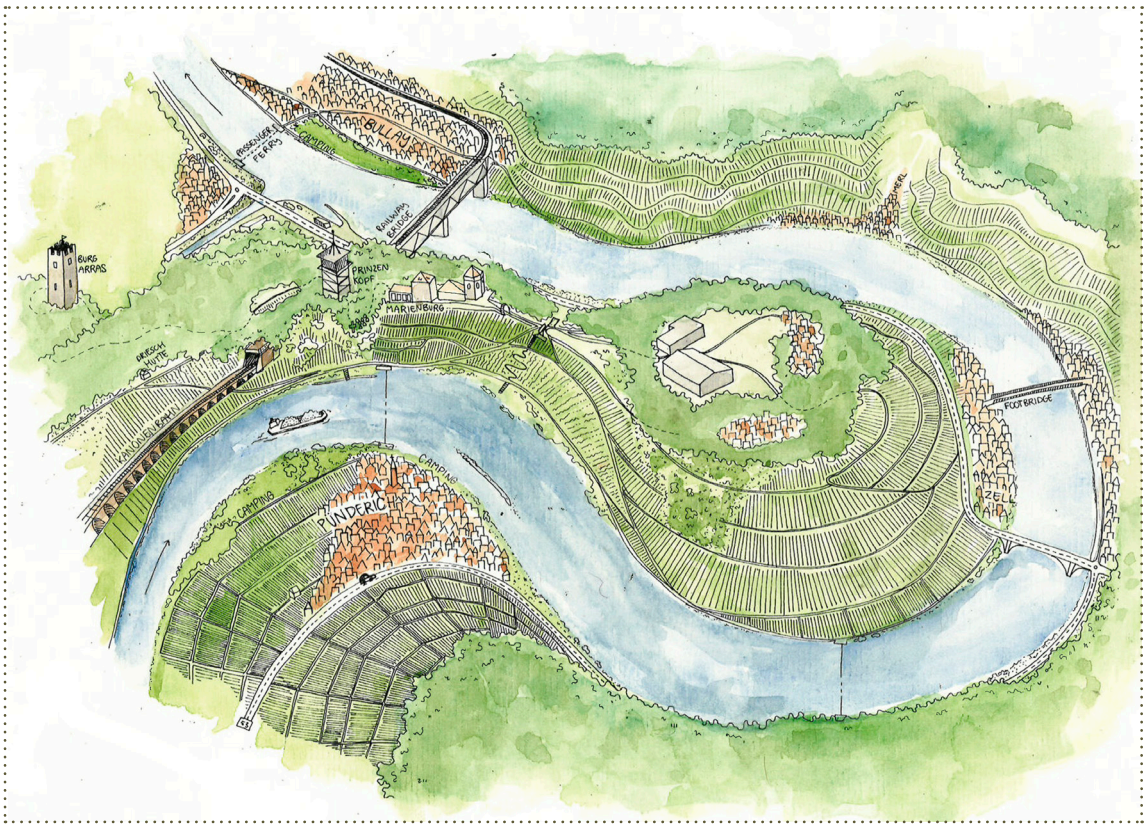
The Postcards

Mosel Beyond the Picturesque

From Romantic View to Layered, Resillient Landscape.

Geeske van Batenburg
MSc Graduation Project
Academic Year 2025 / 2026

TU Delft | Architecture and the Built Environment


BULLAY
BURG ARRAS
PRINZEN KOPF
MARIENBURG
FOOTBRIDGE
CAMPING
PÜNDERICH
ZELL

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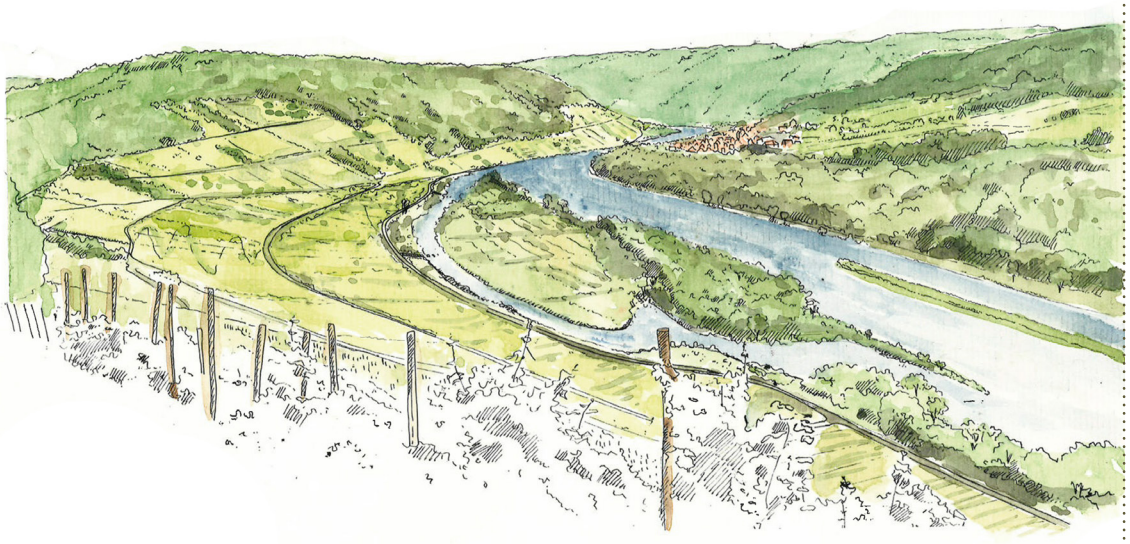

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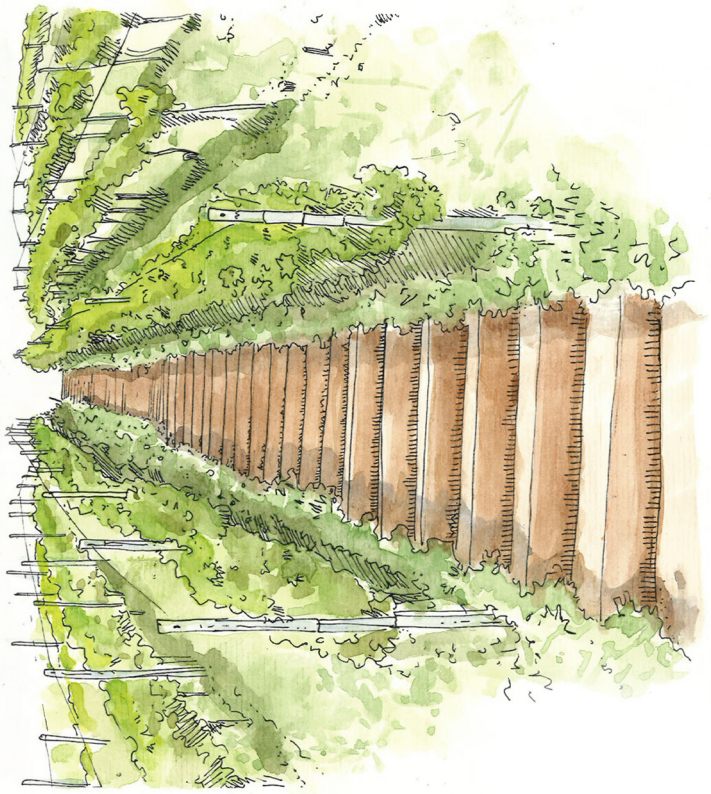

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For parts of this research, ChatGPT (OpenAI) is used to revise written text. However, it is ***not*** *used for text development, analysis, drawings or other parts of the research. The text is owned by the author.*

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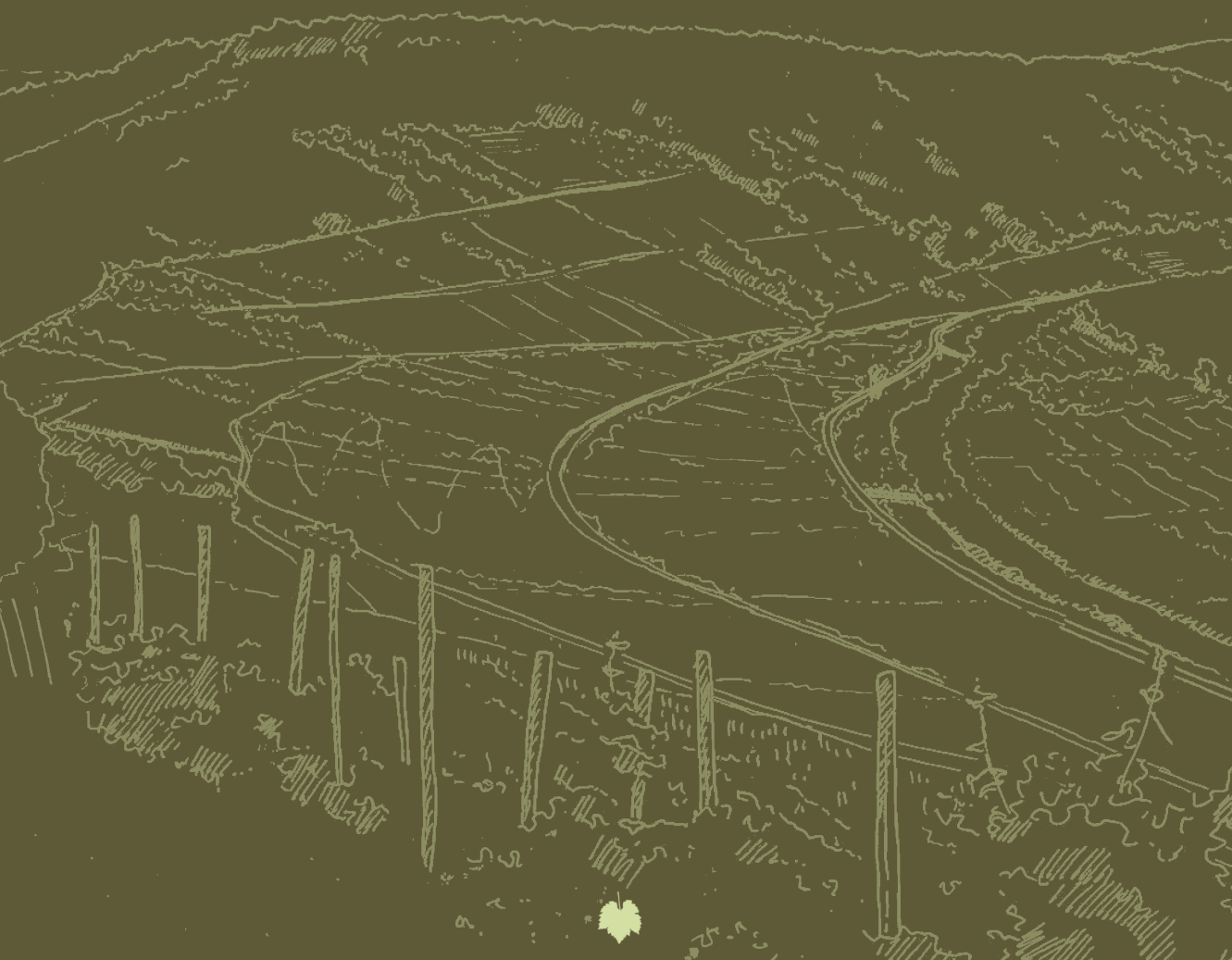
Part III

Romanticism

"It is vain to search for a definition of Romanticism."

Louis Dupré, 2013.



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