

## A LANDSCAPE HISTORY OF THE GEUL VALLEY: FROM A FARMERS' ARCADIA TO A MULTIFUNCTIONAL LANDSCAPE

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**Abstract:** This article describes the role of Natuurmonumenten, a Dutch NGO for nature conservation, in the preservation of cultural landscapes. The case study is the traditional rural landscape of the Geul River, South Limburg, The Netherlands. The Geul Valley was recognized for its natural, geological and Arcadian beauty early in the 20<sup>th</sup> century. The nature conservationists took action in the early 20<sup>th</sup> century when industrialization already threatened the area. However, it was only after the Second World War, that nature conservation societies like Natuurmonumenten (Natural Monuments Society) bought parts of the Geul Valley in order to preserve the landscape. The Arcadian argument was strong: not only did Natuurmonumenten buy the flowery meadows, but also a castle, watermills, and ancient farmsteads. All within the paradigm of the traditional landscape. In the decades following the Second World War, however, the surrounding landscape changed dramatically due to increased tourism, intensive farming, growing population, land reallocations, etc. The contrast between the nature reserves and the surrounding parts of the valley grew. Now, in the early 21<sup>st</sup> century, new challenges arise: will nature management continue to strive for the preservation of the traditional landscape, or will nature development like rewilding take place? Climate change is an important issue and the sustainability of the management of the nature reserves is under discussion. This article uses the Landscape Biography method not only to describe the history of the management of the nature reserves of Natuurmonumenten in the Geul Valley, but also to look at the role of the cultural and natural heritage of this landscape in the transitions to come. The aesthetic aspect of the landscape also referred to like the beauty of the landscape, should play a role in the ongoing debate on the future of these landscapes.

### Introduction

In 1909, my great-grandmother received a postcard. Willem and Anna congratulated her on her birthday and chose a postcard from the Geul Valley to send her. Willem and Anna apparently were there on holiday. Depicted on the postcard is an Arcadian landscape; the river meadows, cows grazing and drinking from the Geul River, a rustic fence and the colors of the setting sun (Figure 1).



Figure 1. Postcard of the Geul Valley near Geulem sent in 1909 (Collection M. Purmer)

In this article, I look at this river valley in the southernmost part of The Netherlands from a landscape-biographical point of view. I will examine the role of nature conservationists of Natuurmonumenten in the preservation and management of the Geul River valley. Natuurmonumenten (Natural Monuments Society), a Dutch NGO for nature conservation, is well known in The Netherlands. It is much less known however that the society also manages an impressive collection of cultural heritage. Properties include castles, country estates, cultural landscapes, and archeological remains. In short, Natuurmonumenten owns a broad array of typical Dutch landscapes, together with hundreds of historical buildings, wooded banks, hedges, lanes, and other landscape heritage.

This article is based on research on the management of the cultural heritage of nature-oriented organization. The focus lies on the historical-cultural landscapes Natuurmonumenten manages in the Geul Valley from historical perspective. With this article, I hope to draw attention to the role of the society for cultural heritage and more specifically cultural landscapes. The Geul Valley is one of four case-studies presented in my doctoral thesis (Purmer 2018).

### **Material and method**

Landscape biography is the main scientific method used in this article. Landscape biography studies the relationship between man and landscape. The relationship, however, is not characterized by a slow and graduate process. Specific events or actions form the biography of a person, this is equally the case for landscapes. The landscape is therefore dynamic and changes over time. Nature and man relationship are also determined by the action of man in a certain landscape. In this perspective, it is possible to identify authors in the landscape: people or events that have a lasting impact on the landscape (Kolen and Renes 2015).

In this article, Natuurmonumenten is studied as an author in the nature reserves in the Geul valley managed by society. The 20<sup>th</sup>-century landscape history of the present-day nature reserves of Natuurmonumenten in the Geul Valley is based on references, oral history, archival research, and fieldwork.

### **Results**

#### **The Geul Valley around 1910**

The Geul River valley is situated in the southern part of the province of Limburg, the southernmost province of The Netherlands. The Geul is a right bank tributary to the River Meuse and is often seen as one of the most beautiful small rivers in The Netherlands. The landscape here is elevated: hills reach a height of more than 300 meters above sea level. The rivers, like the Geul, Gulp, and Meuse, are deeply incised in the landscape thus presenting a hilly landscape with a foreign look for most Dutchmen. This is one of the reasons the region attracted tourists already in the 19<sup>th</sup> century.

A book about the Geul Valley, written by a nature conservationist-writer, which was published in 1911, turned out to have an important influence on the future of the valley. His name was Eli Heimans and he described the Geul River valley as an Arcadian landscape with an abundance of beauty and geological and natural rarities in his book 'Uit ons Krijtland' (from our Chalkland) (Heimans 1911). His lyric description of the Geul Valley gives much attention to the aesthetic aspect of this Arcadian landscape. The book was based on his own experience, gained during a holiday he spent in the region in 1910.

The term Arcadian is related to the picturesque in art and suggests a certain harmony between nature and man. An Arcadian landscape contains nature within man-made landscapes (Renes 2018). Often, there is an aesthetic aspect of the appreciation of the landscape involved.

In this period, tourism found its way to the Geul Valley, helped by early train connections. In 1853 already, the small town of Valkenburg aan de Geul was connected with a railway link to Maastricht and Aachen in Germany. The first tourist information organization of The Netherlands was founded in Valkenburg in 1885. Around the turn of the century, there were dozens of hotels present in the small city. The postcard sent in 1909 to my great-grandmother illustrates the Arcadian landscape which was one of the tourist attractions at the time, together with other sites like the ruins of Valkenburg Castle and underground quarries in the same city. These quarries of Valkenburg were open to the public and even decorated with murals for touristic purposes (Renes 1988). Tourism spread to the surrounding villages like Epen and Slenaken as well. Heimans stayed in Epen during his holiday in 1910. The part of the Geul Valley between the Belgian border and this village was described in his book.

However, the landscape Heimans described was mainly an agricultural landscape. This landscape was subject to change; land use changed under the influence of supply and demand on the market and the growing mining industry nearby. Topographical charts of the period show a small-scale landscape in the river valley, with a combination of meadows and orchards surrounded by hedges in lower parts, forests on steep slopes, pastures, arable lands and orchards on more gentle slopes and open, large-scale arable fields on the plateaus. These landscape patterns basically date from the Middle Ages, although the man had been present in this landscape since prehistoric times. Around 1910, cattle breeding and the fruit industry were important in the agricultural sector. This resulted in an increase of orchards and cow pastures in the region. Arable fields were used to grow cattle feed (Bieleman 1992). It is this landscape in change that Heimans recorded in his book.

### **The Geul Valley and nature conservation until 1940**

The book 'Uit ons Krijtland' illustrates that conservationists showed an early interest in the Geul Valley. Heimans was befriended with Jac. P. Thijsse, one of the founders of the society *Natuurmonumenten* in 1905. Thijsse and Heimans corresponded about possibly interesting grounds to obtain for the young society in the Geul Valley already before the book was published in 1911. Heimans advised the society to try to acquire one of the rare forests in the area, *Het Bovenste Bos* (literally *The Upper Forest*) and some of the geological interesting small quarries. As in the rest of The Netherlands, mostly forests, heathlands and not-reclaimed bogs were directly threatened by reclamation and cuttings. The meadows of the Geul Valley, rich in floral diversity, were not considered as threatened.

In the first half of the 20<sup>th</sup>-century conservationists like the society, *Natuurmonumenten* did not buy grounds in the Geul Valley in order to establish a reserve but tried to avoid large scale developments in the area that were threatening the landscape, for instance, a projected water reservoir in 1931. The idea presented by the Dutch State Mines was to build a hydroelectric power station. One of the reservoirs proposed would flood a large part of the most southern stretch of the Geul Valley, including the biodiverse meadows. The plans aroused nationwide protest from conservationists' circles and there was a debate in the papers. In a letter to the chairman of *Natuurmonumenten* Pieter van Tienhoven, Thijsse states that this reservoir would not only destroy the vegetation but would also affect the landscape. The argumentation was aimed at the preservation of the threatened species and the aesthetics of the landscape. Conservationists from different societies and organizations gathered to discuss the matter in a meeting in Utrecht in February 1932. Here, the idea was conceived to establish a committee devoted to the protection of threatened landscapes, the so-called '*Contact-Commissie voor Natuur- en Landschapsbescherming*' (committee for the protection of nature and landscape). In the end, the plans for the reservoir were withdrawn. The *Contact-Commissie* existed for years and played an important role in nature conservation in The Netherlands (Gorter 1986).

The discussion about the water reservoir showed that conservationists came into action when the Geul Valley was being threatened, but not by buying grounds. Natuurmonumenten had to wait till after the Second World War for an opportunity to acquire a country estate in the Geul Valley.

### **Natuurmonumenten and the Geul Valley (1955-1975)**

It's only shortly before and during the Second World War that the provincial nature conservation organization Het Limburgs Landschap obtained some grounds in the Geul Valley. One of the geological rarities of the Geul Valley, a small quarry where Carboniferous layers came to the light, was rented from the owners in 1936. Later, the quarry was named after Heimans, who had died unexpectedly while on an excursion in Germany in 1914. Het Limburgs Landschap also managed to buy some lime grassland in the proximity of the Geul in 1942.

Natuurmonumenten had some properties in the province of Limburg after the Second World War, but all in the northern parts of the province and nothing in the so much appreciated Geul Valley. This changed in 1955: Genhoes, a large country estate near Valkenburg came on the market that year. A public auction was held on October 18<sup>th</sup>, 1955. Natuurmonumenten was interested in buying the Genhoes country estate including its castle, farmsteads, meadows, forests and arable fields. Natuurmonumenten was to celebrate its 50<sup>th</sup> anniversary in 1956 and wanted a special acquisition to mark the jubilee. Also, there was money available since the late chairman of Natuurmonumenten Pieter van Tienhoven had left the society an inheritance which was to be spent in the spirit of the deceased. Staatsbosbeheer (National Forest Service) had shown interest in the forests of the estate, so negotiations before the auction were necessary to avoid conflicts on the auction. Natuurmonumenten wished to keep the estate intact, buildings and grounds included.

In the end, Natuurmonumenten succeeded in buying the estate, including more than 84 hectares of ground. A series of photos was taken shortly after the purchase. It shows an agricultural landscape, with all the typical Geul Valley elements: orchards, meadows lined with poplars, arable fields and forests on the steep slopes (Purmer 2018) (Figure 2).



*Figure 2.* Poplars along the Geul in 1955, part of the Genhoes estate  
(Photo by J. van Dijk, Photo archive Natuurmonumenten, 's-Graveland, The Netherlands)



Around 1955, the landscape of southern Limburg was changing fast under influence of changing agriculture and a rapidly growing population. This was one more reason to establish nature reserves in this region. The biodiversity of the recently acquired Genhoves was enormous, according to the well-known ecologist Victor Westhoff, who advised Natuurmonumenten at the time (Purmer 2018). His only concern was the disappearing flora of the arable fields and he advised the society to make sure that species like poppy and cornflower were preserved.

The aim of the management was to preserve the existing landscape. The management of the forests and trees was mainly conducted by the National Forest Service. The iconic poplars for instance were replanted on the shores of the Geul. Grasslands were used by farmers, who leased some of the plots. Natuurmonumenten supported the restauration of the nearby village church because of the century-old connections with the castle. The castle itself needed a thorough restauration, after which it was rented out to a painter. The agricultural landscape however was still used by farmers and more or less kept in the state of 1955. The aesthetics of Arcadian landscape was thus preserved.

In 1961 Natuurmonumenten had the opportunity to buy a property in the Geul Valley described by Heimans in 1911. The Bovenste Bos, a forest lyrically described by Eli Heimans as the most beautiful place in the country, came on the market. Natuurmonumenten started a campaign to fund the purchase. The campaign titled 'Het Bovenste Bos Behouden!' (The Bovenste Bos preserved!) became a success: there was media attention, new members joined the society and money was raised for the purchase. After the acquisition, the forest was named the Heimans Reserve the Bovenste Bos, in honor of the man who focused on the natural beauty of the forest and was born exactly hundred years earlier. His son, a biologist himself, revealed a memorial plaque in the forest. Again, the National Forest Service was in charge of the management (Purmer 2018).

Few years later, another country estate neighboring Genhoves came on the market. The estate called Schaloen drew the attention of Natuurmonumenten. Again, the society wished to acquire the whole estate, including the small castle, watermill and a 17<sup>th</sup> century hermitage which historically was maintained by the owners of the castle (Figure 3). The slope forests which were part of the estate were especially interesting from a nature perspective. The forests were coppiced and this management enabled orchids and other rare species to flower here.



Figure 3. The 17<sup>th</sup> century hermitage called 'De Kluis' historically belonging to the Schaloen country estate (Photo: M. Purmer 2015)

This time however, Natuurmonumenten wasn't able to raise enough money from government grants. Because of the purchase of an important forest in the Veluwe in Gelderland, the Deelerwoud, Natuurmonumenten did not have own finances available. In the end, the local government of the municipality of Valkenburg was willing to buy the castle and some adjoining grasslands. This suited the municipality as there were plans for a small recreational lake in the adjoining part of the Geul Valley. As a result, the Schaloen estate was split. In 1967, Natuurmonumenten got the much-desired forests and also the hermitage. Hermits had been living in this remote corner of the estate from the late 17<sup>th</sup> century till the beginning of the 20<sup>th</sup> century. At that time, the growing number of tourists from Valkenburg made a life of prayer and contemplation on this location difficult. The last hermit had left in 1930. It illustrates the growth of the tourism in the region, a process which continued after the Second World War.

Tourism was not the only pressure on the landscape. Infrastructure to accommodate tourism and other economic developments threatened the Geul Valley. In 1957, a highway was projected through the Genhoes estate. This was prevented by conservationists, so the highway was built outside the nature reserves but still in the Geul Valley. Elsewhere, existing old roads were broadened and improved to accommodate the growing traffic. In the sixties and early seventies, the world around the Geul Valley in Southern Limburg was rapidly changing and this was the main reason for another campaign fifteen years later.

### Action Geuldal (1977)

In the seventies, land consolidation was planned in Southern Limburg, which threatened the Geul Valley landscape. Once again, conservationists organized a campaign to preserve the most valuable parts of the Geul Valley, still in agricultural use. Natuurmonumenten and Het Limburgs Landschap together organized the Geul Valley campaign, 'Aktie Geuldal' in 1977. Main objective of the campaign however was heritage oriented: the purchase of the historic watermill the Volmolen and two old farmsteads with their surrounding grounds. Although the symbol of the campaign became the small zinc violet, growing on debris from old 19<sup>th</sup> century zinc factories in Belgium, attention was focused on the preservation of the typical Geul Valley landscape. Posters highlighted the beauty of the Arcadian landscape threatened: vernacular architecture, the wild and untamed Geul River, flowers and trees and small chapels and crucifixes typical for the landscape.

Again, the action was very successful. Throughout The Netherlands, the poster with the zinc violet was seen. A special medal was issued, which showed the zinc violet on one side and the meandering Geul on the reverse (Purmer 2018) (Figure 4).



Figure 4. Medal with the zinc violet and the meandering Geul on the reverse. The text on the medal states: 'to preserve the Geul Valley 1977' (Collection Natuurmonumenten)

There was also protest: farmers in the village of Epen were afraid that protection of the Geul Valley as nature reserve would make farming impossible. The campaign however provided Het Limburgs Landschap and Natuurmonumenten with the financial means to buy the properties which were targeted as goal. Natuurmonumenten bought the typical farmstead 't Höfke with the grasslands and orchards belonging to it and the Volmolen watermill in Epen with surrounding meadows. The mill illustrates another aspect of the heritage of the Geul Valley (Figure 5). The mill was built in the 18<sup>th</sup> century and served the cloth industry in nearby Vaals. It was converted into a corn mill late 19<sup>th</sup> century (Van Lochem et al. 2015).



Figure 5. The Volmolen (Photo: M. Purmer 2018)

The campaign generated so much money that another historical building could also be bought: the Bovenste Molen watermill on the Geul near Mechelen. However, the acquired meadows in the Geul Valley did not have the botanical richness as was described in 1911. The typical zinc-based vegetation had largely disappeared. The Arcadian landscape described by Heimans about 65 years earlier had changed dramatically. In the end, Natuurmonumenten had acquired parts of the so much desired Geul Valley meadows, but without the rich biodiversity mentioned by Heimans. The question was now how to manage the newly acquired reserves.

### **Management in two directions: wilderness and Arcadia (1980-2015)**

When studying the management plans for the period after 1977, the main theme seems to be an Arcadian oriented management. The Genhoves estate and the other Geul Valley properties of Natuurmonumenten were managed as an agricultural landscape. Coppice, grazing and mowing were used to manage the reserves. New orchards and hedges were planned to restore the historic cultural landscape. In this period, the historical landscape of the region gained attention. In 1987, a first historical geographical study of the landscape of Southern Limburg was published (Barends et al. 1987). In the following year, a thorough study of the history of the landscape was published by the historical geographer Hans Renes (Renes 1988).

The environment outside the reserves however was still changing under the pressure of large-scale and modern farming and the growing pressure of tourism. In the late eighties, the idea of creating large-scale nature was developed. The first plans for nature development along the Dutch rivers were presented in 1987 (De Bruin et al. 1987). In 1990, articles were published

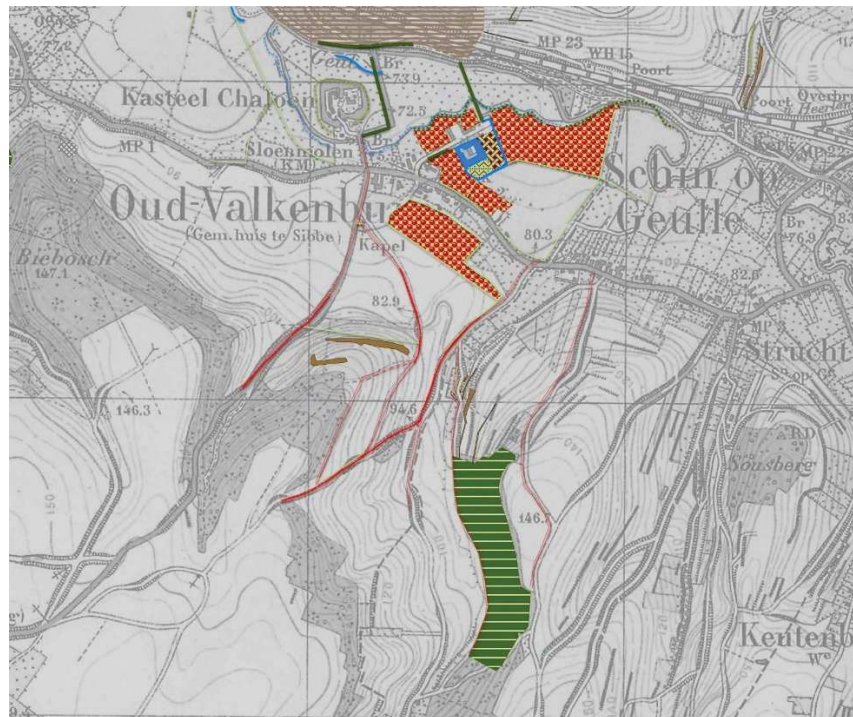


on the possibility of large-scale nature development in the Southern Limburg river valleys. The Geul is mentioned as a possible location for nature development (Hendrix and Schepers 1990).

The idea of large-scale nature development brought different opinions on the management of the reserves. On the one hand large-scale wilderness was the objective, but on the other hand maintenance of the Arcadian small-scale landscape was desirable as well. In reality however the Arcadian landscape Heimans described was under constant pressure and vanishing slowly. Het Limburgs Landschap decided in the late nineties on large-scale nature development along the Geul, west of Valkenburg (Staal and Ovaa 2006). Natuurmonumenten had plans for small-scale nature development projects in the reserves but otherwise held on to a management aimed at preserving the Arcadian landscape in the nature reserves. Especially in the management of the Genhoes and Schaloen country estates, heritage played an important role in the management.

Despite of this, there was also critique on the management of Natuurmonumenten in the Geul Valley. The Dutch NGO De Landschapswacht (landscape watch) wrote a very critical report: they stated that hedges, wooded banks and orchards were neglected (Landschapswacht 2004). The Landschapswacht was at least partly right. The management of Natuurmonumenten, which aimed to preserve the Arcadian landscape, wasn't always successful, could be concluded.

With the growing attention for cultural heritage and cultural landscapes since the late nineties-early years of the twenty-first century however, Natuurmonumenten focused more on restauration of the small-scale landscape. An inventory of the historic elements in the Geul Valley reserves showed that from a heritage perspective, restauration and consolidation was needed in some cases. On the other hand, the landscape was far more intact in the nature reserves than in the surroundings (Purmer and Burger 2010) (Figure 6).





Again, the world outside nature reserves was changing rapidly. For now, the challenge for the future seems to be to find an equilibrium between heritage and nature inside and outside the reserves.

### To the future

Today, large-scale nature development in the river valleys in southern Limburg is still high on the nature conservationist's agenda. Now, the concept of rewilding is used to look at the ecological potential of river valleys like the Geul Valley (Monbiot 2014).

When one is walking in and around the nature reserves today, it's possible to make some observations. Inside the reserves, there is still much present that reminds of the past of the landscape. Sometimes it's well-maintained orchards or hedges, traditionally cut every year, sometimes a sole pollard tree is a relic of the past. These trees stood once in the hedges or stood along small streams in the meadows (Figure 7).



*Figure 7.* Two ancient pollard trees, who most likely stood along a tributary small river of the Geul, near the hamlet of Hurpesch (Photo: M. Purmer 2017)

If we compare photographs of the turn of the century with the current situation, one could see that the landscape around 1900 was more cultivated as the landscape was mostly in agricultural use. Parceled grazing and mowing, together with coppice and hedges to divide the plots resulted in a small-scale landscape. The Geul River itself was meandering through this landscape, the riversides relatively open (Figure 1). Nowadays, the management of the conservationists is more large scale and extensive, resulting in more trees and bushes along the Geul itself and disappearance of elements of hedges and pollards elsewhere (Figure 8).

Historical buildings and especially the watermills have a strong relationship with the surrounding Geul Valley landscape. The connection of buildings and landscape is also important for the Genhoves country estate. The castle itself is built on the edge of the valley, with the water from the Geul nearby enough to hold the moat filled, but without the risk of frequent flooding. The large-scale property belonging to the estate is still recognizable in the landscape.



*Figure 8.* Spontaneous and planted vegetation along the Geul between the villages of Mechelen and Epen, with the trunk of a fallen poplar in the stream (Photo: M. Purmer 2017)

The arable fields, the orchards, and the meadows are therefore historically relatively large scale compared to other parts of the Geul Valley. The forests are still coppiced, with results for the biodiversity. The cultural landscape of the Genhoes estate, however, remains largely intact (Figure 9). Outside the reserves, however, such relics and elements are scarce.



*Figure 9.* The landscape of the Geul Valley on the Genhoes estate, with forests, poplars along the Geul and the arable fields in the background (Photo: M. Purmer 2008)

For the future, choices have to be made. On the one hand, nature is very much under pressure in the reserves. On the other hand, managing the small-scale landscape with all the elements in it is expensive. Consolidation plans are often drawn up from either heritage or an ecological perspective. The combination of heritage and nature, however, seems fitting in this centuries-old cultural landscape. The management aimed at preservation of the small zinc



violet, for instance, requires frequent mowing of the meadows, thereby copying the former agricultural use of the river meadows for the harvest of hay (Figure 10).



Figure 10. The zinc violet (*Viola lutea* subsp. *calaminaria*) in the Geul Valley near Epen (Photo: M. Purmer 2017)

There seems to be a lot to gain, both for an ecological and a heritage aspect of the landscape of the Geul Valley. Old elements in the landscape, like wooded banks and hedges of hawthorn, function as a migration route for different species of plants and animals. A lot of these elements connecting the worlds in and outside the reserves have disappeared. Ecology and heritage could profit from restauration (Van Tooren et al. 2015).

What should the landscape of the Geul Valley look like? From a rewilding perspective, one could think of large-scale nature development alongside the Geul, including grazing and trekking forests, spontaneously developing where grazing allows it. From a heritage perspective, one could look at still used, small-scale valley landscapes elsewhere in Europe. The landscape of the Una river valley in Bosnia-Herzegovina resembles the situation in Southern Limburg around the time of Heimans' writing (Figure 11).

On the terraced hills of this Bosnian river valley -now a national park- one recognizes the features Heimans described. Orchards, wooded banks, hedges, and river meadows are still in agricultural use. The small-scale landscape in Bosnia-Herzegovina could be a reference for the Geul Valley. It must be considered, however, that the management of such a small-scale landscape is intensive and could be expensive. On the other hand, this management respects the long history and the layerdness of this landscape. Preservation of the old cultural landscape seems to be coherent with the beauty of the landscape Heimans described. Even then, it is probably not possible to manage all the reserves in the Geul Valley this intensively.

For the nature reserves of Natuurmonumenten in the Geul Valley, a form of zoning could bring a solution. More intensively managed zones of small-scale cultural landscapes surrounding historic buildings such as water mills, castles and farmsteads could be alternated with more extensively managed grounds.





*Figure 11.* Small-scale terraced landscape in the Una River valley, Bosnia-Herzegovina (Photo: M. Purmer 2018)

In both cases, however, the Arcadian landscape described by Heimans more than a hundred years ago can be inspirational. This seems fitting for nature reserves which were spared from too drastic changes in the past 65 years. The Geul Valley nature reserves that Natuurmonumenten manages tell the story of centuries human-nature relationships. Man has been shaping this landscape since at least medieval times and the use of man in the past is visible everywhere. The late medieval castle of Genhoves, the 18<sup>th</sup>-century watermills and old farmsteads testify human presence. The landscape was formed by generations of farmers. This mainly agricultural landscape was the scene for Heimans' Arcadia. Conservationists took this layered landscape as reference for their management.

From a landscape biographical point of view, Natuurmonumenten was and is an author in the landscape of the Geul Valley. By buying and managing nature reserves in Southern Limburg since 1955, the society played an active role in the shaping of the Geul Valley landscape. In this way, conservationists added another layer to this already layered landscape.

Even with this rather conservative management, the contrast between the reserves and the outside world grew. Therefore, to base the management of the future on the cultural landscape at hand seems logical. With zoning both ecological and heritage goals can be served. Large scale nature development could lead to the loss of the cultural heritage present in the landscape. The layerdness of this century-old landscape could be affected, thereby losing parts of the rich history still visible in the current landscape.

### Conclusion

Landscape-biographical research in the nature reserves of Natuurmonumenten in the Geul Valley shows the role of the society as an author in this centuries-old landscape. The Geul Valley landscapes Natuurmonumenten tried to preserve are part of a dynamic and layered landscape. This research illustrates the dynamic nature of the reserves, with different layers in the landscape illustrating a long history of development. The pressure on this Arcadian agricultural landscape has only been growing since then.

The history of the management of Natuurmonumenten in the nature reserves in the Geul Valley shows, that the society mainly strived for the preservation of the existing cultural landscape, including the diverse collection of heritage buildings the society acquired over the

years. Succeeding staff members of Natuurmonumenten, from the forester in the field to the chairman of the society, all had their influence on the landscape. The chosen vision on nature was maintained locally throughout the years, even when on a national level the insights changed, as we saw in the period of large-scale nature development.

These days, the challenges for integrated management of nature reserves are big. Sustainability, spatial quality, landscape, and climate change all will have their effects on the terrains of Natuurmonumenten, as well in the Geul Valley as elsewhere in The Netherlands. The concept of a dynamic nature reserve is appropriate when taking the often long historical and ecological development of the landscape into account. The scale of the landscape, historical perspective, and attention for the existing layerdness of the landscape should play a role in the discussion on the future of the nature reserves in this man-made landscape. Management measures should be reviewed on their influence on the landscape and if it respects the layerdness of the existing landscape. The aesthetic aspect of the landscape, also referred to as the beauty of the landscape, has long been absent from the discussions on landscape change.

This study shows, that the aesthetic aspect always played an important part in the management strategy of Natuurmonumenten in the Geul Valley, most clearly illustrated by the attention for the preservation of the Arcadian landscape. Therefore, the beauty of landscape deserves a place in the discussion on the future of the landscapes at hand. After all, the Dutch landscape remains for the most part a man-made landscape, or is at least very strongly influenced by men. Nature management in the Dutch landscape is a cultural act. For the future of the Geul Valley, integration of ecological and heritage goals could be the foundation for an overall management strategy which is based on the preservation of the Geul Valley cultural landscape. In this landscape, there is room for the beauty of the landscape Heimans described, including rare species like the zinc violet and valuable heritage as the Volmolen watermill as well.

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