

A photograph of a dirt path leading through dense green foliage towards a church with a tall spire. The path is in the foreground, leading the eye into the scene. The foliage is lush and green, framing the path and the church. The church is in the background, partially obscured by the trees. It has a dark roof and a prominent spire. The sky is overcast and grey.

# Adaptive reuse for monastic complexes in the rural environment of Zuid-Limburg

An exploration of different design options

Moniek Widdershoven  
MSc thesis Landscape Architecture





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Moniek Widdershoven  
moniekwiddershoven@gmail.com

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Chairgroup Landscape Architecture  
Droevendaalsesteeg 3  
6708 BP Wageningen  
The Netherlands

Phone: +31 317 484 056  
Fax: + 31 317 482 166  
Email: office.lar@wur.nl  
www.lar.wur.nl

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Picture on front page: Monastery Watersley, Sittard





*Author*  
Moniek Widdershoven

.....  
signature date

*Supervisor and examiner*  
Ir. Rudi van Etteger MA (WUR)

.....  
signature date

*Supervisor and examiner*  
Dr.ir. Joks Janssen (WUR)

.....  
signature date

*Examiner*  
Prof.dr.ir. Adri van den Brink (WUR)

.....  
signature date

*Examiner*  
Ir. Annet Kempenaar (WUR)

.....  
signature date



# Preface

This thesis is part of the Master Landscape Architecture at the Wageningen University and simultaneously the end product of this Master. In this thesis all knowledge gathered during the Bachelor and Master in Landscape Architecture will be combined into one project.

My preference for cultural heritage made me decide to spend this one year journey on the adaptive reuse of monastic complexes in the rural environment of Zuid-Limburg. When I visited Zuid-Limburg the last few years, I noticed that more and more monastic complexes became vacant. Since I was raised in Zuid-Limburg I wanted to use my knowledge in order to prevent this cultural heritage from being demolished. Although this research is not a clear action plan, it provides new insights in dealing with cultural heritage.

During this process I was supported by several people. First I would like to thank Rudi van Etteger and Joks Janssen who gave feedback and comments on my work. When necessary they helped me through difficult phases and proposed new approaches. Furthermore I would like to thank Annet Kempenaar for her motivation in the last phase of this thesis. I also would like to thank Frans Hoebens for providing data about all the monastic complexes in the Province of Limburg. Without this data, it would not have been possible to give a clear overview of the need for adaptive reuse of monastic complexes in the region. Furthermore, I would like to thank Philippe Cremers, Wil Krekels, Ed van den Ende and Jo Horbach for their contribution to this thesis. They were involved or committed to the three selected monastic complexes and provided information about these complexes. I also would like to thank everyone else who provided information in what way so ever.

Finally, I want to thank my fellow students, friends, and family for their support and understanding during this thesis.





# Summary

Since 796 A.D. 208 monasteries were founded in Zuid-Limburg (Hoebens 2014). Not all monasteries are still present or fulfil the function that they used to fulfil. Out of the 208 monasteries, 146 monasteries are still present in Zuid-Limburg nowadays. They are important identifiers in the landscape of Zuid-Limburg and are crucial for the identity of the region. Due to secularisation, the fact that the functions that once used to be accommodated in these buildings are accommodated somewhere else and the aging of monastic communities in the Netherlands, makes for a fast release of monastic complexes onto the real estate market. The release of religious heritage is a national trend, but very problematic for the province of Limburg due to the large numbers (Harmsen and Waal 2008).

Since the monastic complexes are inextricably linked to the outdoor space, a large part of this outdoor space will become available as well. Although the outdoor space is often underestimated, it was of great importance for the monastic life. The outdoor space made it possible for the monastic community to be self-sufficient whereby also parts of the outdoor space simultaneously served for religious and recreational purposes. (Rijksdienst voor het Cultureel Erfgoed 2013)

In this research the vacant monastic complexes in the rural environment of Zuid-Limburg and monastic complexes in the rural environment of Zuid-Limburg that might be released in the future, are taken into account. These monastic complexes (17 in total) and their outdoor space are situated on important locations in the landscape framework as stated in the Landscape Plan Zuid-Limburg (Kerkstra et al. 2007). They provide a lot of opportunities for the strengthening of the landscape of Zuid-Limburg due to their location and size.

Out of the 17 monastic complexes, that are vacant or still fulfil a monastic function at the moment, three monastic complexes were selected. These three selected monastic complexes were subjected to two diverse options for

programming: housing and conference centre/hotel. This exploration of different design options gave insights in the design process that the designer undertook and the challenges the landscape architect was confronted with while dealing with cultural heritage.

These insights were at the basis of the recommendations that are addressed at the end of this thesis. These recommendations, about how to deal with adaptively reusing monastic complexes in the rural environment of Zuid-Limburg, provide handholds for others who come into contact with the adaptive reuse of monastic complexes.



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Monastery Wittem, Wittem\*



# PART I - INTRODUCTION TO THE RESEARCH







Monastery Wittem, Wittem\*

# 1\_ Introduction to the topic

*This thesis deals with the issue of monastic complexes in Zuid-Limburg. From 796 A.D. onwards more than 200 monasteries were founded in Zuid-Limburg. The aging of current monastic communities and secularisation makes that there will be no accretion of new people for the monastic life. This ensures that a decrease of monastic communities will take place. This will lead in the end towards a release of monastic complexes. In addition, the functions that the monastic communities used to fulfil are nowadays taken over by other organisations and also often accommodated in other buildings. Therefore there is no need to preserve the monastic complexes for these particular functions anymore. The release of monastic complexes does not have to be a problem though. However, the large number of monastic complexes in Zuid-Limburg could be problematic.*

*The monastic complexes in Zuid-Limburg are not isolated objects. Together with chapels, (road) crucifixes and churches they express the Catholic religion in the region. The significance of this religious heritage is also addressed in the Landscape Plan Zuid-Limburg which was set up in order to strengthen the landscape of Zuid-Limburg (Kerkstra et al. 2007). Besides the focus on the landscape, cultural heritage plays an important role in this vision as well.*

*It is important to value cultural heritage and to monitor the preservation of this cultural heritage. The cultural heritage from for example the mining period in Zuid-Limburg was not estimated very high, which resulted in the fact that not much iconic appearance is left nowadays. The mining heritage could have supported the collective memory if it still would be present (Dommelen and Pen 2013, ter Braak 2008). Therefore, it is important to make informed decisions before another important historical layer will disappear in the landscape.*

*In order to get an understanding of how the landscape of Zuid-Limburg could be strengthened, the Landscape Plan Zuid-Limburg will be addressed first. Afterwards a selection out of*

*the monastic complexes in Zuid-Limburg is made, whereupon an elaboration is given on the history of monasteries in the Netherlands including their developments over time. Furthermore, the problem statement and research questions are set out. Subsequently the purpose and the significance of this research will be addressed. At the end of this chapter the outline of the report will be explained. This outline will also serve as reading guide for the reader of this report.*

## 1.1 Landscape Plan Zuid-Limburg

The landscape of Zuid-Limburg [A.1] is unique in the Netherlands inter alia, by its height differences which are characterised by stream valleys, slopes and plateaus. Its long history of occupation is reflected in the landscape. Also its natural and cultural-historical wealth lends the landscape a varied character and a great recreational appeal. This uniqueness makes that the landscape of Zuid-Limburg is one of the twenty Dutch National Landscapes [F.1.1\*]. These National Landscapes represent ideally the beauty and



[F.1.1\*] National Landscape Zuid-Limburg

history of the Netherlands. In order to strengthen the quality of these landscapes 'preservation through development' is the starting proposition in the governmental policy on strengthening these landscapes. The core qualities that need to be strengthened are dependent on the specific National Landscape. In case of National Landscape Zuid-Limburg these core qualities are: 1. the contrast of scale which varies between open and enclosed environments [F.1.2\*], 2. the green character [F.1.3\*], 3. the relief [F.1.4\*] and 4. the presence of cultural heritage [F.1.5\*] (Kerkstra et al. 2007).

The Landscape Plan Zuid-Limburg is the result of a cooperation of the Province of Limburg and Wageningen University. It is an elaboration on the governmental policy of the National Landscapes on a regional level. The plan was released in 2007 and geared as much as possible to the then prevailing Provinciaal Omgevingsplan Limburg (POL). It consists of: 1. an analysis of the core qualities of the landscape of Zuid-Limburg and their significance for the planning of future spatial developments; 2. the design of a landscape framework for the development of the landscape with concrete design proposals as a typological basis for new implementations; and 3. detailed elaboration of three exemplary areas. The landscape framework presents a coherent picture for the development of the landscape, which can serve individual spatial actions as well. It accentuates the geomorphology of the landscape, highlights the difference between open, dry plateaus and enclosed, wet valleys and strengthens the green character of the area. The concrete design proposals that underlie this landscape framework can be divided into 4 categories: slopes, water bearing valleys, dry valleys and plateaus [F.1.6].

The slopes (10 proposals) are important because they largely determine the main shape of the relief. They form the border between the high plateaus and the lower valleys and can be subdivided into gentle, moderate and steep slopes. For example, the highlighting of the steep slopes with ascending planting enhances the visibility of the relief and the seclusion



[F.1.2\*] Contrast of scale; open and enclosed environments



[F.1.3\*] Green character





[F.1.4\*] Relief



[F.1.5\*] Presence of cultural heritage

of the valleys. This planting also contribute to the reduction of erosion sensitivity of the slopes. On the other hand, gentle slopes are generally not planted. However, when the ramps are long, it is recommended to implement for example a continuous border of bushes in order to control erosion. The stated 10 proposals were distinguished in terms of form, but the interventions for the steep slopes may vary because of variations in soil structure.

The slopes define the edges of the valleys, whereby a subdivision could be made between water bearing valleys and dry valleys. The water bearing valleys (5 proposals) are the wet components of the landscape of Zuid-Limburg. The strengthening of the wet character of the valley floors and the seclusion of the valley ensures that the disparities in the landscape will be accentuated. The wet valleys can be strengthened by the extensification of agricultural land use and the termination of the artificial drainage. This extensification allows the development of a large diversity of moisture conditions and its associated vegetation on the valley floors. The steepness of the slopes and the width of the valleys determine the proposals.

Complementary to these water bearing valleys are the dry valleys. The dry valleys (6 proposals) are situated at the edge of the plateaus and the slopes. The valleys do not have a permanent water bearing function, but are though the natural water drainage for the plateaus. Again, the dry valleys were distinguished after form and similar to the water bearing valleys in terms of determining the proposals. The determinative factors for the proposals are the steepness of the slopes, the presence and width of the flat valley floor and the presence of steep edges between the valley floor and the slopes.

The last proposals in order to create the landscape framework are the ones from the plateaus (3 proposals). The core quality of the plateaus is the openness in contrast with the seclusion of the valleys. A distinction could be made between plateaus

## SLOPES

S1



Long, gentle slope (1-4°)  
Vegetation: scrubs with hiking path on slope ('new planted bend')

S2



Long, moderate slope (4-8°)  
Vegetation: scrubs with hiking path on slope ('new planted bend')

S3



At the top: long, moderate slope (4-8°)  
At the bottom: very long, gentle slope (1-4°)  
Vegetation: scrubs with hiking path on slope ('new planted bend')

S4



At the top: long, gentle slope (1-4°)  
At the bottom: short, strong slope (>8°)  
Vegetation: forest on steep sloping base, scrubs with hiking path on slope ('new planted bend')

S5



At the top: short, strong slope (>8°)  
At the bottom: long, moderate slope (4-8°)  
Vegetation: forest on steep sloping top

S6



At the top: long, gentle slope (1-4°)  
At the bottom: long, strong slope (>8°)  
Vegetation: forest or pasture with scrubs on steep sloping part

S7



At the top: long, strong slope (>8°)  
In the middle: long, moderate slope (4-8°)  
At the bottom: long, gentle slope (1-4°)  
Vegetation: forest or pasture with scrubs on steep sloping top

S8



At the top: long, strong slope (>8°)  
In the middle: very long, moderate slope (4-8°)  
At the bottom: very long, gentle slope (1-4°)  
Vegetation: forest or pasture with scrubs on steep sloping top

S9



At the top: long, strong slope (>8°)  
In the middle: short, moderate slope (4-8°)  
At the bottom: short, strong slope (>8°)  
Vegetation: forest or pasture with scrubs on steep sloping top, forest on steep sloping base

S10



At the top: long, strong slope (>8°)  
In the middle: very long, moderate slope (4-8°)  
At the bottom: short, strong slope (>8°)  
Vegetation: forest or pasture with scrubs on steep sloping top, forest on steep sloping base

## WATER BEARING VALLEYS

WV1



Valley floor: <20 m without steep edges  
Valley slopes: gentle or moderate sloping  
Vegetation: riparian vegetation (spontaneous storage directly along the stream)

WV2



Valley floor: <20 m with steep edges  
Valley slopes: moderate sloping  
Vegetation: scrubs on valley floor and on steep edges

**WV3**

Valley floor: 20-50 m with steep edges  
 Valley slopes: moderate sloping  
 Vegetation: forest on valley floor and scrubs on steep edges

**WV4**

Valley floor: >50 m with steep edges  
 Valley slopes: one moderate sloping, one strong sloping  
 Vegetation: forest (or pasture with scrubs) on steep slopes, scrubs on steep edge and riparian vegetation along stream

**WV5**

Valley floor: >50 m with steep edges  
 Valley slopes: one gentle sloping, one moderate sloping and two strong sloping  
 Vegetation: forest (or pasture with scrubs) on steep slopes, scrubs on steep edge and riparian vegetation along stream

**DV2**

Valley floor: <20 m without steep edges  
 Valley slopes: moderate sloping  
 Vegetation: scrubs in valley axis

**DV3**

Valley floor: not present or <20 m without steep edges  
 Valley slopes: one moderate sloping, one strong sloping  
 Vegetation: forest (or pasture with scrubs) on steep slopes and scrubs in valley axis

**DV4**

Valley floor: >50 m with steep edge  
 Valley slopes: one moderate sloping, one strong sloping  
 Vegetation: forest (or pasture with scrubs) on steep slopes and scrubs on steep edge

**DV5**

Valley floor: >50 m  
 Valley slopes: both strong sloping  
 Vegetation: forest (or pasture with scrubs) on steep slopes

**DV6**

Valley floor: not present or <20 m without steep edges  
 Valley slopes: both strong sloping  
 Vegetation: forest (or pasture with scrubs) on steep slopes

---

## PLATEAUS

**P1**

Flat part: small  
 Slope at the top: short  
 Bend in slope: round

**P2**

Flat part: small  
 Slope at the top: long, gentle slope  
 Bend in slope: abrupt  
 Additional: wavy character by repetition of several sub plateaus

**P3**

Flat part: big  
 Slope at the top: short or absent  
 Bend in slope: abrupt

---

## DRY VALLEYS

**DV1**

Valley head  
 Valley floor: <20 m without steep edges  
 Valley slopes: gentle sloping  
 Vegetation: none

with a small flat area, several flat areas that follow each other and a large flat area. In order to preserve the openness of the plateaus, it is important to be cautious with new buildings and plantings. Additions on these plateaus have an enormous visual impact to its surroundings. (Kerkstra et al. 2007)

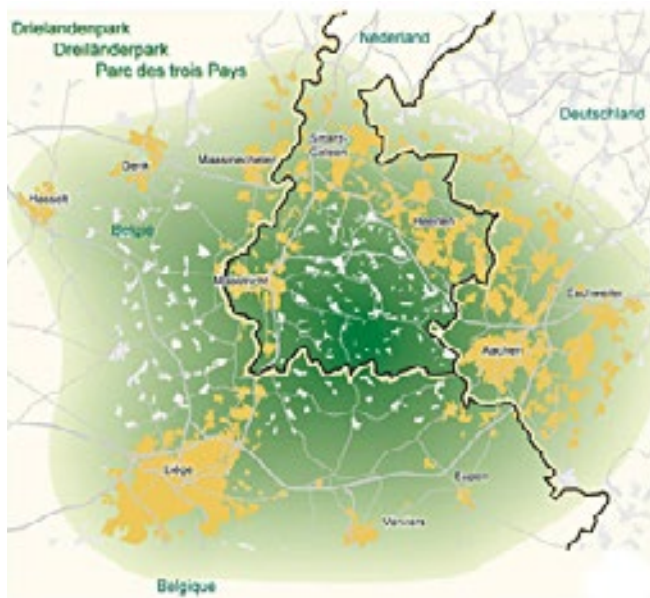
The proposals in the landscape framework bring order to the landscape and provide the cultural-historical elements with a coherent green context. This by expanding the typical differences between plateaus and valleys by rewetting the valley floors, planting the valley axes and extending the natural growth on the steep slopes.

Furthermore, the Landscape Plan Zuid-Limburg also propose to improve the appearance of the villages in the rural environment. This by means of (new) plantings at the edges of the villages in order embed the villages in the landscape of Zuid-Limburg. Besides, they also propose to accentuate the important roads from the 18th and 19th century by means of planting trees. The alleys that are situated near castles and estates can contribute to the appearance of these objects.

## 1.2 Monastic complexes in the rural environment

The landscape of Zuid-Limburg contains a large cultural-historical wealth. The influence of the Roman Catholic Church on the inhabitants of the region is reflected in for example the numerous (road) crucifixes, chapels, churches and monasteries. Since 796 A.D. 208 monasteries were founded in Zuid-Limburg (Hoebens 2014) [F.1.8]. Not all monasteries are still present or fulfil the function that they used to fulfil. Out of the 208 monasteries 62 monasteries are demolished or destroyed over the years, 107 monasteries fulfil a different function than they used to fulfil, 26 monasteries still fulfil a monastic function and 13 monasteries are vacant at the moment.

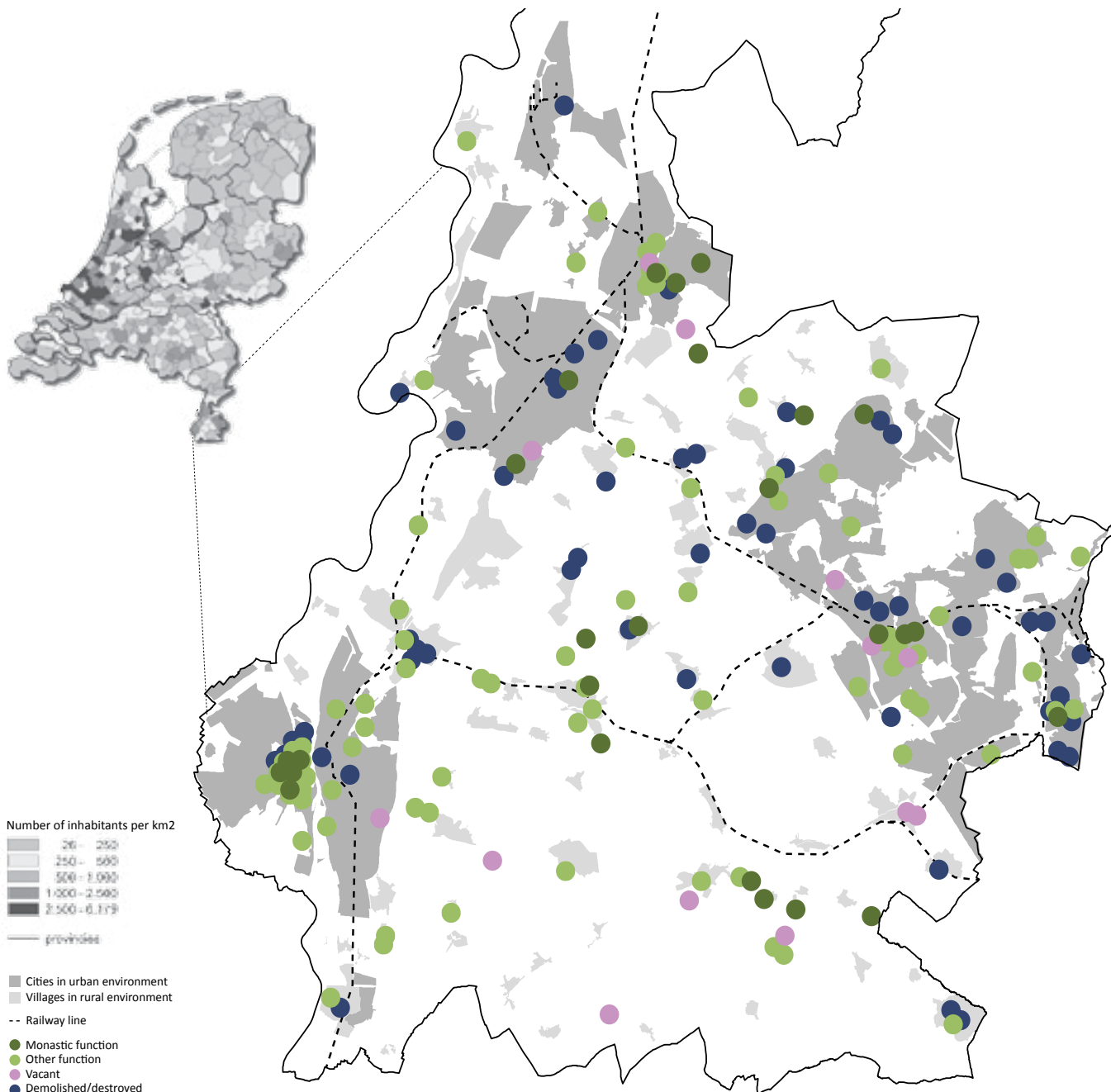
The monasteries can be found in both rural and urban environments. The rural environment of Zuid-Limburg is



[F.1.7\*] Three Countries Park

everything that is situated outside the agglomerations of Maastricht, Sittard-Geleen and Parkstad Limburg which is the most urbanised area in the Netherlands after the Randstad [F.1.9\*]. The rural environment which is equivalent to the National Landscape Zuid-Limburg is part of the cross-border cultural landscape Three Countries Park and is therefore of great value both nationally and internationally [F.1.7\*]. From the 208 monasteries, 17 monasteries are situated in the rural environment [A.2] that still fulfil a monastic function (10 monasteries) or are vacant (7 monasteries). They are generally bigger and contain (more) outdoor space than monasteries in the urban environment. The monasteries in the urban environment are left out of consideration in this thesis due to their accessibility and the presence of other facilities in their surroundings. They have a bigger chance to fulfil another function. Often only the building is left, making the complexes more compact and comparable with churches. Velthuis and Spennemann (2007) stated for example that the



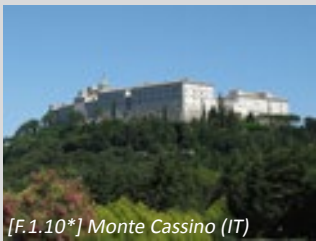


[F.1.8] Monasteries in Zuid-Limburg (adapted from F. Hoebens) and [F.1.9\*] Most urbanised areas

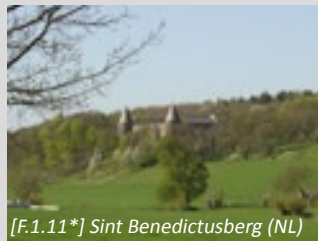


## Intermezzo: History of monastic complexes

The first monasteries that were founded in the Netherlands were in Maastricht, Utrecht and Susteren, around 700 A.D. by itinerant monks who came to the Netherlands to spread Christian faith (Erfgoedcentrum Nederlands Kloosterleven 2014). When a new monastery was founded different motives could be at the basis. The location for example could be strategic and determined by geographical aspects, the presence of ancient trade routes, residential centres, the economic accessibility of a region and the dynamics of aristocratic and ecclesiastical networks (de Nijs and Kroeze 2008). Examples in the rest of Europe show that for instance the Benedictines preferably built their monasteries on hills and mountains. For example monastery Monte Cassino, situated between Rome and Napels [F.1.10\*], or even more related, monastery Sint Benedictusberg, situated near Vaals (NL) [F.1.11\*].



[F.1.10\*] Monte Cassino (IT)



[F.1.11\*] Sint Benedictusberg (NL)

Other orders had a strong preference for remote and wooded valleys, where running water was available (de Nijs and Kroeze 2008). Another motive may be the securing of family goods. In particular nobility were concerned about their family welfare and belongings. Especially between 1000-1440 A.D. they invested a part of their family goods into new monasteries whereby they also became the representative of that monastery. Hereby, they were able to keep supervision on the monastery and their invested goods. By donations of other monasteries or nobility the capital grew which resulted in a financial investment for the family. (Ubachs 2000)

In the early Middle Ages, monasteries especially established at the countryside were the monastic people contributed to

the development of agriculture and the keeping of livestock. The monastic complexes were highly self-sufficient and mostly separated from the outside world by means of a wall. Nevertheless, they were firmly rooted in the medieval society. In the interaction between monasteries and the society, not only spirit, economic dependence, prestige and protection played a role, also family ties and personal involvement were important (de Nijs and Kroeze 2008). When later on in the Middle Ages the city life developed, other forms of the monastic life, like pastoral work, teaching and taking care of poor and sick people, were naturally filled in by monastic people.

As in 1517 the Reformation started -by which a transition to a predominantly Protestant religion took place- monasteries got nationalised by the State. This resulted in the abolition of monastic communities, the demolishing of monastic buildings and the fulfilment of new functions into monastic buildings (Erfgoedcentrum Nederlands Kloosterleven 2014). Only the monastic complexes that were related to foreign maternal monasteries, like for example monasteries in Belgium, Germany or France, were able to exist. Up until 1796, it was therefore not allowed to practice the Catholic religion in public in what way so ever. It came to an end when State and Church separated, the same year after which people were allowed to practice their faith again. In addition to this religious freedom, King Willem II admitted in 1840 that the monastic communities were able to accept new monastic people within their community again.

From then onwards, the amount of monasteries grew enormously. Also because of the fact that in Germany -from 1875 onwards due to the 'Kulturkampf' (whereby the government tried to reduce the role and power of the Roman Catholic Church) - and in France -from 1901 onwards due to the separation of State and Church- it was forbidden to establish new monasteries (Erfgoedcentrum Nederlands Kloosterleven 2014, Rijksdienst voor het Cultureel Erfgoed 2013). Many religious people fled their homeland and sought

## in the Netherlands and Zuid-Limburg

refuge somewhere else. Inter alia in Limburg, as it conducted an easier admission policy for foreigners than Belgium. Religious people from Germany established in over sixty different places in Limburg, preferably in larger towns with reasonable rail connections abroad (Ubachs 2000). Some monastic communities that were established in Limburg built their own monastic complexes. Others bought vacant castle complexes from nobility who declined in privileged managerial posts during the French period. In order to create a monastic complex out of an existing complex, a chapel or boarding school were added to the vacant castle complex. The construction of the vegetable gardens was changed and the embedding of meditation and recreational purposes was changed as well (Gerats and Werkgroep 2013). Till the second half of the 20th century, the amount of monastic people grew and they actively contributed to the social life by taking care of schools, hospitals, nursing and retirement homes. All these monastic people, which live or used to live within a monastic community, can be traced back to 3 main orders; the Order of Benedictus, the Order of Augustinus and the Order of Franciscus [F.1.12]. The orders vary in the amount of contemplation or worldly activity and in severity and flexibility.

### *Order of Benedictus; Ora et labora - Pray and work*

This strongly place bounded order is contemplative, secluded and has a strong tendency for autarky and is therefore often secluded from a town or city. The monastic complexes are enclosed with walls in which agriculture, for their own food supply, can take place (Urban Unlimited 2012).

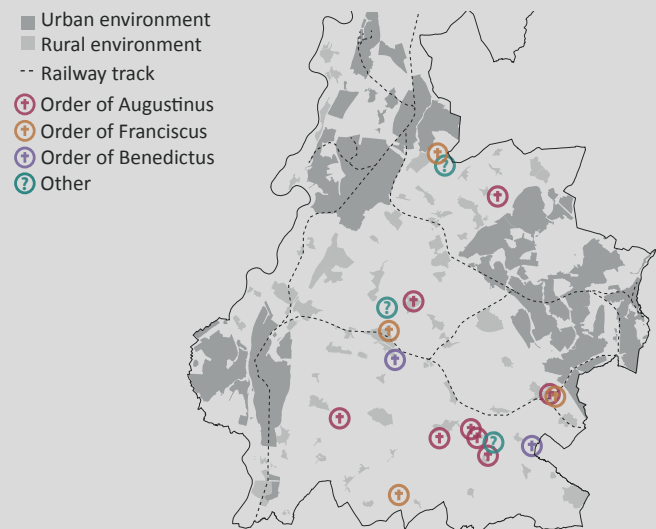
### *Order of Augustinus; Tolle, lege - Take up and read*

This strongly intellectual order is rigorous, but more active. They pay special attention to typography, languages, critical consideration, work for the poor and mission. The Rule of Augustinus is not particular about details and the daily routine, but more about mutual love, harmony and dispossession which form the basis of the common life (Krüger 2008). The monastic complexes are often imposing and situated at the edge of town or city. (Urban Unlimited 2012)

### *Order of Franciscus; Pax et bonum - Peace and the good*

This active, open and generally less severe order is most common and responsible for primary and secondary education, care and mission. The monastic complexes are usually situated within the village or town and contain often a school, boarding school or hospital. (Urban Unlimited 2012)

In 1960, almost 50.000 Dutch people belonged to a monastic community, the highest amount of monastic people ever in the Netherlands. Secularisation, changes in the monastic life and changes in society, resulted in a decrease of monastic people. In 2012, only 5900 belonged to a monastic community, a decrease of 88% (Rijksdienst voor het Cultureel Erfgoed 2013, Erfgoedcentrum Nederlands Kloosterleven 2014, Radboud Universiteit Nijmegen 2014a). Furthermore, the functions that the monasteries used to fulfil are nowadays fulfilled by other agencies, like care and housing for elderly and disable people, hospice, school and education which are often accommodated in other buildings as well (Rijksdienst voor het Cultureel Erfgoed 2013, Urban Unlimited 2012).



[F.1.12] Monastic complexes within the rural environment, divided after Order

reuse of redundant churches as different kinds of community assets, is more successful in urban areas where demand for such spaces is far greater than in rural areas. In that case there only need to be sought for a function for the monastic building and not for the total monastic complex including the outdoor space.

In this thesis the term ‘monastic complex’ will be used. The term ‘monastic complex’ stands for the main monastic building as well everything else that is related to this building including outdoor space. This outdoor space contains at least one of the following elements: a monastic garden - nearly always concluded from the outside world by means of walls, hedges or trees-, a vegetable garden, a herb garden, a pond, a vineyard, a chapel, a series of Stations of the Cross or a cemetery (Rijksdienst voor het Cultureel Erfgoed 2013). This in contrast to the term ‘monastery’. The term ‘monastery’ stands for the residence of a Catholic community that at least contains monastic cells, a communal dining room, a refectory and a chapel and where a group of religious people bound by religious vows living in seclusion from secular society. No outdoor space is included within this concept (Collins 2014, Hoebens 2014, KNR 2014).

The monastic complexes in the rural environment are situated on crucial places in the new landscape framework. The embedding of these complexes in a larger green structure will counter the levelling and loss of structure in the landscape [F.1.14]. The monastic complexes are identifiers in a historical, landscape, urban and sociological perspective, whereby the strong physiographical connection with the landscape is an important aspect that allows strengthening the scenic basic structure of the landscape.

1.3 Problem statement

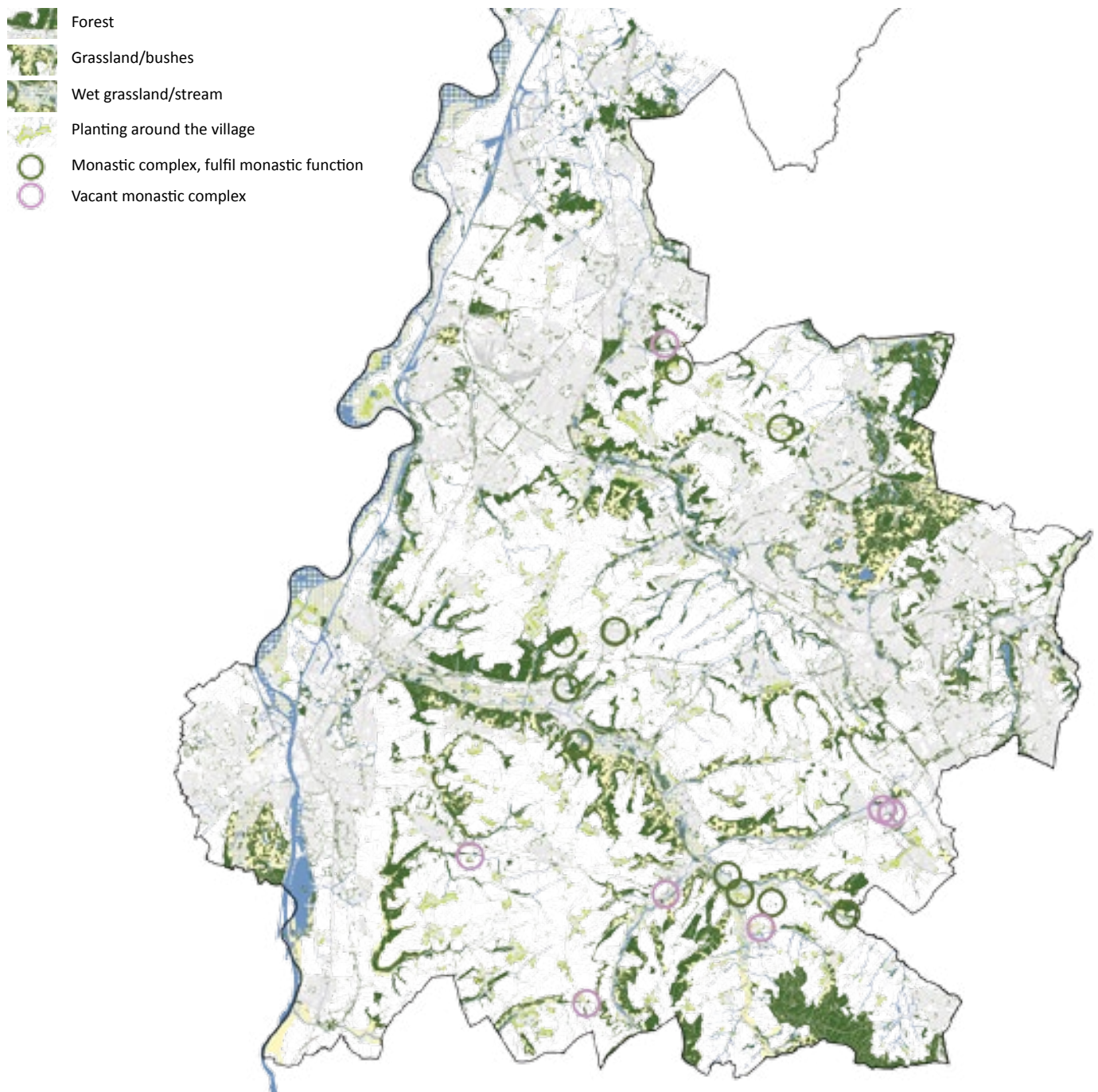
As mentioned in the Intermezzo, a large decrease within the amount of people who belonged to a monastic community took place [F.1.13]. In addition, in 2004 93% of the monastic

| Year | Number of nuns | Number of brothers/friars | Number of priests |
|------|----------------|---------------------------|-------------------|
| 2003 | 7.862          | 1.113                     | 1.883             |
| 2004 | 7.362          | 1.034                     | 1.774             |
| 2005 | 6.907          | 966                       | 1.687             |
| 2006 | 6.464          | 923                       | 1.602             |
| 2007 | 6.015          | 855                       | 1.548             |
| 2008 | 5.586          | 786                       | 1.458             |
| 2009 | 5.219          | 745                       | 1.373             |
| 2010 | 4.838          | 709                       | 1.325             |
| 2011 | 4.472          | 663                       | 1.245             |
| 2012 | 4.112          | 628                       | 1.161             |

[F.1.13] Number of religious people, living in the Netherlands counted on 31 December (adapted from KASKI)

people were at the age of 65 or higher, whereby the average age was 84 (KNR 2014). Due to secularisation, the fact that the functions that once used to be accommodated in these buildings are accommodated somewhere else and the aging of monastic communities in the Netherlands, makes for a fast release of monastic complexes onto the real estate market. The release of religious heritage is a national trend, but very problematic for the province of Limburg due to the large numbers (Harmsen and Waal 2008). The vacant complexes cannot be absorbed by the market so fast, partly because of the scale and nature of the objects. This might as for instance lead in the end to demolition, unless new functions or implementations are found.

Since the monastic complexes are inextricably linked to the outdoor space, a large part of this outdoor space will become available as well. Although the outdoor space is often underestimated, it was of great importance for the monastic life. The outdoor space made it possible for the monastic community to be self-sufficient whereby also parts of the outdoor space simultaneously served for religious and recreational purposes (Rijksdienst voor het Cultureel Erfgoed 2013).



[F.1.14] Landscape framework Zuid-Limburg including 17 monastic complexes within the rural environment (adapted from Kerkstra et al. 2007 and F. Hoebens)



Problem statement: The released monastic buildings are attractive to property developers because of the presence of cultural heritage and their locations in the landscape. The most cost effective interventions probably exerts pressure on the outdoor space and will change into car parks or extra buildings. There are views about the monastic buildings but outdoor space is also crucial. Guidelines are needed to safeguard the careful dealing with these monastic complexes.

General studies about the preservation of cultural heritage as well single case studies on adaptively reusing religious heritage objects, like for example churches, are well researched by scientists (Rijksdienst voor het Cultureel Erfgoed 2013, van Duijn and Rouwendal 2013, Velthuis and Spennemann 2007, Huysmans and Haan 2007, Bosma and Kolen 2010, Navrud and Ready 2002). Van Duijn and Rouwendal (2013) for example investigated the impact of cultural heritage on the attractiveness of cities by analysing the location choice of households. Their results confirm that cultural heritage has a substantial impact on the attractiveness of cities. Velthuis and Spenneman (2007) on the other hand reviewed literature on the reuse of churches in the Netherlands. They address different options for both community use (multipurpose, sports and education; music; theatre; exhibition space) and commercial use (residential; other commercial like offices, storage facilities, shops and hospitality venues).

Also much research has been done on the development of new estates embedded in the landscape. These estates show at the first sight even more similarities with monastic complexes due to their outdoor space (Derckx and Kooiman 2010, van den Berg and Wintjes 2000). Derckx and Kooiman (2010) for example exposed several essays and introductions to new estates in different contexts, whereby they also give recommendations for both the spatial design and the developmental process. Subsequently to this research, is the research of Berg and Wintjes (2000) in which they display an exploratory research on the contribution of new estates to the improvement of the spatial quality.

Nevertheless, the new estates as mentioned before do not consist any history like monastic complexes do and can therefore not be compared completely. Furthermore, the cultural heritage that has been adaptively reused nowadays omit the outdoor space, because often only the building has been taken into account. These given facts make it hard to compare monastic complexes with both the new estates and cultural heritage. However, Van Duijn and Rouwendal (2013) stated that cultural heritage contributes to the atmosphere in an area whereby not only the municipality, where for example a monastic complex is situated, benefits from its presence, but also the surrounding municipalities gain their benefits from the presence of cultural heritage. Cultural heritage therefore should be seen in a larger context. Only strategies are made for individual cases though, but clear guidelines for embedding cultural heritage in the landscape in order to strengthen the landscape, are needed. Therefore what remains to be explored is how monastic complexes can be adaptively reused in a way that they fit into the landscape framework of Zuid-Limburg whereby they create synergy between cultural heritage and the environment.

#### 1.4 Research questions

To be able to create synergy between the monastic complexes and the landscape of Zuid-Limburg and in order to come up with recommendations for other cases, the following research questions should be answered.

##### *Main research question*

What design guidelines support synergy between adaptively reused monastic complexes and the rural environment of Zuid-Limburg?

##### *Design question*

How to design a new future for disused monastic complexes that support synergy between cultural heritage and the landscape?



### Sub questions

- \_1. What are the connections between the monastic complexes and the landscape policies of Zuid-Limburg?
- \_2. In which way have comparable monastic complexes been adapted for reuse?
- \_3. What are the opportunities and restrictions of reusing monastic complexes in the rural environment of Zuid-Limburg and what might be the consequences for the outdoor space?
- \_4. What can be learned from comparing different design options for monastic complexes in Zuid-Limburg?

### 1.5 Purpose

The purpose of this study is to answer the broad question on how to deal with released monastic complexes in the rural environment of Zuid-Limburg and monastic complexes in the rural environment of Zuid-Limburg that might be released in the future as well. The developing of design guidelines for embedding monastic complexes within the landscape of Zuid-Limburg, which match the landscape framework as well, have to provide handholds for others who come into contact with the adaptive reuse of monastic complexes. The concept 'cultural heritage' will therefore be the directing source of inspiration in this research and also the source of inspiration for giving shape to the landscape. The research will be backed up by means of three case studies which are situated in the rural environment of Zuid-Limburg in order to identify and discuss the challenges the landscape architect confronts when designing with cultural heritage. The design guidelines are in the end at the basis of pre-implementations in the landscape in order to make the landscape of Zuid-Limburg more adaptive for uncertainties in the future.

### 1.6 Significance

Monastic complexes have often iconic appearances which

is underpinned by the fact that streets and districts were named after them [F.1.15\*]. The monastic complexes refer to the religious history of the region, whereby unfortunately the historical value of heritage is not always immediately estimated at value.

In order to estimate cultural heritage to the right value four ministries came up with Nota Belvedere. Belvedere is an initiative of the ministries of Environment, Education, Agriculture and Water. They approached the new development of plans not only with concepts like for example 'quantity', 'par value' and where 'functionality comes first', but also with concepts like 'quality', 'added value', 'identity adds value' and 'interdisciplinary value' (Belvedere 2014).

That the estimation of value of cultural heritage does not always works out well, shows the example of how was dealt with the cultural heritage from the mining period in Zuid-Limburg. Initially the value of the buildings from the mining period in Zuid-Limburg was not estimated very high which resulted in the fact that not much iconic appearance is left nowadays. If the mining heritage was preserved it could have supported the collective memory (Dommelen and Pen 2013, ter Braak 2008).

The same can happen to the monastic complexes and their outdoor space, if no design guidelines will be created. The monastic complexes could be torn down for the



[F.1.15\*] Named after monastic complex

implementation of new constructions or new constructions can be placed over the outdoor space. The preservation of the monastic complexes and its outdoor space is therefore not only important because of cultural heritage values (science), but also for the collective memory (society).

### 1.7 Conclusions

The general problem that this thesis wants to address is the uncertain future of the large amount of released monastic complexes in Zuid-Limburg. The monastic complexes are important identifiers in the landscape of Zuid-Limburg and are crucial for the identity of the region. They are also situated on important locations in the landscape framework as stated in the Landscape Plan Zuid-Limburg. They provide a lot of opportunities due to their location and size. However no guidelines are created yet.

The next chapter will provide more insights in how this research was approached. First the landscape architectural lens and worldview will be addressed. Subsequently the research strategies of this research will be set out. Beside that, also the methods that were used during this research will be explained.

### 1.8 Outline of the report

The introduction to the topic in Chapter 1 provides insights in Landscape Plan Zuid-Limburg and explains the choice for focussing on the rural environment of Zuid-Limburg [F.1.16\*]. Also the problem of this research was stated in this chapter. The research questions, the purpose and the significance of this research are also addressed in Chapter 1. Chapter 2 provides the landscape architectural lens and worldview. Also the research strategies and methods that were used during this thesis will be set out. Chapter 3 will address a wide view on cultural heritage. Within this chapter the shift in cultural heritage will be explained. Furthermore, this chapter will elaborate on the different ways of approaching

cultural heritage. Subsequently, in Chapter 4 the focus will be on two different options for programming. The first function that will be addressed is the housing programme, the second one is the conference centre/hotel programme. Chapter 5 will provide the landscape analysis, which will give insights in the relations between the different scale levels. An explanation of the three selected monastic complexes will be given as well. Besides, Chapter 6 will address six design options. These options are elaborations of the two diverse options of programming that were implemented within three different case studies. Chapter 7 provides a reflection on the six design options. This reflection provides insights in the design process that the landscape architect undertake when creating synergy between the landscape and cultural heritage. In this chapter, also recommendations will be addressed. These recommendations will provide handholds for others who come into contact with the adaptive reuse of monastic complexes. The entire research will be concluded with a discussion and conclusions. The report will end with the references, a list of figures and a set of appendices.

In addition, the figure numbers in the text that are designated with [\*] can be found in the list of figures. The additional pictures are provided by the author of this thesis. The numbers of appendices [A.X] in the text refer the a specific appendix at the end of this document.

*[F.1.16\*] Rural environment of Zuid-Limburg*







Monastery Wittem, Wittem

## 2\_ Methodology

*Not every landscape architect does approach every research in the same way. Depending on the landscape architect's approach towards their field of work, their knowledge claim and the outcomes that need to be extracted from the research, the elaboration of the research may differ. Therefore it is important to give insights in the starting propositions of the landscape architect and elaborate on the methods which were at the basis of this research. Furthermore the strategies of inquiry will be explained in order to show how the research was addressed.*

### 2.1 Landscape architectural lens - worldview

Designs in general can be self-contained, but I think the challenge is to design something that influences more factors whereby synergy is created. Synergy stands for the interaction or cooperation of two or more elements to produce a combined effect greater than the sum of their individual effects (Collins 2014, Oxford University Press 2014). Therefore, I approach landscape architecture from the starting point where the design is used as a synthesis (integration, problem solving). The approach involves the design that brings together dissimilar elements and creates a solution that can resolve contradictions (Crewe and Forsyth 2003). I see landscapes as a framework where people live in whereby the landscape and its changes over time create a lot of interesting perspectives. With today's perspective, but keeping in mind the history, things can be made more beautiful and even innovative.

Since this research faces different contexts, I would say that I see myself as a pragmatist. Pragmatists do not see the world as an absolute unity and agree that research always occurs in social, historical, political, and other contexts (Creswell et al. 2007). Therefore, it is important to understand the context or setting very well before making a design. This understanding will not be achieved by only using one way of collecting data. Therefore, different ways of collecting data will be used during this research in order to gain the right knowledge

(Creswell 2013). As stated by Lenzholzer et al. (2013) based on Creswell and Plano Clark (2011) pragmatism draws on many ideas, employs 'what works', uses different knowledge claims, and values both objective and subjective knowledge.

### 2.2 Research strategies

The research will be qualitative. Within this research the focus will be on one single phenomenon. Therefore interpretations of data will be made and an agenda for change will be created (Creswell 2013).

Crewe and Forsyth (2003) stated several landscape architecture approaches. The classification of these approaches enables landscape architects reflecting upon and debate about the dimensions of their field of work. The landscape architecture approach that will be used for this qualitative research is 'design as synthesis' [F.2.1]. The goal of the 'design as synthesis' approach is to integrate and solve problems. In this research the approach is related to the six designs which explore different design options for the implementation of a new function for disused monastic complexes, whereby the focus is on the outdoor space.

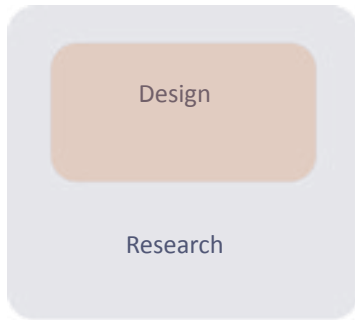
The six design options will be exploratory designs in order to provide insights in the design process that the designer undertake when creating synergy between the landscape and cultural heritage. For that reason, the research will be abductive, because it merely suggests that something might be. This varies from deductive and inductive research. In deductive research there must be proven that something must be and by inductive research that something actually is operative (Crewe and Forsyth 2003). Since the six design options serve as part of the research (Stappers and Sleeswijk Visser 2014), the design options are not elaborated up to detail. The designs are just tools and will therefore not be the main objectives in this study [F.2.2].

The exploration of the different design options is accomplished



| Approach                 | Goals                                                       | Process                                                                                                                                           | Client/<br>Audience                                                                                                                   | Scale                                                                                          | Intellectual<br>base                                                                                       | Ethics                                                                                                                                                             | Approach to<br>nature                                                                                                           | Analysis of<br>power                                                                                                                                                                                                                                               |
|--------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Design as<br>Synthesis   | <b>S</b><br>Integration,<br>problem<br>solving              | Landscape<br>architecture as<br>problem solving—<br>analyzing the<br>problem and<br>synthesizing an<br>approach                                   | Government,<br>corporate, and<br>private clients<br>who pay for<br>professional<br>competence                                         | Varied—from<br>private gardens<br>and corporate<br>campuses to plans<br>for national<br>parks  | General<br>professional<br>knowledge                                                                       | Doing good<br>through<br>professional<br>work                                                                                                                      | Do not get caught up<br>in arguments about<br>whether nature has<br>intrinsic worth—<br>they are busy solving<br>human problems | See 1. As in doing good—<br>a corporate campus may<br>be for a powerful<br>corporation but it is an<br>environment enjoyed<br>by workers                                                                                                                           |
| Cultivated<br>expression | <b>C</b><br>Artistic<br>expression                          | Intuitive and<br>expressive;<br>some base in<br>art history                                                                                       | Patrons who<br>are prepared<br>to pay for art                                                                                         | Small to medium—<br>at most the scale<br>of a large urban<br>park                              | History and<br>criticism                                                                                   | Artistic<br>expression                                                                                                                                             | Plans are a means<br>of human artistic<br>expression, and are<br>combined with other<br>materials                               | Works for patrons (or<br>aspires to) that are part<br>of the economic or<br>political elite—this kind<br>of expression needs<br>people prepared to pay<br>for it.                                                                                                  |
| Landscape<br>analysis    | <b>A</b><br>Large scale<br>landscape<br>protection          | Draws on natural<br>science research<br>but applies this<br>to managing and<br>conserving large<br>landscapes using<br>more generic<br>principles | Government or<br>non-profit groups<br>for some private<br>clients with very<br>large landholdings<br>who need to<br>manage land areas | Very large—<br>habitats,<br>watersheds,<br>greenways                                           | Ecology, physical<br>geography, some<br>cultural<br>geography                                              | Various<br>environmental<br>ethics—the larger<br>natural world is<br>a focus either<br>intrinsically or<br>because protecting<br>it will protect<br>humans         | See ethics                                                                                                                      | Allied with government<br>and powerful interest<br>groups to gain control<br>over large landscapes;<br>some work on education<br>to build constituencies;<br>sees high levels of<br>government as potential<br>allies and aspires after<br>high levels of control. |
| Plural<br>design         | <b>P</b><br>Empowerment<br>and<br>participation<br>of users | Professional<br>knowledge<br>and local/user<br>knowledge<br>interact                                                                              | The least<br>advantaged<br>neighborhood<br>residents, etc.                                                                            | Small                                                                                          | Democratic<br>theory, citizen<br>participation<br>general<br>professional<br>knowledge,<br>local knowledge | Egalitarian and<br>democratic                                                                                                                                      | Nature is a setting<br>for human life.                                                                                          | Assumes that users can<br>be given power over<br>their own environments;<br>brackets larger issues<br>of inequality to deal<br>with immediate needs                                                                                                                |
| Ecological<br>design     | <b>E</b><br>Design<br>grounded in<br>nature                 | Draws on natural<br>science research<br>but applies this to<br>design problems                                                                    | Government,<br>corporate, and<br>private clients<br>who want to<br>restore, enhance,<br>or supplement<br>existing<br>environments     | Small to medium—<br>at most the scale of<br>the restoration of a<br>mine or waste<br>facility. | Ecology,<br>horticulture                                                                                   | Various<br>environmental<br>ethics—the larger<br>natural world is<br>a focus either<br>intrinsically or<br>because protecting<br>it will protect<br>humans         | Try to create<br>landscapes that<br>create human-scaled<br>ecosystems, though<br>still respecting the<br>natural world first.   | They ignore human—<br>human power relations—<br>though of course that<br>doesn't mean that<br>they are absent.                                                                                                                                                     |
| Spiritual<br>Landscapes  | <b>S</b><br>Deep<br>connection<br>of humans<br>and nature   | Some design<br>intuition but<br>also reflecting<br>knowledge about<br>psychology,<br>theology, etc.                                               | Non-profit and<br>government<br>clients who are<br>interested in<br>landscapes for<br>healing                                         | Small to medium                                                                                | Psychology,<br>theology/<br>religion,<br>medicine                                                          | Humanistic<br>(though it could<br>be somewhat<br>biocentric)—these<br>are landscapes<br>for humans even<br>if part of the<br>purpose is<br>connection to<br>nature | Nature is a setting<br>for human life (but<br>in this case its<br>spiritual and<br>transcendent<br>dimensions).                 | They ignore human—<br>human power relations—<br>though of course that<br>doesn't mean that<br>they are absent.                                                                                                                                                     |

by means of ‘research through designing’. Before setting out the meaning of ‘research through designing’ some general information on research and design(ing) will be addressed.



[F.2.2] Design as a part of research (adapted from Stappers and Sleeswijk Visser 2014)

Since in the field of landscape architecture, research and design(ing) are closely interrelated, the terms ‘research’ and ‘designing’ will be clarified first. According to Lenzholzer et al. (2013) the term ‘research’ stands for the curiosity or question driven, rigorous academic research. Whilst on the other hand the term ‘designing’ stands for the process of giving form to objects or for the process of giving form to space. This process of giving form takes place on diverse levels of scale whereby the ‘design’ must be interpreted as the result of the design process. (Lenzholzer et al. 2013)

There is a variety of relations conceivable between research and designing. This variety of relations can be distinguished into three groups of research and design interactions: ‘research for design’, ‘research into design’ and ‘research through design’. Within ‘research for design’ (or research-informed-design) the research informs the design process in order to improve the quality of the design and increase its credibility. The aim of this interaction is to help, to guide and to develop design practice. ‘Research-on-design(ing)’ (or research-on-design/design research) focuses on the expounding of a finished design product (substantial). The

objects, phenomena and history of the design are set out. ‘Research-on-design(ing)’ can also focus on the procedural side of designing: the design process. Within ‘research through design’ (or design-based-research/research-by-design/research as design) the designing activity is applied as a research method. The designers/researchers create new products or experiment with new materials and processes. The aim of ‘research through design’ is to generate innovative research. The design cannot be developed completely which enables the designer/researcher to dialog with the situation and learn from it. Since the word ‘design’ in ‘research through design’ is more precise to denominate an activity, ‘research through designing’ (RTD) is more appropriate when describing research methods that employ ‘designing’. (Duchhart 2011, Godin and Zahedi 2014, Lenzholzer et al. 2013)

Since this research is approached from a pragmatic perspective, Servillo and Schreurs (2013) stated that RTD can be defined as the repeated exploration of the spatial context and/or spatially un(der)determined programmes through visioning and testing of possible transformations. This abductive reasoning within RTD can be described as an act of understanding by way of logical inference (Servillo and Schreurs 2013). Hence, RTD’s ultimate goal from a pragmatic perspective is not merely finding the ‘perfect solution’ to a spatial problem, but it can be considered as means of spatial design for exploring significant transformative spatial strategies and testing their opportunity and feasibility whereby for example potentialities of sites are explored. In a way it is the development of context-based knowledge regarding for example transformative potentialities of places whereby the spatial potentialities and limitations of the site are typical concerns. Therefore, RTD tries to combine on the one hand different fields of knowledge or experience in order to address socio-spatial complexity, while on the other hand RTD gathers interests for the exploration of possible solutions to spatial problems within social-learning processes. The major challenge of RTD thus is the exploration

of spatial potentialities in a socially meaningful way. (Servillo and Schreurs 2013)

### 2.3 Methods

To be able to get the right information for the execution of the research and in order to answer the research questions, multiple forms of data were used [F.2.3]. The overview of the monastic complexes in Zuid-Limburg is based on a dataset (Hoebens 2014). In order to get more insights in the conditions of the monastic complexes in Zuid-Limburg, the complexes were divided into four categories: 1. monastic complexes that still fulfil their monastic function, 2. monastic complexes that fulfil other functions, 3. monastic complexes that are vacant at the moment and 4. monastic complexes that were demolished.

In this research three monastic complexes are selected and will be subject for testing two diverse functions, each with its own programme. The first one is the reuse of the monastic complex as housing, the second one is the reuse of the monastic complex as a conference centre/hotel. Prior to the six design options wherein in each case study two programmes were tested, general information is needed. The general information, which provides answering the research questions in the end, is gathered by means of site visits/field walks, a desk study, a literature study, a reference study and by means of research through designing (RTD).

#### *Literature study*

The first literature study was done in order to get a better understanding of monastic complexes in general. Within this literature study, an overview of the different elements of monastic complexes was provided. These elements were extracted out of either a literature study and site visits.

Subsequently, a second literature study was done on how designers can approach cultural heritage. This literature

study gain insights in the different ways of approaching cultural heritage and the concepts that are related to the specific approaches.

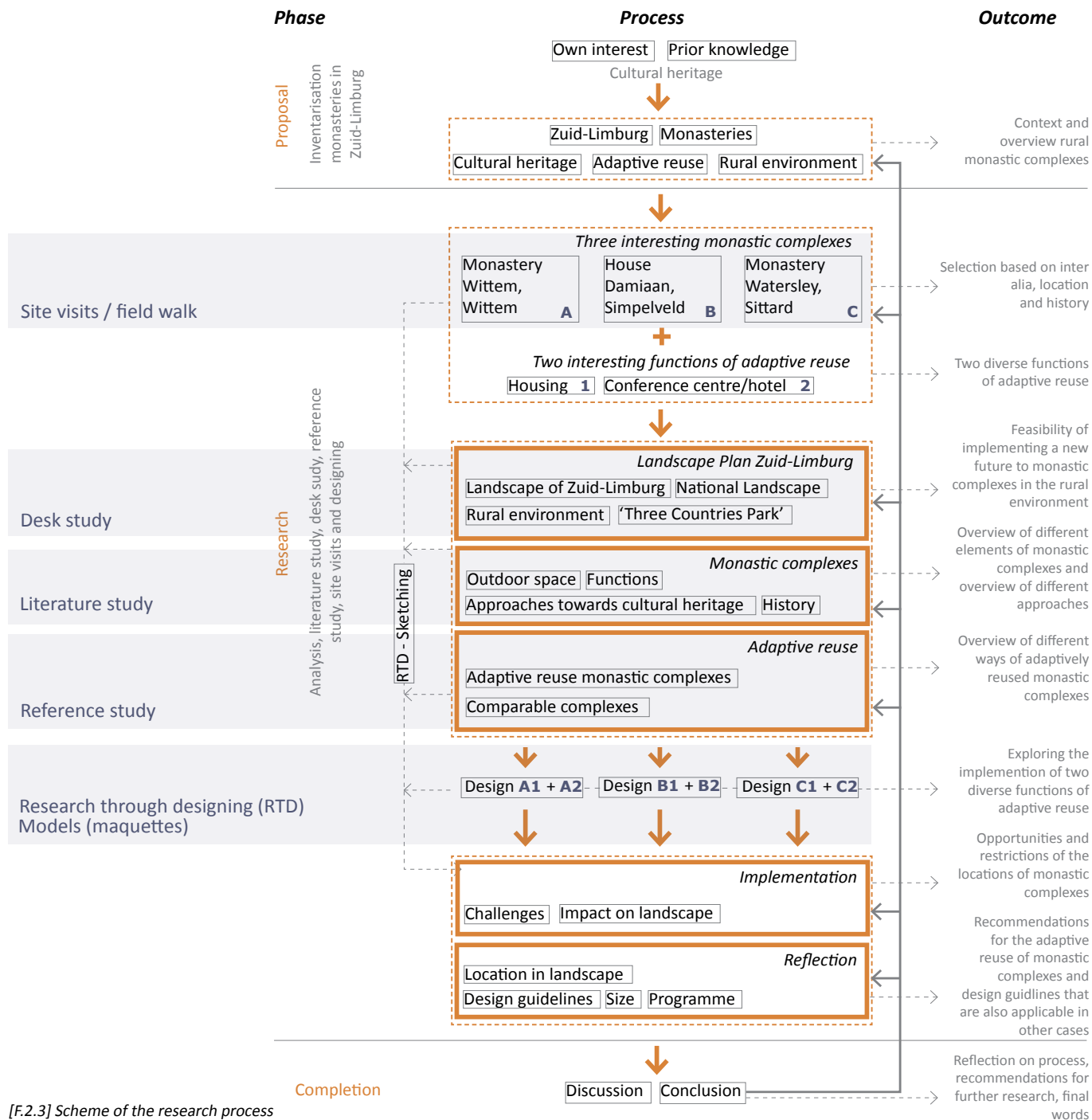
#### *Desk study*

The first desk study that was done, was in order to figure out what the perspectives on the rural environment of Zuid-Limburg were, as they were stated by the Landscape Plan Zuid-Limburg. This desk study gained insights in the landscape framework that is proposed for Zuid-Limburg. Different design proposals, which underlie the landscape framework, gave handholds for the rest of the research.

The second desk study that was done, was in order to get an understanding of the situation and the location of the three monastic complexes. This desk study started with a landscape analysis on the regional scale (Zuid-Limburg) whereby was worked down to a lower scale (monastic complex). This in order to set out the relationships between the different scale levels.

#### *Site visits/field walks*

The first couple of site visits were provided by people who were involved or committed to the three selected monastic complexes. The first field walk was together with Philippe Cremers, which is the director of the working community of the monastic complex in Wittem. The working community supports the monastic community which is housed in the monastic complex. The second field walk was together with Wil Krekels and Ed van den Ende which are members of Stichting Behoud Kollenberg and who are committed to the surroundings of Monastery Watersley in Sittard. The last meeting was with Jo Horbach, who once was the owner of House Damiaan in Simpelveld. They all provided general information about the individual monastic complexes. This gained information provided better insights throughout the rest of the research. The second couple of visits were in order to clarify things that came up during the research.



[F.2.3] Scheme of the research process

### *Reference study*

The reference study will give insights in other monastic complexes that have been adaptively reused. The study reveals the different elements that were used for either implementing a housing programme or a conference centre/ hotel programme to the existing monastic complexes. The reference study provided new insights for stating a fixed programme. The elements were used during the exploration of different designs options for the monastic complexes in the rural environment of Zuid-Limburg.

### *Case studies*

Out of the 17 monastic complexes that are situated in the rural environment of Zuid-Limburg and which are vacant or still fulfil a monastic function at the moment, three monastic complexes were chosen. Only the monastic complexes that are vacant or still fulfil a monastic function are included within this research, assuming that monastic complexes that fulfil another function, still fulfil this function in the future. The monastic complexes which still fulfil a monastic function were included into the research due to the chance that they are likely to become vacant in the future as well.

The case studies for this research are:

- Monastery Wittem in Wittem
- House Damiaan in Simpelveld
- Monastery Watersley in Sittard.

The three monastic complexes [F.2.4-6] were chosen after a consideration based on their locations within the landscape of Zuid-Limburg. They are scattered over Zuid-Limburg, located in different municipalities, and one of each monastic complex is situated in a different context, like for example in the stream valley, on the slope or on the plateau. They also differ in the size of the plot. They are all situated outside the villages and the civilised world.

### *Models (maquettes)*

The models were created in order to gain better insights in



[F.2.4] Monastery Wittem, Wittem



[F.2.5] House Damiaan, Simpelveld



[F.2.6] Monastery Watersley, Sittard



the heights differences of the three monastic complexes. Since the three monastic complexes were situated on three different locations in the landscape (valley, slope and plateau), the models gave an overview on their position in the landscape of Zuid-Limburg [A.3].

#### *Research through designing (RTD)*

Based on the previous information, that was gained out of the site visits, literature study, desk study and reference study, six design options were created. Each out of the three monastic complexes will have two elaborated design options whereby either the housing programme and the conference centre/ hotel programme are implemented. In the end, the design options are reflected in order to give insights in the design process that the designer undertook when creating synergy between the landscape and cultural heritage. The design options are variable allowing that other design options might work out as well in the given context.

Finally, design guidelines and recommendations will be addressed in order to provide handholds for others who come into contact with the adaptive reuse of monastic complexes.

## **2.4 Conclusions**

This chapter gave an overview of the starting propositions of the landscape architect. Furthermore it addressed the research strategies and the methods that were used during this research. These insights makes that the research will be transparent. This provides that the research could be carried out in exactly the same manner.

Within the next chapter the wide view on cultural heritage will be set out. This in order to gain an understanding of cultural heritage in general. Different elements of cultural heritage will be set out.



House Damiaan, Simpelveld

## 3\_ Theoretical framework

*Here the thesis starts with a wide view on cultural heritage. The development in the practice of dealing with cultural heritage is described within this chapter. First the shift within approaching cultural heritage will be set out where after the different ways of approaching cultural heritage will be explained. Furthermore, the value of adaptive reuse will be addressed and the role of the landscape architect, within the changing view on dealing with cultural heritage, will be set out as well.*

### 3.1 Shift in cultural heritage

The last decades the classical regulatory and conservational approach has given way to a more pro-active and developmental approach whereby more than ever the interests of heritage conservation are embedded in spatial planning and policy making (Mommaas and Janssen 2008, Stegmeijer 2014). Thereby, also the views on dealing with cultural heritage were changed. Nota Belvedere which was created in 1999 is an example of this change. This Belvedere Nota is a policy on the relationship between cultural history and spatial planning (Feddes 1999). Were there 20 years ago, even more than prior to Nota Belvedere, only archaeologists who estimated the value of individual buildings, nowadays attention is paid to entire areas. As stated by UNESCO (2012): *“Cultural heritage does not end at monuments and collections of objects. It also includes traditions or living expressions inherited from our ancestors and passed on to our descendants, such as oral traditions, performing arts, social practices, rituals, festive events, knowledge and practices concerning nature and the universe or the knowledge and skills to produce traditional crafts”*.

The change from focussing on individual buildings towards focussing on entire areas led towards the modernisation of the heritage conservation (in Dutch: Modernisering Monumentenzorg) whereby practical approaches give way to more strategic approaches. The system of dealing with cultural heritage is therefore adapted to the developments

of our time whereby the government chose five priorities in the area-heritage policy for the next few years: 1. World Heritage, whereby they ensure consistency and enhance the appearance; 2. identity and safety, whereby the sea, coast and rivers will have the main focus; 3. rezoning as an (urban) area challenge, whereby the focus will be on growth and shrinkage; 4. living landscapes, whereby synergy between heritage, economy and ecology will be created; and 5. reconstruction, whereby different eras are shown (Rijksdienst voor het Cultureel Erfgoed 2014).

Nowadays, there is a more developmental approach towards cultural history whereby ‘preservation through development’ is the leading proposition. The approach reflects the symbolic importance of cultural heritage. The cultural heritage serves as an inspiration and there need to be sought for the functional repositioning of cultural heritage whereby interests are integrated (Belvedere 2014). That the functional repositioning or the development of cultural heritage is a hot topic nowadays, is underpinned by the many different platforms that provide information or serves as a consultation group. Examples of these platforms are: Erfgoedmonitor, Erfgoedbalans, Kennisbank Herbestemming, Task Force Toekomst Kerkgebouwen and Agenda Toekomst Religieus Erfgoed.

Task Force Toekomst Kerkgebouwen is a national civil initiative, whereby they not only focus on recognising the problem of the fast release of religious heritage but also focus on the opportunities of this release (Task Force Toekomst Kerkgebouwen 2014). Another platform is the Agenda Toekomst Religieus Erfgoed which is committed to religious heritage as well. They created an agenda that consists out of seven points. These seven points together include all issues and opportunities in relation to religious heritage. They take into account continuing use, in the ‘meantime’ use as well as new use (Agenda Toekomst Religieus Erfgoed 2014). The term ‘religious heritage’ stands as it were for anything religious –tangible or intangible- that has been transmitted



from the past or handed down by tradition, that is the result of humankind's interaction with the environment which relates the past to the present (Collins 2014, van Duijn and Rouwendal 2013, Velthuis and Spennemann 2007).

Considering the growing number of vacant buildings and the release of cultural heritage in the Netherlands, a more proactive and developmental approach as stated by Mommaas and Janssen (2008) and Stegmeijer (2014) seems to be a logical response. The reason for these disused buildings depends on several factors. Examples of vacant buildings due to cultural developments are for instance churches and monasteries. The religious buildings differ from the monumental buildings due to their unsecular space behaviours. They are important urban identity elements and serve as the landmarks of the towns (Mine 2013).

According to Van Duijn and Rouwendal (2013) cultural heritage have a potentially important effect on municipal attractiveness. The exterior of the striking buildings –in this case religious buildings- contribute to the identity of the environment and perceptions of the residents who are associated to the buildings (Harmsen and Waal 2008). Marlet (2007) stated on the other hand that cultural heritage contributes to the atmosphere in an area and its attractiveness for residents, shops, cafés, restaurants and tourists which contributes further to its own attractiveness. Cultural heritage is basically something that remains from the past whereby each generation adds new layers and which contributes to an enriched built environment with a mixture of different times, architecture and interiors. The success does not only depend on job opportunities and transport facilities, but also on cultural heritage. The impact of cultural heritage is therefore not only visible within the area itself, it extends also outside the borders of the municipality in which it is located. This means that surrounding municipalities also benefit from this amenity. (Asselbergs 2008, Marlet et al. 2007, van Duijn and Rouwendal 2013)

### 3.2 Approaches towards cultural heritage

Within the vision of the National Landscapes 'preservation through development' is also the starting proposition. Preservation stands for the identifying of important aspects of the past, protecting and managing for the benefit of present and future generations (Urban Unlimited 2012). However, preservation is not the only way to address cultural heritage. There are several ways in which the significance of the history can be translated into contemporary buildings, landscapes and designs. A distinction can be made between practical approaches and strategic approaches. The practical approaches are clear interventions which can be implemented immediately. Strategic approaches on the other hand, are more vague and can be implemented in several ways. They need a lot more imagination than the practical approaches. Both ways of approaching cultural heritage will be set out in this chapter.

#### 3.2.1 Strategic and practical approaches

The appearance of cultural heritage vary between physical presence and physical absence causing the fact that customised strategies are needed. Several literature (Colenbrander 2005, Corten et al. 2014, Giebeler et al. 2009) set out multiple clear actions on how to deal with cultural heritage. Although these actions could be implemented in multiple ways, the implementations are in a way limited due to their defined concepts. Several other literature (Huisman 2001, Provoost and Wilkins 1995, Strolenberg 2006) assume more broad concepts which can be implemented in many ways after their own interpretation. It may be that different concepts have a wide range of different implementations. The concepts provide handholds for approaching cultural heritage though, whereby it is important to find a balance between monument, man and nature. Particularly vulnerable monuments need some extra attention. A ruin for example exists by the grace of decay. When building her up it is no longer a ruin, but when it will be overgrown by nature and climbers, eventually nothing remains of it.

Although the methods and techniques of historical research in for example art, architecture and garden design are sometimes applicable to landscapes as well. The fact is that these objects can be restored and used for new purposes without changing its form or appeal. Landscapes on the other hand are always in movement and cannot easily be restored because they will never be the same as they used to be (Sijmons et al. 2002). Therefore, examples have been set out in this chapter in order to show how the stated concepts can be implemented in the landscape. The concepts are built up in a divergence way, whereby the starting concepts are expanded with other literature. It will also work the other way around though, whereby a more specific concept will lead to a more overarching concept (convergence way). However, every concept needs to be customised before it will be implemented to a specific place (Tijdschrift van de Rijksdienst voor het Cultureel Erfgoed 2014).

### *Strategic approaches*

Strategic approaches are at the basis of the more broad concepts [F.3.2]. The concepts are more vague and can be interpreted in different ways. Provoost and Wilkins (1995) stated for example concepts like:

- subterranean
- facelift
- $1+1=2$
- $1+1=1$
- continuity
- palimpsest
- hermit crab
- recapitulation.

These concepts require a lot of imagination and can therefore be implemented in many different ways. Initially the concepts were stated when reinvigorating old buildings. Due to their wide range of interpretations, they can be used for landscape purposes as well.

The concept 'subterranean' refers to subtle interventions

in order to adjust the landscape. They are subservient to the landscape allowing that the landscape is a working unit. Opposed to this concept is the concept 'facelift'. This concept allows new additions to landscape by means of new structures or elements in order to improve the landscape.

Another element that was stated is the concept ' $1+1=2$ ' whereby the additions in the landscape stand out. An example of this concept is for instance the implementation of a grid within an English landscape garden. More in line with this concept, is the concept ' $1+1=1$ '. The additions that are made to the landscape form together a whole new landscape. These additions seem to be the best possible solution. The concept ' $1+1=1$ ' stands for melting the old and the new into something new, whereby they become one. 'Werk aan het spoel', a former fortress within the New Dutch Waterline, is an example of this concept [F.3.1\*].

The concept 'continuity' allows new additions to landscape that are in line with previous additions. These additions could be interpretations of elements of the past which are implemented in the current time. Within this concept architectural interventions are based on similarity and congruence with the existing, not on the difference with the existing. Complementary to this concept, is the concept



[F.3.1\*] 'Werk aan het spoel'



‘palimpsest’ whereby the landscape is in line with the history. However, the changes that are made call some questions. Palimpsest stands for writing a whole new modern manuscript over the existing ancient text. The new created layer does not always mean the demise of the old layer. The new layer or landscape can be precisely arranged in order to reinforce the old layer or landscape (Bosma and Kolen 2010).

The concept ‘hermit crab’ stands for the preservation of big structures, elements and lines in the landscape. However, these structures, elements and lines are provided with new paddings.

The last concept that was stated by Provoost and Wilkins is the concept ‘recapitulation’. This concept refers to the repetition

of the main content which elaborates on the story of the landscape. It also refers to the recap of the design mentality of the original designer without imitating him. The concept ‘recapitulation’ is in line with the concept ‘continuity’. The main difference between the two concepts is the fact that the concept ‘continuity’ builds upon existing additions and the concept ‘recapitulation’ builds upon the story. Therefore it could be possible that the concept ‘recapitulation’ replaces existing additions in the landscape.

More in accordance –but still vague- are the concepts of Strolenberg (2006) and Huisman (2001). On one hand the concepts as stated by Strolenberg (2006):

- history as a quotation
- preservation through development

|                     | HUISMAN (2001) | STROLENBERG (2006)                                      | PROVOOST AND WILKINS (1995) |
|---------------------|----------------|---------------------------------------------------------|-----------------------------|
| OVERCONFIDENCE<br>↑ | MODERNISE      | HISTORY AS A QUOTATION                                  | FACELIFT                    |
|                     |                |                                                         | 1 + 1 = 2                   |
|                     | REGIONALISE    | PRESERVATION THROUGH DEVELOPMENT<br><i>place making</i> | CONTINUITY                  |
|                     |                |                                                         | RECAPITULATION              |
| MELANCHOLY<br>↓     | COMMERCIALISE  | CULTURAL HISTORY AS A FINDING<br><i>place branding</i>  | 1 + 1 = 1                   |
|                     |                |                                                         | PALIMPSEST                  |
|                     | MUSEALISATION  | PRESERVATION THROUGH PROTECTION                         | HERMIT CRAB                 |
|                     |                |                                                         | SUBTERRANEAN                |

- cultural history as a finding
- preservation through protection.

On the other hand the concepts as stated by Huisman (2001):

- musealisation
- commercialise
- modernise
- regionalise.

The first concept as stated by Strolenberg (2006) is the concept 'history as a quotation'. This concept refers to the history while renewing structures in or adding new structures to the landscape. The interventions do not have to be on the same place as they used to be. They can also be a reference to structures or elements without implementing them on the same location.

The concept 'preservation through development' allows adjustments to structures and elements to the current time. However, it is important not forget the past and to take into account the past as well.

More in line with the concept 'history as a quotation', is the concept 'cultural history as a finding'. This concept takes into account historical structures or elements but then with a new interpretation. The interventions are not translated one to one.

The last concept that was stated by Strolenberg (2006) is 'preservation through protection'. Within this concept all structures and elements are preserved. The structures and elements are not adjust to the current time because as much as possible of the past need to be protected.

The concepts of Huisman (2001) are the most overarching concepts and are disposed between two very opposite main concepts: Melancholy and Overconfidence. The first overarching concept assumes a nostalgic look at the scenery and wants to keep it as it is, while the second overarching

concept polishes the past away and provides the landscape of a whole new layout. The concepts 'musealisation' and 'commercialise' lean against the main concept Melancholy whereby the cultural heritage is most powerful within the concept 'musealisation'. This concept is based on the authenticity of the landscape and can provide reference points for a collective memory. However, it is hard to preserve the landscape as it is, because the landscape is always in movement. Within this concept cultural heritage is dominant over cost considerations, whereby in these financially hard times trade-offs must be made. Although there is space for inventive ideas, unfortunately not everything could be executed due to the little money that is available at the moment.

Within the concept 'commercialise', recreation, tourism and consumption are forging together whereby both economy and cultural history will be served. It relates to the marketing of cultural heritage and stated as 'place branding'. Place branding requires a selective relocating of the programme, whereby the conservation of structures and decor is important.

The concepts 'regionalise' and 'modernise' lean more against the main concept Overconfidence. The concept 'modernise' assumes that culture is at the service of new developments. Structures and elements in the landscape can be adapted and are subject of change. Within this concept the programme is the dominant factor. All elements that stand in the way of the completion of the programme, may be removed. Allowing that everything that is redundant could be wiped away.

Within the concept 'regionalise' the character of the landscape determine the suitable functions. Within this concept cultural heritage is structurally related to creating new culture and stated as 'place making'. The landscape serves as starting proposition when creating a new environment. Though the government needs to have active role in order to situate everything in the right place.

### *Practical approaches*

As mentioned before, clear concepts will be put forward when cultural heritage is approached practically [F.3.3]. For example Corten et al. (2014) stated six alternatives for dealing with cultural heritage:

- do nothing
- tear the building down
- reinsert the old use
- convert the building into a museum
- manage the building as a ruin
- adaptively reuse the building.

Although these concepts are invented for buildings in the first place, some of the concepts can be used for landscape purposes as well. The concept 'do nothing' for example allows that the outdoor space will have its own developments over time without any interaction with humankind. An important note to this concept is that no maintenance could be dangerous in the end. Old trees and poorly maintained sidewalks can cause problems, because branches can fall down or there may be holes in the sidewalks.

The concept 'tear the building down' refers to the removal of the existing landscape. It once happened to the mine buildings in Zuid-Limburg as was mentioned before. The new implementations start from scratch (vacant lot), whereby there are no references to the past anymore. Opposed to the concept 'tear the building down' is the concept 'reinsert the old use' whereby old and former ways of agriculture, structures and elements are brought back. It will never be the same as it used to be though, because for example trees have grown and have a different appearance than before.

The concept 'convert the building into a museum' refers to the conservation of the outdoor space. However, it is not possible to keep the same appearance because the landscape changes over time.

The concept 'manage the building as a ruin' is quite similar

to the concept 'do nothing', whereby in this concept some maintenance is needed. It is a controlled decomposition whereby nothing new will be added, but only dead trees, branches, structures and other elements will be cleaned up.

The last concept that was stated by Corten et al. (2014) is the concept 'adaptively reuse the building' whereby creative interpretations of uses in the landscape are required.

Complementary to the previous concepts, Broesie (in Colenbrander 2005) stated that there are ten different ways of dealing with cultural heritage. Between these extremes a wide range of design strategies can occur. The extremes of dealing with cultural heritage are:

- conserve
- branding
- static highlight
- flexible highlight
- reconstruct
- update
- showcase
- integrate
- enclose
- materialise.

All the concepts can be subdivided among the concepts of Corten et al. (2014) as stated before. At one end the concepts may relate to the national scale, on the other end they can also relate to local small objects. Although these strategies are invented for archaeological elements in the first place, most of the concepts can be used for physically present cultural heritage as well.

The concept 'conserve' for example refers to the preservation of structures and elements –whether or not these are situated in the landscape-, whereby no changes or additions occur. The hardest part of this concept is the fact that the landscape is always in movement and that it never will be the same again. The landscape develops over time, whereby

| CORTEN ET AL. (2014)                                                                                                    | COLENBRANDER (2005)                                                                                        | GIEBELER ET AL. (2009)                    |
|-------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| DO NOTHING<br>                         |                                                                                                            |                                           |
| REINSERT THE OLD USE<br>               | RECONSTRUCT<br>          | RECONSTRUCTION                            |
| MANAGE THE BUILDING AS A RUIN<br>      | STATIC HIGHLIGHT<br>     | RESTORATION                               |
|                                                                                                                         |                                                                                                            | REPAIRS/MAINTENANCE                       |
|                                                                                                                         |                                                                                                            | CONVERSION                                |
| CONVERT THE BUILDING INTO A MUSEUM<br> | ENCLOSE<br>              | GUTTING/REBUILDING WITH PARTIAL RETENTION |
|                                                                                                                         | SHOWCASE<br>             | PARTIAL REFURBISHMENT                     |
|                                                                                                                         | CONSERVE<br>             | TOTAL REFURBISHMENT                       |
|                                                                                                                         | BRANDING<br>             | RENOVATION/MAINTENANCE                    |
|                                                                                                                         |                                                                                                            | FITTING OUT                               |
| MANAGE THE BUILDING DOWN<br>         | MATERIALISE<br>        | DEMOLITION                                |
|                                                                                                                         | FLEXIBLE HIGHLIGHT<br> | DECONSTRUCTION                            |
|                                                                                                                         |                                                                                                            | DECONTERMINATION                          |
| ADAPTIVELY REUSE THE BUILDING<br>    | UPDATE<br>             | CHANGE OF USE                             |
|                                                                                                                         |                                                                                                            | REFURBISHMENT                             |
|                                                                                                                         | INTEGRATE<br>          | MODERNISATION                             |
|                                                                                                                         |                                                                                                            | EXTENSIONS/ADDITIONS                      |



structures or elements will grow or whereby the living material dies, like for example an alley or solitary trees.

The concept 'branding' on the other hand, does not care about the fact that the landscape is always in movement. It can brand as well buildings as landscapes whereby additions in or to the object make no difference. Opposed to the concept 'branding' attention can also be drawn by a 'static highlight'. This concept makes a reference towards landscapes, history or buildings. An example of this concept could be 'Bunker 599' from WWII. This bunker was cut through in order to give insights in how former group shelters looked like. The cut through bunker marks both present and past and exposed more than only the visible part [F.3.4\*].



Subsequently to this concept is the concept 'flexible highlight' whereby the intervention is less dominant. Flexible highlighting the landscape can be carried out by, for example, the use of different materials or by marking a location with a different tree. The concept can also refer to subtle details, like for example a logo on a bench.

'conserve', but whereby the concept 'conserve' only makes small renovations or implements little interventions, the concept 'reconstruct' wants to bring the object/landscape back as it once used to be. This concept ignores other developments and clings to important structures and elements. Opposed to this concept is the concept 'update'. In this concept additions are made to the landscape in order to make it liveable in the current time. Examples of additions are new structures or new elements.

Another concept that was stated by Broesie (in Colenbrander 2005) is the concept 'showcase' whereby the building or landscape does not integrate with its environment. They are two existing elements operating alongside each other, where no exchange is taking place. However, the concept 'integrate' on the other hand, stands for combining multiple horizontal and vertical layers of the landscape. The exchange between the two elements is a privilege.

The concept 'enclose' is more in line with the concept 'showcase', but whereby the concept 'showcase' is accessible for public and therefore well maintained, the concept 'enclose' is less accessible. The maintenance is not the main focus within this concept.

The last concept that was stated is the concept 'materialise'. This concept is in line with the concept 'flexible highlight' but used to be different due to the fact that within the concept 'materialise' the reference does not necessarily have to be on the same place as it once was.

Also Giebeler et al. (2009) assume a wide range of concepts whereby the precise choice of words is important in order to make it possible to assign the right measures and therefore these concepts are the most detailed ones. The concepts that are mentioned are:

- reconstruction
- restoration
- deconstruction

- demolition
- renovation/maintenance
- repairs/maintenance
- partial refurbishment
- refurbishment
- total refurbishment
- conversion
- gutting/rebuilding with partial retention
- modernisation
- decontamination
- extensions/additions
- fitting-out
- change of use.

All the concepts can be linked to Broesie (in Colenbrander 2005) and Corten et al. (2014). The concepts are the best defined concepts of all the literature that has been addressed. Since they are arrayed to a larger denominator as shown in the scheme, there is no need for a further explanation.

### 3.2.2 Conclusions

Previous approaches allow the exploration of different opportunities of how to interact with our past by means of structures, elements, spatial representations, atmospheres and stories from the past. However, designers and historians look differently at places, buildings, or (urban) landscapes. The vision on heritage is substantially different in the heritage sector than parties that pursue regional development or those who assign a contemporary role to heritage (Bosma and Kolen 2010).

The different approaches provide interesting structures that appeal to many people. In addition, the choice for a specific approach may be dependent on the parties who are involved in the process since they all have their own interests and requirements. Variations within the composition of the different parties might result in different choices for different approaches. Basically every cultural heritage object can be addressed by the different approaches as stated above. The

development measures still rely on the choice for a specific approach. Hence, it is important to address the monastic complexes in an appropriate way in order to make sure that they are able to give expression to the religious landscape in the future as well.

### 3.3 Adaptive reuse

Monastic complexes have been a subject of change over time. New constructions were added to or replaced instead of the original building, new land has been purchased, new orders sometimes took over or new functions were inserted into the monastery. The changes generate new values allowing that adaptive reuse is just a step in a constant development (Rijksdienst voor het Cultureel Erfgoed 2013).

Adaptive reuse is an option if a building is no longer used or suitable for the use of its original function. It refers to the process of giving a building a new existence and function (Velthuis and Spennemann 2007). Latham (2000) stated five imperatives for adaptive reuse: 1. the building under consideration has an archaeological value; 2. the building under consideration is a visual amenity or a cultural contribution; 3. reuse of the building under consideration can make economic sense; 4. the building under consideration has a functional value; and 5. the building under consideration fills a psychological need. Adaptive reuse refers to the process of giving a building or complex a new existence which requires a certain amount of inventiveness and creativeness. Not only from the architects who are involved in finding a way to fit a new function, but from everyone who is involved in the process of adaptive reuse (Velthuis and Spennemann 2007).

Large objects or sites in remote areas with a specific function and specialized building types for example, are more difficult to redevelop and need therefore special attention (Harmsen and Waal 2008). Bogie et al. (1999) (in Velthuis and Spennemann 2007) stated that through adaptive reuse, not only the building and the atmosphere/character of

the building is saved, also the identity of the place is saved through adaptive reuse. Therefore the preservation of cultural heritage serves a larger social purpose as well. When adaptive reuse takes place, the new programme for the building should be at least in line with the cultural heritage values (Rijksdienst voor het Cultureel Erfgoed 2013).

Adaptive reuse is an important strategy towards conservation of cultural heritage. By means of adaptively reusing, for example vacant buildings, the sight of a city entrance by rail of highway undergo substantial improvement whereby the 'back' of the city could be transformed into a dynamic 'front' (Harmsen and Waal 2008). An example of this 'dynamic front' is for instance Strijp-S in Eindhoven whereby a former industrial area has been adaptively reused [F.3.5\*].



[F.3.5\*] 'Dynamic front' Strijp-S

### 3.4 Role of the landscape architect

Since the different ways of approaching cultural heritage passed through a shift the last decades, a larger and different role is reserved for landscape architects. Cultural heritage is not only a matter for archaeologists anymore, but also an interesting starting proposition for landscape architects whilst giving form to the landscape. Seen from a different point of view, Sijmons in Vroom and Ettema (2010) stated that out of

all cultural challenges in dealing with the landscape there is one challenge which received special attention, namely the relationship between cultural preservation and the culture of making.

Different than for example historical geographers, which see patterns and objects with differing degrees of intactness, age and rarity in their field of work, landscape architects see in their field of work the landscape as the results of systems and processes which are analysed in dynamic terms. Since the analyses in these fields of work are so different, landscape architects often cannot make use of the results of for example cultural historical research. This because they are faced with the fact that the landscape is hard to judge in an artistic sense. It cannot be moved and after all it is never finished. In addition, Sijmons et al. (2002) stated that landscape architects have in their turn not yet turned out to be sufficiently capable of incorporating cultural historical awareness into their plans and to act in dialogue with the history of the landscape. However, there are some good examples though.

Therefore, the role of the landscape architect in this research is trying to make a connection between the defined concepts



[F.3.6\*] 'Moerenburg', Tilburg

of static cultural heritage, as in for example cultural historical research, and the dynamic concepts of the landscape and the designing of this landscape.

### 3.5 Conclusions

This chapter provided insights in the shift that cultural heritage had been through the last decades and gave an overview of the different ways of approaching cultural heritage. Also the value of adaptive reuse and role of the landscape architect within this research were explained. This background information is necessary in order to understand the choices the designer made during the design process.

Before exploring the different design options, two options for programming will be stated in the next chapter. Within some stated approaches towards cultural heritage, as mentioned in this chapter, the dominance of the programme was an important element. Therefore two diverse functions will be set out in order to get insights in the spatial interventions the programme entails.



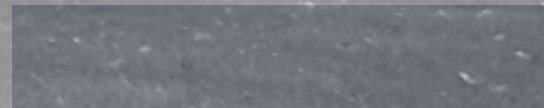


House Damiaan, Simpelveld





**PART II\_ RESEARCH  
THROUGH DESIGNING**







House Damiaan, Sijpeveld



## 4\_ Cases and options for programming

*To be able to test whether the implementation of different functions has an impact on the outdoor space, three monastic complexes are subjected to two diverse functions of adaptive reuse each with its own programme: reuse the monastic complex as housing and reuse the monastic complex as a conference centre/hotel. The programme for implementing the conference centre/hotel concept vary from the concept of housing due to for example the temporality of the stay of people. Is there at the housing concept a shift in a couple of years or decades, at the conference centre concept there is a shift from a few hours to several days. Due to the divergent interpretations of adaptive reuse, divergent requirements for the different functions should be taken into account as well.*

### 4.1 Cases – housing

Several Dutch case studies show how the housing concept was implemented in vacant monastic complexes. The case studies that will be explained are ‘St. Luciablooster’ in Bennebroek, ‘Sancta Monica’ in Esch and ‘Gouden Handen’ in ‘s-Heerenberg. The complexes were selected after a consideration of location in the rural environment, the size of the monastic complex itself and the presence of outdoor space. Although it seems to be easy implementing the concept of housing due to the amount of rooms that are present in monastic buildings, some other aspects need to take into account as well. Due to the permanent stay of people, the private and public areas have to be considered. Also the way of parking, the location of the gardens and the different ways of housing (for example townhouses with a garden, apartments, studios) should be taken into account as well and will be addressed in the following examples.

#### *St. Luciablooster, Bennebroek*

This monastic complex is situated in the municipality of Bloemendaal (Province of Noord-Holland). It is located within the village Bennebroek near the dunes of the North Sea [F.4.1\*]. The location of Bennebroek is at the border of the Randstad, the most urbanised area in the Netherlands.



The complex was built in 1920 and is in the running to get adaptively reused. It will in the end consist of 7 townhouses, 5 apartments and 8 maisonettes [F.4.2\*]. Not all the accommodations have been sold yet, but more than half of them already have new owners. The surface of the different properties vary between 120 m<sup>2</sup> and 500 m<sup>2</sup> excluding the surface of a possible balcony. Some of the accommodations have a private driveway. Other properties contain a private garden whereby the depth of the garden varies between 20 and 30 meters. Again other properties have their own balcony. The residents of all other accommodations can

make use of a collective garden. (Buitengewoon wonen in Bloemendaal 2013)

#### *Sancta Monica, Esch*

This monastic complex is situated in the municipality of Haaren (Province of Noord-Brabant). The complex is located in the outer area of the village Esch near large forest areas [F.4.3\*]. The monastic complex was built in 1895 and has been redeveloped since 2005 as a housing location [F.4.4\*]. The monastic complex consists out of 44 accommodations.



A distinction can be made between 4 townhouses, 16 apartments and 24 houses that are established in the garden of the monastic complex. The 4 townhouses and the 24 houses do have their own entrance. None of the accommodations contain outdoor space except for the 4 townhouses. They have an own private terrace. The surface of the different accommodations vary between 60 m<sup>2</sup> and 110 m<sup>2</sup>. Inhabitants and visitors can park their car on a central parking lot which is situated within the surface of the monastic complex. (Sancta Monica 2014)





#### *Gouden Handen, 's-Heerenberg*

The former monastery St. Bonifacius has been established in 1910 in 's-Heerenberg and provided collateral to a creative centre for several years. It is situated within the municipality of Montferland (Province of Gelderland). The monastic complex is located at the edge of the village 's-Heerenberg, near the German border [F.4.5\*]. Nowadays the complex is adaptively reused as housing location and consists of 46 apartments for people who are at the age of 45 or higher [F.4.6\*]. A part of the former monastery will serve as a public function, whereby on the ground floor a counter of the municipality is situated. Also a police station, a health centre and an Youth & Family Centre will be present. In addition, commercial facilities are planned for residents and visitors such as a café-restaurant. Due to these additional facilities one main entrance is situated at the front of the building. The surface of the apartments vary between 71 m<sup>2</sup> and 190 m<sup>2</sup>, dependent on additional rooms and the presence of outdoor space/balcony. There also will be a collective terrace of 40 m<sup>2</sup> for the inhabitants of the complex. (Woonzorg Nederland 2014)

#### **4.2 Cases - conference centre/hotel**

Also several Dutch case studies can be found on adaptively reusing monastic complexes as a conference centre and/or hotel. The case studies that will be explained are 'Vergader-en conferentiecentrum Soeterbeeck' in Ravenstein, 'Bovendonk' in Hoeven and 'Kloosterhotel ZIN' in Vught. These complexes were also chosen after a consideration of their location in the rural environment, the size of the monastic complex itself and the presence of outdoor space. Although it would be obvious to redevelop a large monastic complex into a conference centre/hotel, in particular due to the volume of the building and the surface of the environment, some aspects need to take into account. Because of the relatively short stay of people, the flow rate needs to be well organised. Aspects that need to take into account are for example the parking lot, the location of the rooms, the location of other facilities,

the location for the loading and unloading of goods and the separation of private space and public space.

#### *Vergader- en conferentiecentrum Soeterbeeck, Ravenstein*

The former monastic complex is situated in the municipality of Oss (Province of Noord-Brabant). It is located in the outer area of the villages Ravenstein and Deursen, near the border of the Province of Gelderland [F.4.7\*]. The complex was established in 1732 and is nowadays in use as conference centre by the Radboud University Nijmegen [F.4.8\*]. The complex can accommodate up to 450 people at the same



[F.4.7\*] Location conference centre Soeterbeeck



[F.4.8\*] Conference centre Soeterbeeck

time within different rooms. The rooms can accommodate between 2 and 150 people. The monastic complex is easily accessible by public transport, but also easy to reach by car. The cars can be parked on a central parking lot within walking distance of the building. The complex contains a lobby and several terraces. Furthermore, it consists 33 rooms were participants can have an overnight stay. Breakfast, lunch and dinner for the participants is prepared with regional products, due to a cooperation with farmers in the region. (Radboud Universiteit Nijmegen 2014b)

#### *Bovendonk, Hoeven*

The former monastic complex is situated in the municipality of Halderberge (Province of Noord-Brabant). The complex is embedded within the village Hoeven. The village is located at the border of a large area of arable land [F.4.9\*]. The monastic complex was completed in 1908 and can accommodate up to 350 people for congresses or conferences [F.4.10\*]. The upper floor of the building is permanently leased to the foundation of priest and deacon education. Nevertheless, also outsiders are welcome. The monastic complex is easily accessible by public transport since the railway station is within three minute walking distance. Also here the cars can be parked within the surface of the monastic complex. The conference centre stated that there are plenty of free parking spaces available around the building. The complex can partly be used as a marriage location, party location, place for condolences and it contains a small brasserie with a limited menu. The complex also provides accommodation for events. For the maintenance of the complex a fundraising project has been launched. The building consists 48 rooms were people can have an overnight stay. (Conferentiecentrum Bovendonk 2014)

#### *Kloosterhotel ZIN, Vught*

The monastic complex is situated in the municipality of Vught (Province of Noord-Brabant). The complex is located in the outer area of the village Vught, but enclosed between the village of Vught and the highway A2. It is situated



[F.4.9\*] Location conference centre Bovendonk



[F.4.10\*] Conference centre Bovendonk

within a scenic landscape though [F.4.11\*]. The monastic complex consists of 8 rooms for diverse occasions which can accommodate a maximum of 368 people [F.4.12\*]. Furthermore, the complex contains 39 rooms for overnight stays, whereby the people can join a yoga class in the morning in order to get productive for the rest of the day. The conference centre is an accredited training company for people with intellectual disabilities and they are committed to be sustainable. In several ways sustainability was taken into account. Various modifications during the renovation of the complex were implemented for instance and they cook



with biological products. The monastic complex has a large central parking lot which is within walking distance from the monastic building. (Kloosterhotel ZIN 2014)

### 4.3 Analysis

The reference study about adaptively reusing monastic complexes as housing and conference centre/hotel show strikingly similarities between the different investigated monastic complexes. The similarities and considerations will be set out in order to generate information about the

adaptive reuse of monastic complexes.

#### 4.3.1 Options for programming

##### *Housing*

Within the reference study about the adaptive reuse of monastic complexes as housing, a large variety in housing types and their associated values occur. The diversity of housing types makes that a large target group will be achieved due to the fact that there is something for everyone. This diversity is also noticeable in the presence or absence of outdoor space. Large private gardens are assigned to several accommodations, whereby –when the circumstances allow it– the depth of the garden can be up to tens of meters. Remarkable is that in addition to these private gardens, also a collective garden is present. This collective garden form the base for the inhabitants who do not have a private garden or balcony. Unfortunately, there are no statements about whether the collective garden is also accessible for outsiders. Furthermore, the reference study shows that all the investigated monastic complexes have a central parking lot. In exceptional cases some accommodations have their own driveway. Furthermore, all complexes have one main entrance which makes that the different housing types are accessible from out one central point. Optional is the housing of additional facilities in the monastic complex, whereby the main entrance also serves as an access to these facilities.

In sum, there are four elements which were similar to all monastic complexes: 1. diversity of housing types; 2. private gardens and collective garden; 3. one central parking lot; and 4. one main entrance. These elements provide handholds when implementing the housing programme into the three selected monastic complexes in the rural environment of Zuid-Limburg.

##### *Conference centre/hotel*

Within the reference study about reusing monastic complexes as conference centre/hotel, a large variety in different conference locations and different atmospheres occur. The

diversity of the different atmospheres and different locations makes that a large target group will be achieved since there is something for everyone. The investigated complexes provide accommodation for divergent events in order to address an even larger target group. Furthermore, it was remarkable that sustainability had a high priority at all the investigated monastic complexes. There were cooperatives with local organisations and businesses which inter alia resulted in biological breakfasts, lunches and dinners, produced with artisanal products. Since the monastic complexes can accommodate a large amount of people at the same time, all the complexes consist of a large central parking lot in order to deal with large flow rates of cars.

Summarised, there are less similarities between the case studies on conference centre/hotel than the case studies on housing. The two elements that were similar to all the monastic complexes whereat a conference centre/hotel was implemented, are: 1. different conference locations (additional conference buildings); and 2. one central parking lot. These elements also provide handholds when implementing the conference centre/hotel programme into the three selected monastic complexes in the rural environment of Zuid-Limburg.

#### 4.4 Conclusions

The six case studies are scattered out over the middle part of the Netherlands and are situated in diverse landscape types. Some of them are located within villages, others in the outer area of the villages. Though all the studied sites are standalone places in their surrounding environments.

In this chapter two diverse options for programming -housing and conference centre/hotel- were set out. Each option for programming provided its own elements. The options for programming and their programme will be tested within the three selected monastic complexes in the rural environment of Zuid-Limburg. Before exploring the different design

options, the locations of the three selected complexes will be set out first in the next chapter.







Monastery Watersley, Sittard

## 5\_ Landscape analysis

*In order to explore different design options for the adaptive reuse of monastic complexes, three monastic complexes in the rural environment of Zuid-Limburg were selected. The different explorations provide insights in the design process on dealing with cultural heritage as a landscape architect. The three monastic complexes were selected after their location in Zuid-Limburg and their differences in size. They are all situated outside the villages and the civilised world. Furthermore each monastic complex is situated in a different context, like for example in the stream valley, on the slope or on the plateau. The three selected monastic complexes are all related to the landscape framework as stated in the Landscape Plan Zuid-Limburg. The complexes that will be addressed in this chapter are [F.5.1-4]:*

- Monastery Wittem in Wittem
- House Damiaan in Simpelveld
- Monastery Watersley in Sittard.



[F.5.1] Monastery Wittem, Wittem

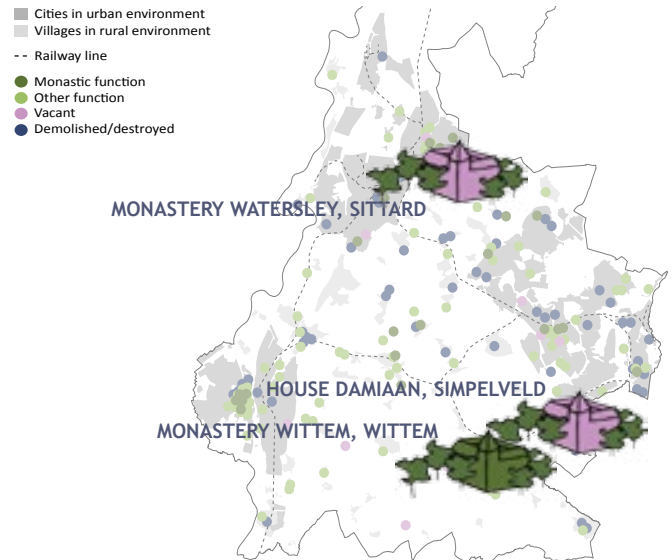


[F.5.2] House Damiaan, Simpelveld



[F.5.3] Monastery Watersley, Sittard

*In order to get an understanding of the positions of the three monastic complexes within the landscape of Zuid-Limburg, the research has been carried out on three different scale levels (regional level, local level and the level of the monastic complex itself). The different levels interact with each other due to for instance abiotic conditions and historical developments. Vroom and Ettema (2010) stated that the landscape is conceived as a system in which the components and their relationships are known and therefore can be manipulated.*



[F.5.4] Location of monastic complexes in Zuid-Limburg

### 5.1 Regional scale

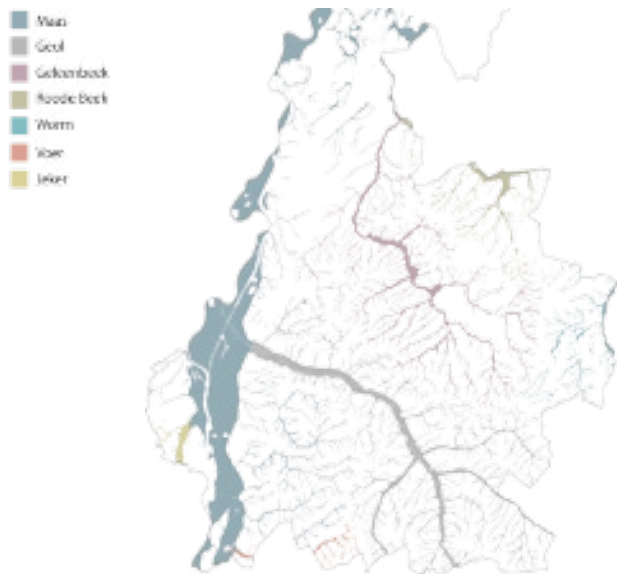
As mentioned before in Chapter 3, a policy on the relationship between cultural history and spatial planning had been addressed, Nota Belvedere. This Nota stated 70 Belvedere areas which are addressed as the most valuable areas in the Netherlands (Feddes 1999). The rural environment of Zuid-Limburg, also known as 'Heuvelland', is one of those Belvedere areas [A.4]. This area covers a large part of the stated National Landscape Zuid-Limburg. An elaboration will be given on the landscape of Zuid-Limburg in order to show the value of this region.

#### 5.1.1 Zuid-Limburg

Zuid-Limburg is situated in the southern part of the Netherlands and possesses a long occupation history. Due to abiotic conditions, the presence of flint and limestone, fertile loess and plenty of running water the occupation history dated back to the Stone Age. The formation of the present landscape started two million years ago, at the beginning of

the Quaternary, when the Meuse flowed in a relatively flat area from Eijsden towards the villages Epen and Vijlen - which are situated in the north-eastern part of Zuid-Limburg-. The direction of the Meuse changed since the Ardennes-region in Belgium started to turn over. The elimination became less in the northwest of Zuid-Limburg which resulted in the displacement of the Meuse westward and the extension of the valleys in that particular direction. (Kerkstra et al. 2007)

The streams carved into the landscape and underlie the current water bearing valleys and dry valleys. Dry valleys are valleys where the water drainage is not permanent (Renes 1988). All valleys –water bearing or not- are hierarchical constructed systems who branching out the more they go upstream. The valleys are an alternation of open communal lawns, orchards, private pastures and hayfields whereby the pastures and hayfields are surrounded by hedges (Renes 1991, Berendsen 2005). The seven valley systems that could be distinguished in Zuid-Limburg are the valleys of the Meuse,



[F.5.5] Valleys (adapted from Kerkstra et al. 2007)

Geul, Geleenbeek, Jeker, Voer, Worm and Roode Beek [F.5.5]. (Kerkstra et al. 2007)

Besides the valleys, the slopes and plateaus were created at the same time. The slopes in Zuid-Limburg could be differentiated into gently sloping, moderately sloping and strongly sloping and form the boundary between the lower parts (stream valleys) and the higher parts (plateaus). The slopes consist of highly confined areas and relative open areas. On the steepest slopes forest is situated, the moderate slopes are covered with farmland and orchards can be found on the gentle slopes (Renes 1991, Berendsen 2005). Characteristic for the landscape of Zuid-Limburg are the planted bends (in Dutch: 'grafter') which can be found in particular on the relative open areas of the slopes [F.5.6\*]. The bends are created to counter the erosion since a large part of Zuid-Limburg has been covered with loess during several Ice ages. Although loess is very fertile and well drained in order to moisture the crops in dry summers, it is very vulnerable to erosion by wind and water. Some places in Zuid-Limburg lacking loess due to the drainage of the different streams and on higher places due to run-off (Renes 1988). Berendsen (2005) stated that the initial presence of

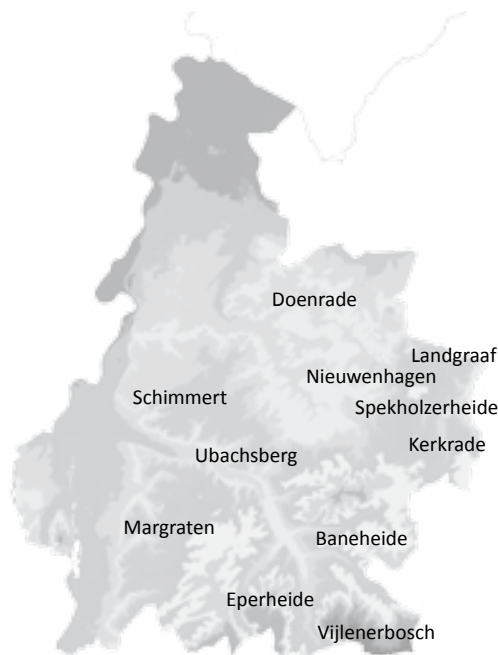


[F.5.6\*] Planted bends



loess makes that originate species as oak and hornbeam forest are present on the slopes. Alder forest on the other hand is present in the valleys while oak forest is present on the plateaus. Different plateaus, with their own sizes and shapes, have also been created by the carving of the different streams into the landscape.

Due to their open and large-scale character, the largest part of the agriculture of Zuid-Limburg can be found on the plateaus (Renes 1991, Berendsen 2005). The plateaus which are present in Zuid-Limburg are the plateaus of Margraten, Schimmert, Doenrade, Eperheide, Vijlenerbosch, Baneheide, Ubachsberg, Spekholzerheide, Kerkrade, Landgraaf and Nieuwenhagen [F.5.7].



[F.5.7] Plateaus (adapted from Kerkstra et al. 2007)

The abiotic conditions of the landscape of Zuid-Limburg, as described above, underlie a large part of the occupation

and networks in the area. The establishment of villages and towns, the construction of highways and railway tracks, the construction of canals, the location of heritage objects, the location of mining areas, they are all closely related to the natural system of the landscape. But not all elements seem to relate to the natural landscape, Renes (1991, translated p. 16) stated: *'Due to all attention for structures and connections it sometimes threatens to lost sight of the fact that the wealth of a cultural landscape is most strongly reflected in the many individual landscape elements. Not all of these elements are associated with the scenic basic structure: they date from very different periods and are the result of a wide variety of developments.'* Though there could be a genetic connection between individual landscape elements. This means that specific elements are not related to the natural system but that they connect with each other (Renes 1991). Zuid-Limburg contains a rich variety of cultural heritage -linked to the natural system or not- whereby the churches, monasteries, chapels and monumental crosses are visually dominant and underpin the religious (heritage) landscape.

## 5.2 Local scale

Now that the landscape of Zuid-Limburg has been addressed, zoom-ins can be made on the three different locations of the selected monastic complexes. These zoom-ins give more insights in the location of the three complexes within the landscape of Zuid-Limburg. Furthermore per monastic complex an explanation will be given about the history of the complex.

### 5.2.1 Monastery Wittem, Wittem

#### History

The monastery of Wittem was founded in 1732 by Duke Ferdinand van Plettenberg. The complex was built next to the former castle of the duke in order to protect the area against the encroaching Protestantism from adjacent areas. Capuchin fathers from Cologne (who lived by the Rule of Franciscus) took care of the pastoral work within the monastery until they

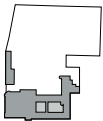
had to leave due to the French Revolution. When in 1836 the Redemptorists (who lived by the Rule of Augustinus) moved into the neglected building, they started a Redemptorist school. Due to the growing numbers of students, the original monastic complex turned out to be too small and was replaced by a new monastic complex at the end of the 19th century. In 1938 the monastic complex was expanded again. In 1961 a new chapel was added [F.5.9\*].

Nowadays the monastery of Wittem is a pilgrimage site and is yearly visited by more than 150.000 people. A large part of the monastic main building is disused. Nevertheless, the monastic community who lives and works there consists of 12 residents, approximately 20 paid staff members and more than one hundred volunteers. (Kerkgebouwen in Limburg 2014, Klooster Wittem 2014)

#### Location

The monastic complex, which covers approximately 1 hectare [F.5.8], is situated in the municipality of Gulpen-Wittem. It is located next to the main road N595 which is part of a major transit route between Valkenburg and Vaals. The main road in the surrounding of the monastery is partly enclosed with an avenue of trees which ends near castle Wittem. The road from Simpelveld strokes to the N595 next to monastic complex [F.5.10-11].

Size compared to other selected complexes



[F.5.8] Monastic complex, 1 hectare



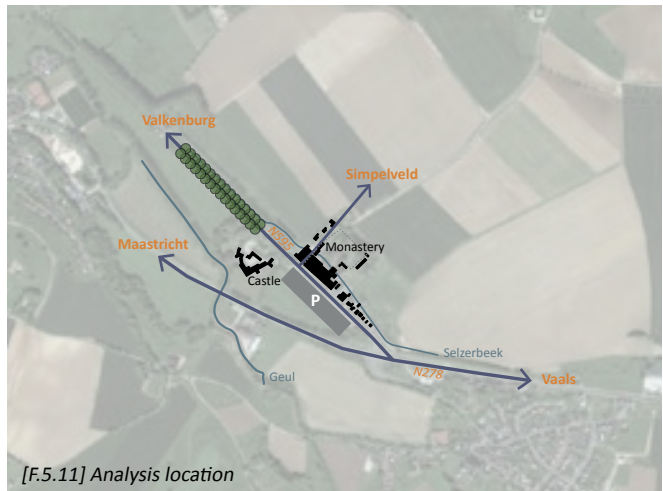
As mentioned before, the monastic complex is located nearby castle Wittem at the opposite site of a large parking lot. Since the establishment of the castle and monastery, some other buildings were established in the surrounding as well.



[F.5.9\*] Old picture monastic complex



[F.5.10] Location complex within landscape



[F.5.11] Analysis location

Together with these few houses, the monastery and castle form the township Wittem. The monastic complex is situated at the edge of the stream valley of the Geul and relates best to design proposal WV4 as stated in Landscape Plan Zuid-Limburg [F.5.12]. Since the monastic complex is situated at the edge of the valley it is clearly visible from the edges of the higher parts in the surrounding.



[F.5.12] Design proposal WV4 (adapted from Kerkstra et al. 2007)

### *Monastic complex*

The outdoor space of the monastic complex of Wittem is almost entirely enclosed with a wall. A small part of this wall is not enclosed which makes that the outdoor space of the monastic complex is free for public access. The largest part of the monastic main building is private due to the monastic community who lives there. Nevertheless the chapels are freely accessible for public as well. The outdoor space contains a former butchery, a former sawmill, greenhouses/vegetable garden [F.5.13], a place to scatter ash of the deceased [F.5.14], an outdoor chapel [F.5.15], various relics and a water mill [F.5.16]. Since a branch of the Selzerbeek was led through the 'garden' of the monastic complex towards the water mill of the castle, a small water mill for the monastery used to be created as well. The branch of the Selzerbeek ends in the Eyserbeek, after which the Eyserbeek ends in the Geul.



[F.5.13] Vegetable garden



[F.5.15] Outdoor chapel



[F.5.14] Place to scatter ash of the deceased



[F.5.16] Water mill; branch of the Selzerbeek



### 5.2.2 House Damiaan, Simpelveld

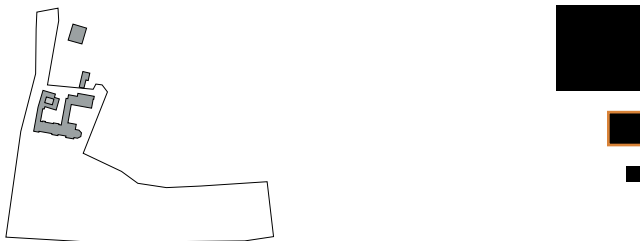
#### History

House Damianeum –as called by the fathers of the monastery- was founded in 1896 by Belgian fathers. They initially launched in 1883 an apostolic school in Simpelveld for the education of German students. A few years later they purchased the land and buildings from farm 'De Plaar' in order to build a new monastic complex [F.5.18\*]. The old farm complex was incorporated within the new monastic complex and in popular parlance the residents of Simpelveld always referred to the 'Fathers of De Plaar' instead of 'Fathers of Damianeum'. In 1913 the monastic complex got expanded with a chapel. After more than a century of serving as a monastic complex, the fathers (who always lived by the Rule of Franciscus) moved out of the monastic complex in 1991. Since then several different functions have been located in the former monastery. Unfortunately the complex is disused again since the beginning of 2014. (Rijckheyt 2009)

#### Location

The monastic complex, which covers approximately 4,5 hectares [F.5.17], is situated in the municipality of Simpelveld. It is located in the outer area of the village Simpelveld at the other side of a railway. This location excludes the monastic complex from the built environment of the village [F.5.19-20]. The location of the monastic complex next to the railway was not accidental, because it enabled the connection

Size compared to other selected complexes



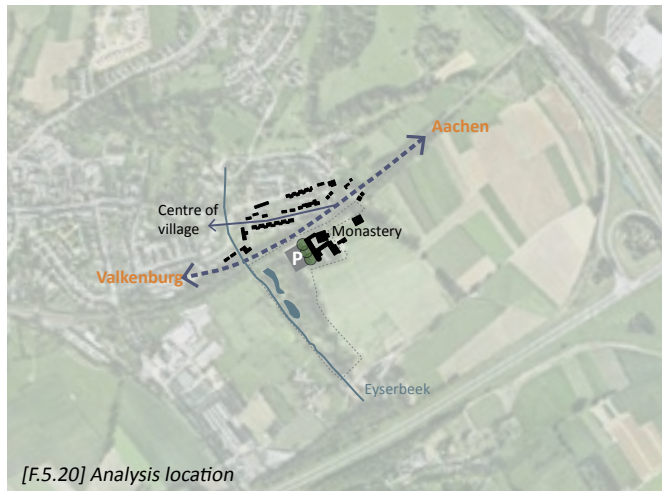
[F.5.17] Monastic complex, 4,5 hectares



[F.5.18\*] Old picture monastic complex



[F.5.19] Location complex within landscape



[F.5.20] Analysis location

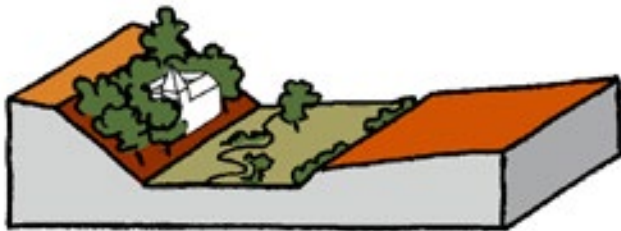


with Germany and its German students. Nowadays the railway is used for touristic purposes, although there is no train platform in front of the monastic complex anymore [F.5.21\*]. The monastic complex used to have its own platform, but since the fathers moved out it was no longer necessary. The monastic building is located on the slope of the 'Spekholzerheide' plateau whilst a part of the monastic



[F.5.21\*] Railway track

complex is located on the valley floor of a branch of the Eyserbeek. The location of the monastic complex relates best to design proposal WV4 of the Landscape Plan Zuid-Limburg [F.5.22]. Since the monastic complex is situated on a slope it is visible from out the valleys whilst the top part of the monastic building is also visible from the plateau.



[F.5.22] Design proposal WV4 (adapted from Kerkstra et al. 2007)

### *Monastic complex*

The outdoor space of the monastic complex House Damiaan is free for public access. There is a big parking lot in front of the main monastic building. The public footpaths which are present make the place accessible for hikers. The monastic main building is temporary inhabited as anti-squat until another function has been found. Therefore the building and chapel are not accessible for public. The outdoor space covers a part of the valley, a steep slope and a gentle slope at the top. This provides that the outdoor space of the complex is situated at different levels. The outdoor space contains two ponds [F.5.23], a spring, a cemetery [F.5.24], a grotto [F.5.25], remaining relics [F.5.26] and forest which is located on the steep slope of the complex. There used to be an orchard at the back of the monastic main building which was situated next to cemetery. The monastic complex also used to have stables, printing works and shoemaking.



[F.5.23] Ponds



[F.5.24] Cemetery



[F.5.25] Grotto



[F.5.26] Remaining relicts

### 5.2.3 Monastery Watersley, Sittard

#### History

The complex was originally designed as a farmhouse in 1752, commissioned by the couple Loyens-Delhogue from Maastricht. Since 1876 the monastic complex was used by several congregations expelled from Germany, started with Franciscans from Saksen (who logically lived by the Rule of Franciscus). From 1883 – 1889, the complex was used by priests, where after in 1895 German Franciscans established in the monastic complex again. In 1897 a major renovation took place whereby new side buildings and a chapel were added to the main building. The Franciscans established an official German Gymnasium: The Seraphicum. They also enriched the monastic complex with its own farm. In 1959 a private boarding school was added to the complex [F.5.27\*]. In 1967 the Franciscans moved out of the monastic complex and sell the complex to Pergamijn Foundation (former St. Paulusabdij Watersley Foundation and former Pepijn



[F.5.27\*] Old picture monastic complex

and Paulus Foundation). A large part of all the buildings is disused, only a part of the staff of Pergamijn Foundation is still established at the main building. (Stichting Behoud Kollenberg 2014)

#### Location

The monastic complex, which covers approximately 29 hectares [F.5.28], is situated in the municipality of Sittard-Geleen. It is located in the south-east of the town Sittard, not far from the German border. Due to the large surfaces

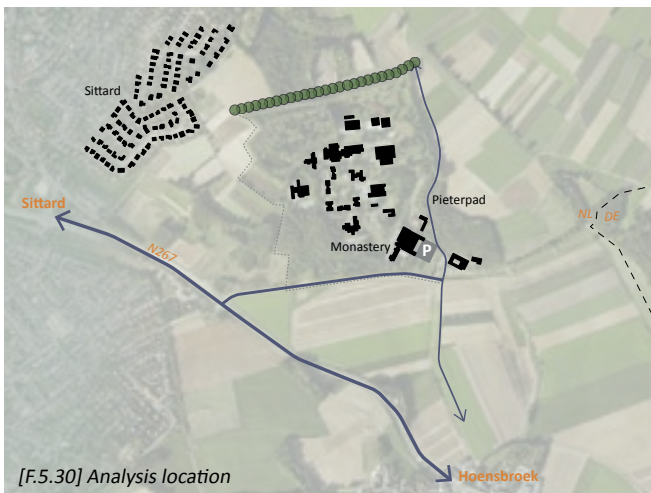
Size compared to other selected complexes



[F.5.28] Monastic complex, 29 hectares

with forest in the surrounding, the major part of the complex is visually isolated from the rest of the environment. Nevertheless, the complex is bordered in the north by a row of poplar trees which ensures that the location is recognisable from out the surrounding area. Furthermore the complex is highly accessible due to the main road N267, irregular hiking trails and several footpaths which come along the area including the 'Pieterpad' [F.5.29-30].

The monastic main building is located on the slope of plateau



'Doenrade' while the rest of the monastic complex is located on the plateau itself. The location of monastery Watersley relates best to design proposal P3 in combination with DV4 of Landscape Plan Zuid-Limburg [F.5.31]. Since the monastic main building is situated on the slope it is visible from its surroundings. Though the rest of the complex is situated on the plateau and enclosed by trees and forest. This enclosed character has a large visual impact on its environment.

### *Monastic complex*

The monastic complex Watersley is basically a private area, but since it is not surrounded by fences everyone can have access to the area. The forest at the west side of the complex has some public paths which makes to complex accessible from out the village. The complex contains 20 buildings besides the monastic main building itself and are serrated for approximately 37,000 m<sup>2</sup>. They are not accessible for public, with the exception of the riding stables. The additional buildings are not of high value [F.5.32-33]. The outdoor space consists a grotto [F.5.34], a series of Stations of the Cross [F.5.35] and some remaining relicts. The outdoor space used to contain a cemetery, and vegetable/herb gardens.







[F.5.33] Vacant additional building



[F.5.34] Grotto



[F.5.35] A series of Stations of the Cross

### 5.3 Monastic complex

The different monastic complexes that were addressed vary in shape, size and location. Besides that, the amount of buildings is different, they vary in arrangement and they have also a different (building) history. However, all the buildings are shaped through the monastic rule used by founding religious communities. Bales (in Brebbia 2013) stated the idea that not only the shape is dependent on the monastic rule, but that there is also a strong relationship between the monastic building and its use. In order to get a clear overview of the different elements of the selected monastic complexes, simplified representations will be addressed.

Various literature (Brebbia 2013, de Nijs and Kroeze 2008, Krüger 2008, Landsberg 1995, Lens et al. 2013) assume that the map of the monastic complex of Sankt Gallen is an ideal translation of how a monastic complex should look like. Although the map was produced in the ninth century and based on the Rule of Benedictus, a lot of similarities are found in the construction of recent monastic complexes.

Lens et al. (2013) subdivided the ideal map of Sankt Gallen into different categories in order to analyse other monastic complexes as well. They made a distinction between 1. abode: monks, nuns and novices; 2. abode: others, kitchen, school, hospital; 3. church, chapel and 4. farming, horsing, crafts. Due to their architectural background they do not comment on the outdoor space, whilst other literature does make judgments. For instance Krüger (2008) stated that other elements, like a cemetery and a vegetable/herb garden, underlie a monastic complex as well.

The cemetery is usually separated by hedges and situated in a corner of the monastic grounds whereby the uniform grave signs are neatly lined up in a geometric construction (Rijksdienst voor het Cultureel Erfgoed 2013). The vegetable and herb garden on the other hand ensures the monastic community to be self-sufficient. This self-sufficiency has also been addressed in other literature (Tack et al. 1999, Krüger

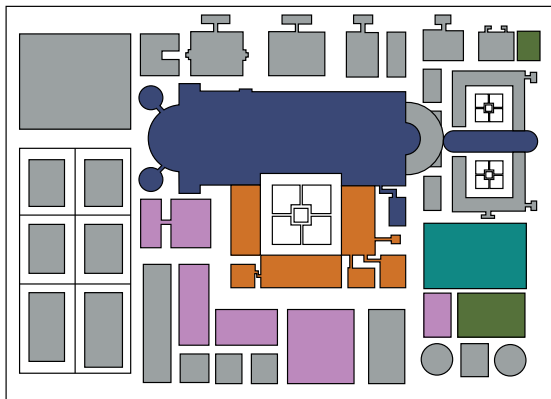


2008, Schrijnemakers 1984) and assume elements for food supply as agriculture, horticulture, livestock and fisheries. These elements are manifested by ponds, orchards, stables, vineyards, meadows and fields. Elements for energy supply such as forestry were also assumed.

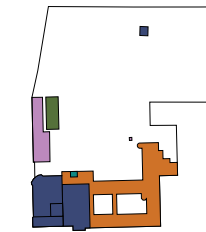
The monastic complex is often enclosed from the outside world by means of waterways, walls, hedges and/or trees and serves three main purposes: contemplation and meditation (manifested by devotional statues of Mary and other saints, a chapel, a grotto, a series of Stations of the Cross), recreation and refreshment and utilitarian garden for sustenance (Rijksdienst voor het Cultureel Erfgoed 2013, Landsberg 1995).

In order to get complete representations -whereby the outdoor space is included as well- a new subdivision is made: 1. monastic main building; 2. church, chapel; 3. cemetery; 4. crafts, for example sawmill, bakery and butchery; and 5. food supply, for example vegetable and herb garden, orchard [F.5.36-39].

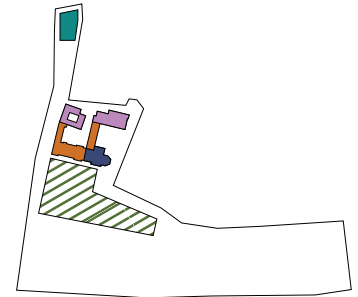
Sankt Gallen



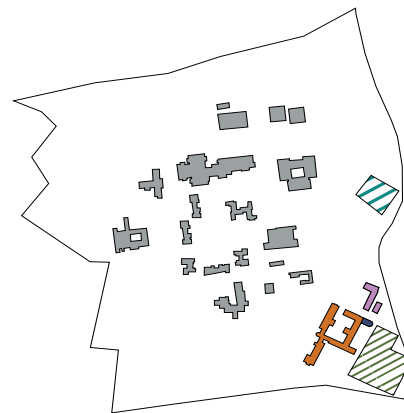
[F.5.36] Abstract representations of the monastic complexes; no scale



[F.5.37] Monastery Wittem, Wittem



[F.5.38] House Damiaan, Simpelveld



[F.5.39] Monastery Watersley, Sittard



#### 5.4 Conclusions

The layout of the sites of the three selected monastic complexes are closely related to the landscape of Zuid-Limburg. The slopes, which are present on the three locations, offer protection for every selected complex. Whilst one complex is embedded in the planting of the slope (Monastery Watersley, Sittard), another complex is enclosed by the planting of the slope (House Damiaan, Simpelveld). The differences within the complexes makes that all monastic complexes have their own potentials. Subsequently, these differences and potentials make every monastic complex unique. It is hard to address all the monastic complexes in the same way since they vary in size and have a different historical background.

Therefore the next chapter will provide an elaboration of six different design options. Within these design options, the options for programming are tested. The three monastic complexes, as explained in this chapter, serve as case studies. The information about the complexes functions as inspirational source during the design process.





Monastery Watersley, Sittard



## 6\_ Design solutions

*In this chapter, six design options for the adaptive reuse of monastic complexes will be explored. Two diverse options of programming -housing and conference centre/hotel- which were explained in Chapter 4, will be implemented within the three selected monastic complexes in the rural environment of Zuid-Limburg. The exploration provides insights in dealing with cultural heritage as a landscape architect.*

### 6.1 Fixed quantitative programme

A fixed programme, of either the housing programme and the conference centre/hotel programme, was stated prior to the exploration of the different design options. The housing programme consists of 50 properties of which at least 10 properties have a private garden. The number of 50 was extracted from the reference study whereby an average was taken of the number of square meters per property. To be able to give insights and compare the outcomes of the six design options, the same fixed programme was implemented in the three case studies. The useful volume of the three selected monastic complexes for implementing the housing programme is comparable to one another, allowing that insights can be generalised.

Besides the amount of properties, other elements need to be taken into account as well. The number of parking spaces for example is closely related to the number of properties. The data of CROW (2008) provided guidance when designing a parking lot. However, the devices have been developed for urban areas where often a little amount of space is available. The standards for the number of parking spaces in rural areas may be higher because there is much more space available since the parking spaces do not necessarily have to be integrated on a minimal surface as is attempted in urban areas. The amount of parking spaces in the rural area could also depend on the distance to public transport. Public transport allows that the area is not only accessible by car, which makes that less parking spaces might be needed.

The numbers of parking spaces per household vary between 1,4 and 2,0 cars, dependent on how expensive the house is.

Since in this research nothing is stated about the costs of the properties, the starting proposition will be 2,0 cars per household. With a number of 50 properties, the number of parking spaces in this research is approximately 100.

On the other hand the number of parking spaces for a conference centre vary between 6,0 and 11,0 cars per 100 m<sup>2</sup> gross floor area (in Dutch: bruto vloeroppervlak/BVO). The average gross floor area of the three selected monastic complexes is approximately 3000 square meters which means that at least 180 parking spaces are needed. The number of parking spaces for a hotel vary between 0,5 and 1,5 per room. Because the people who will have an overnight stay also have been there during the day, no additional parking spaces are needed for this specific function.

Furthermore, two additional conference buildings are added to the fixed programme of the conference centre/hotel. This in order to provide a range of locations within the monastic complex that can be used for different purposes.

Besides, there are several ways in addressing the private and public issue. For example, public and private are separated at the conference centre/hotel option for programming. This in order to guarantee that there will be no disturbance from others while having a meeting. Gardens, hedges, high or low walls, portals, trees, water and nature could provide nuanced boundaries (Zwarte Hond and Provincie Gelderland 2010). At the housing option the two worlds of public and private intermingle. This in order to borne the costs by more concerned parties than only the owners association.

None of the designs has been created as a singularly correct answer to the problem of the fast release of monastic complexes. However, they have been created as explorations in order to give insights in dealing with cultural heritage. The design options were created simultaneously by using several designing rounds in which every time new information was implemented. All the designs have been created within the same amount of time.

6.2 Wittem – housing

This design is based upon the fact that the founder of the castle –which is situated in the southwest of the monastic complex- also was the founder of the monastic complex. In order to show this connection, there has been tried to make a spatial connection between the different complexes and their outdoor spaces. The main road N595 had to make way for this connection. At this moment, feasibility studies are ongoing on rerouting this main road. A large orchard is needed to make a whole out of the two different worlds. The fruit trees that were used are striking due to their colour during spring time. The orchard acts as an eye-catcher and will give a new appeal to the area. It provides shelter for the monastic complex because the complex will be enclosed by the slope and orchard. The orchard also provides a visual boundary between the monastic complex and the main road N278 which is adjacent to the entrance of the area.

The main path between the monastic complex and the castle is encouraged with trees that will spread out across the valley floor of the stream Geul. The path undergoes a transition from the densely planted garden of the monastic complex towards a less densely planted area in the valley. The planting serves as a guide from the monastic complex towards the landscape. The monastic garden largely remains the same and will serve as a collective garden.

Furthermore, an area is kept free in front of the church and chapel which can be transformed into private gardens in the future as well. Ponds are located along the road towards the castle. This road serves as main route for formal occasions

such as weddings. Therefore the road is kept intact. The main parking lot can partly be used by visitors of the castle as well. It contains 106 parking spaces. [F.6.1-10, A.5]

|                                                                                   |                            |                                                                                     |                    |
|-----------------------------------------------------------------------------------|----------------------------|-------------------------------------------------------------------------------------|--------------------|
|  | Monastery                  |  | Car-free alley     |
|  | Castle                     |  | Ponds              |
|  | Entrance church/<br>chapel |  | Stream; Selzerbeek |
|  | Parking lot                |  | Stream; Geul       |
|  | Private gardens            |  | Surroundings       |
|  | Collective garden          |  | Height difference  |
|  | Park                       |                                                                                     |                    |

[F.6.1] Section Wittem - housing











[F.6.10] New connection between the monastic complex and the castle ([F.6.8], current situation)

### 6.3 Wittem – conference centre/hotel

This design relies on the current garden design of the monastic complex. This path structure represents the logo of the monastic community which is housed in the monastic complex. The logo was the starting proposition for the path structure within the additional outdoor space. Again here the main road N595 had to make way for a larger outdoor space for the monastic complex as well as the castle. The alley which is extended towards N278 provides a visual boundary between the two worlds. On one hand the world of the castle, on the other hand the world of monastic complex. These different worlds ensure that people who are in a meeting do not get disturbed by people visiting the castle.

The two additional conference buildings are situated at diverse places within the outdoor space of the monastic complex. One is located on or integrated with the former chapel in the garden of the complex. The other one is situated on a location where a lot of visual elements come together such as the view towards the alley, the path structure in the front garden and the colour of the orchard.

Furthermore, an area in front of the church and chapel is embedded in the current design allowing that when the monastic community might move out, it does not affect the spatial design. The main parking lot can be used by visitors of the castle as well. It contains 227 parking spaces. [F.6.11-20, A.5]

-  Monastery
-  Castle
-  Parking lot
-  Blossom alley
-  Park
-  Car-free alley
-  Outbuilding for conferences
-  Ponds
-  Stream; Selzerbeek
-  Stream; Geul
-  Surroundings
-  Height difference

[F.6.11] Section Wittem - conference centre/hotel



[F.6.12] Design option Wittem - conference centre/hotel







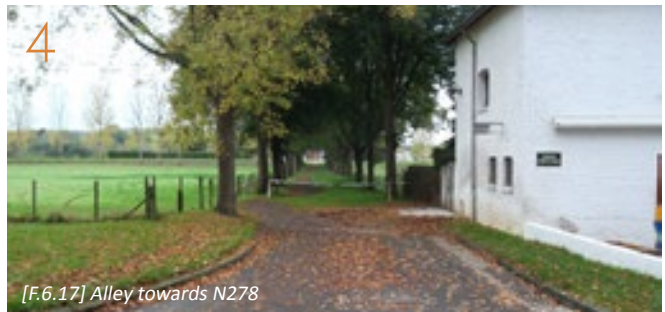
[F.6.13\*] Old picture Monastery Wittem, 1905



[F.6.16] Monastic complex; entrances church and chapel



[F.6.14\*] Drawing, view on the monastery and castle in Wittem



[F.6.17] Alley towards N278



[F.6.15] Current situation, schematic



[F.6.18] Van Plettenbergweg and N595; building on the right blocks connection



[F.6.19] On the left the parking lot; on the right main road N278





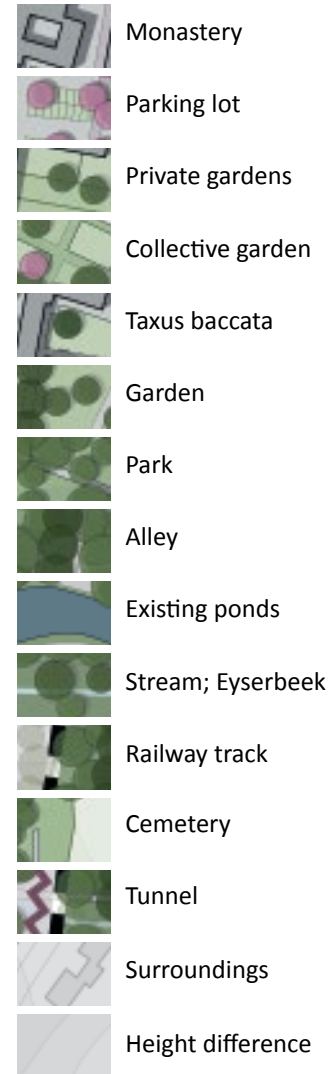
[F.6.20] World of the monastic complex; additional conference building is embedded in the design ([F.6.18], current situation)

#### 6.4 Simpelveld – housing

This design relies on finding the best possible way of implementing the fixed housing programme. The fruit trees - that are situated on the parking lot- make a reference to the orchard that used to be there. They provide the red thread towards the entrance of the building. The parking lot is enclosed by area specific trees (*Quercus robur*, *Fraxinus excelsior*, *Carpinus betulus*, *Prunus avium* and *Tilia cordata*) making it an independent place. The rest of the monastic complex is also enclosed by area specific trees except for the surroundings of the collective garden. This is the only place where there is an unobstructed view towards the landscape. The collective garden provides also an unobstructed view to the monastic building allowing a complete overview of the monastic complex.

The alley of trees works as guiding factor for people coming from the village that want to visit the place. Due to the height differences, the monastic building is not visible from outside the valley floor. Therefore a trigger is made in form of a striking piece of art at one side of the tunnel following by the alley of trees. The path that leads towards the entrance in the front garden, refers to a path that once used to be there.

Furthermore the square of grass in the middle of the monastic building contains a *Taxus baccata* tree. This tree represents the 'symbol of life' because the tree is always green. The tree is often found in the surroundings of a monastic complex (Ubachs 2000). In total there are 108 parking spaces available. The main parking lot consists of 95 parking spaces, while the additional one contains another 13 spaces. [F.6.21-30, A.5]



[F.6.21] Section Simpelveld - housing

[F.6.22] Design option Simpelveld - housing



0 50m







[F.6.23\*] Old picture House Damiaan



[F.6.26] Tunnel at the village side; branch of Eyserbeek



[F.6.24\*] Old picture House Damiaan, 1915



[F.6.27] On the other side of the tunnel, monastic complex at the top



[F.6.25] Current situation, schematic



[F.6.28] House Damiaan, located within gentle slope



[F.6.29] The back of House Damiaan



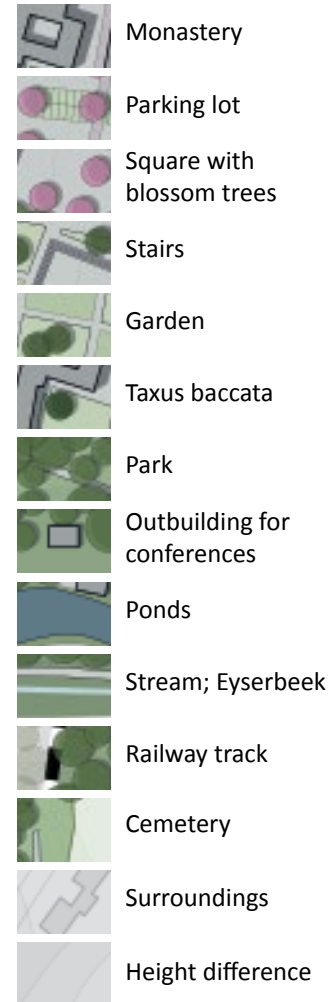


[F.6.30] Collective garden; view towards monastic complex ([F.6.28], current situation)

This design provides a metaphorical cloister path since the route towards the building has the main focus within this design. The parking lot, which consists 186 parking spaces, is also suspended to this route. The route is encouraged with fruit trees that lead towards an elevated square. From out here a view on the front garden is provided. From out here a path will lead to the main entrance. The fruit trees will function as an eye-catcher that will be visible from the surroundings of the monastic complex.

The fruit trees are expanded by area specific trees that lead towards two other conference locations. The conference locations are both located at the bottom of the slope. The locations are embedded within existing forest. These locations provide a different atmosphere than the monastic building itself.

Furthermore the front garden refers to the vegetable and herb gardens that used to be there. A staircase from out there makes this 'lower' world accessible. [F.6.31-40, A.5]



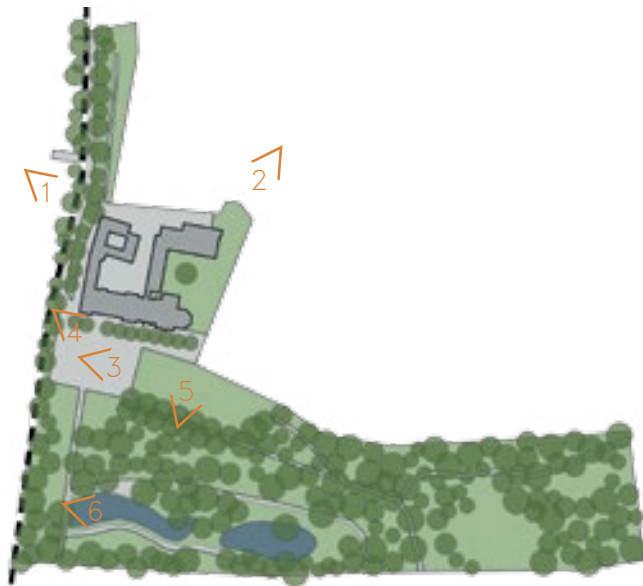
[F.6.31] Section Simpelveld - conference centre/hotel





[F.6.32] Design option Simpelveld - conference centre/hotel





[F.6.35] Current situation, schematic







[F.6.40] Elevated square ([F.6.38], current situation)

### 6.6 Sittard - housing

This design is based on one main route that links different interesting places. The five places refer to the five knots of a rosary. This rosary refers to the Catholic religion in general. One of these interesting points is the view point from where an overview over a large part of the monastic complex and its environment is provided. The alleys on the plateau emphasise the greatness of the terrain. The alleys provide a focus on the monastic building without a direct connection.

The height differences created by the construction debris, coming from demolishing the additional buildings, allow that there are different atmospheres. The debris sometimes creates enclosed places, while at the other places the openness of the landscape will be embraced.

The fruit trees which are situated on the slope, reinforce the height differences of the area. The fruit trees make the monastic complex an iconic object due to the striking colour in spring time. These trees emphasise the location of the monastic building. In the surroundings of the monastic building, 105 parking space are created. An additional 16 places are located next to the view point. [F.6.41-50, A.5]

-  Monastery
-  Parking lot, housing
-  Parking lot, public
-  Private gardens
-  Collective gardens
-  Blossom trees
-  Park
-  Stations of the Cross
-  Height differences out of construction debris
-  Follies along main path
-  Folly with viewpoint
-  Stairs
-  Surroundings
-  Height difference

[F.6.41] Section Sittard - housing





[F.6.42] Design option Sittard - housing









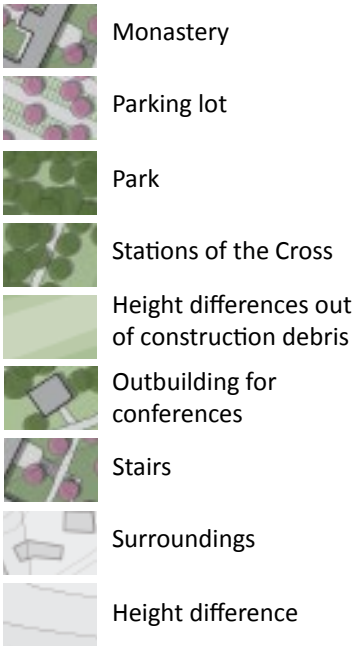
*[F.6.50] Alley of trees, transitions towards the open plateau ([F.6.48], current situation)*

### 6.7 Sittard – conference centre/hotel

The design relies on the axis of fruit trees which embeds the parking lot. This axis provides a leading factor towards to monastic main building which is situated at the bottom of the slope. The parking lot is accessible with one main transport route. A secondary route should provide access to the additional conference locations and leads through different worlds that are present in the area. The main parking lot contains 182 parking spaces. The orchard provides a transition from the forest to the open plateau.

Within the design four additional conference buildings are integrated. They are all situated on different locations within the area in order to provide different atmospheres. The largest one is backed up by height differences that are created with the help of construction debris. The additional buildings should not be too high in order to ensure the openness of the area.

The debris ensures an enclosed world for the conference centre, but an open area (without trees) for the rest of the plateau. The debris creates a visual boundary for people from outside. [F.6.51-60, A.5]



[F.6.51] Section Sittard - conference centre/hotel





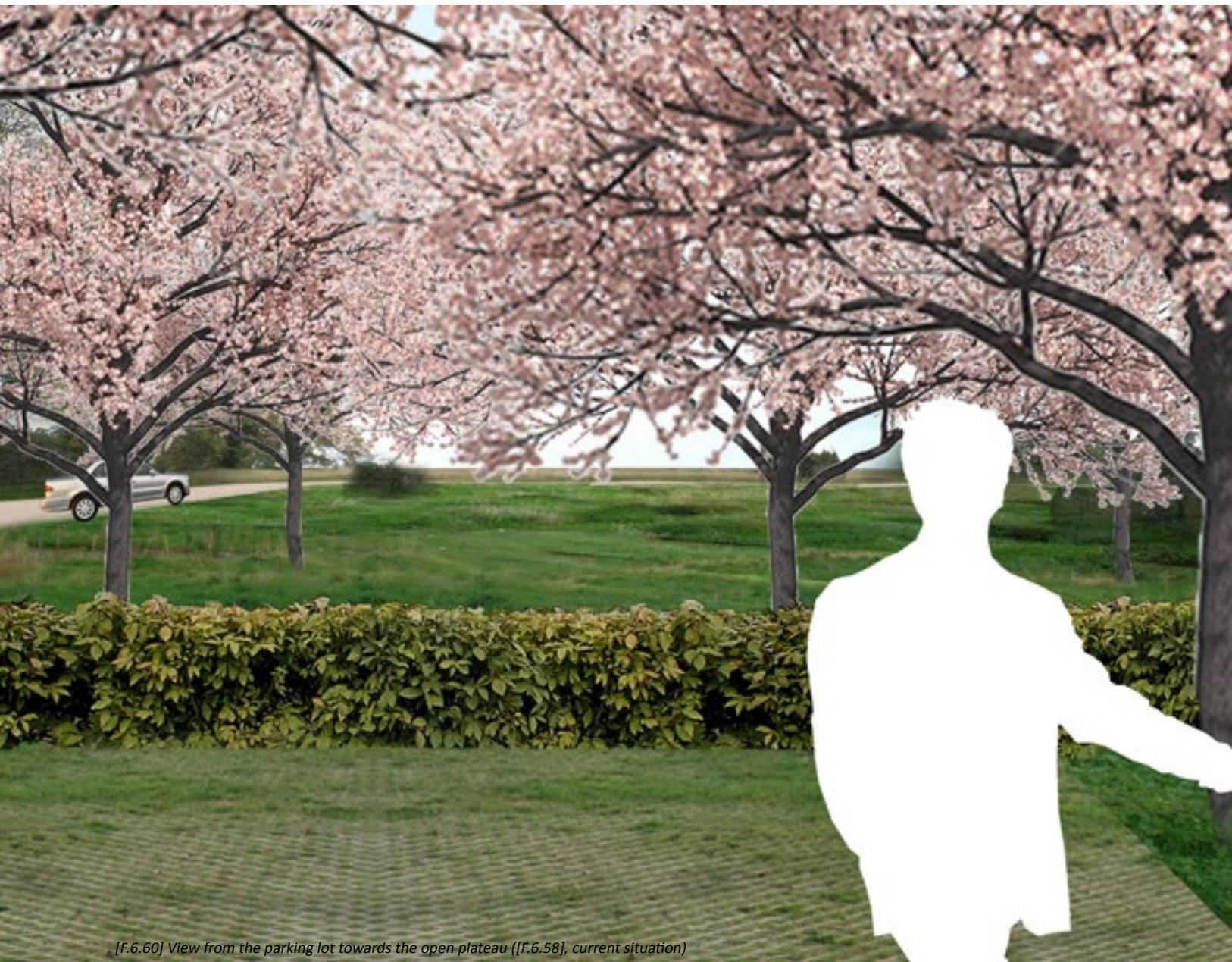
[F.6.52] Design option Sittard - conference centre/hotel











[F.6.60] View from the parking lot towards the open plateau ([F.6.58], current situation)

## 6.8 Conclusions

This chapter gave an overview of six different design options. In three of the six design options, the fixed housing programme was implemented. The other three design options functioned as test case for the fixed conference centre/hotel programme.

Within this design process the previous gained knowledge from the literature study, the reference study and the landscape analysis was taken into account. It was hard to focus on the same aspects of cultural heritage though, because of the differences in size and location. In order to give more insights in the challenges the landscape architect was confronted with during the design process, a reflection on the design options will be set out in the next chapter.







House Damiaan, Sempelveld

## 7\_ Reflection on designs

*The exploration of the six design options in the previous chapter was an investigation on how to deal with cultural heritage. Nevertheless conclusions cannot be drawn yet. Therefore the six design options will be subjected to a critical reflection. Once the design options are subjected to this reflection, recommendations about adaptively reusing monastic complexes in relation to their location, size and programme will be addressed in Chapter 8.*

*Schön (1984) introduced the term 'reflective practice' as a mode of generalizing knowledge that comes with experience. By means of reflection on a level of action, practitioners build generalisations whereby tools are modified for the needs of new situations. The critical reflection on the different design options, that will be set out in this chapter, will give insights in considerations and specific design choices the landscape architect was confronted with when designing with cultural heritage.*

### 7.1 Housing

As shown in the previous chapter, the different design options for the implementation of the housing programme were inspired by several elements. In Simpelveld for example the elements that came out of the reference study were the main source of inspiration. Within this design option there was searched for the best possible solution for the implementation of those elements within the given surface. On the other hand, the design of Wittem was inspired by the the history of the genesis of the monastic building. In case of the design for Sittard, the large surface of the area gave inspiration whereby a certain level of creativity was required.

Still, the most challenging part of this exploration of different design options was the implementation of all different elements, gathered during the reference study and literature study, within the landscape framework of Zuid-Limburg. All striking elements, considerations and the justification of design choices are set out in a scheme [F.7.1].

#### 7.1.1 Wittem

The fixed housing programme would not benefit the monastic complex within the given surface of 1 hectare, because the implementation of the programme would undermine the existing monastic garden. Since the connection between the monastic complex and the castle was the basis of the design, the implementation of the housing programme had a great influence on the layout of the environment. In order to achieve this connection, the main road N595 has to be rerouted. This rerouting had an enormous impact on the rerouting of the surrounding roads as well. The rerouting of the main road N595 created a new area between the monastic complex and the castle and made way for new spatial interventions.

The connection between the monastic complex and the castle is underpinned by the static orchard which will serve as a visually connecting element running across the parking lot, through the private gardens and public areas towards the castle. To achieve this connection a building needs to be demolished, because it blocks that connection. The orchard should enclose the area from the outside world in order to create a new place.

In this design a conscious decision was made on the implementation of the housing programme within the given surface, because the programme probably would destroy the existing garden. Therefore, the parking spaces and a part of the private gardens have been moved to the front of the monastic complex in order to preserve the given outdoor space. At this moment, there are still people from the monastic community housed in the monastic complex. Furthermore, the church is still used as a place of pilgrimage. Therefore, the gardens are not completely extended over the entire length of the building allowing that the entrances of the church and the chapel are accessible. The hedges of the gardens are low so the whole area can be overseen.

However, if the programme had to be implemented on the given surface of 1 hectare, the main route N595 did not have



| Housing                                                                                                                 | FOCUS                                                                                                                | MAIN SOURCE OF INSPIRATION                                                                                                                                                                                                                           | APPROACH TOWARDS CULTURAL HERITAGE                                                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>Monastery Wittem, Wittem</p>       | <p>_Creating a connection between monastic complex and castle by means of the outdoor space</p>                      | <p>_Relation between the monastic complex and the castle (same founder)</p> <p>_Fruityard that used to be in the surrounding of the monastic complex</p>                                                                                             | <p>_Modernise</p> <p>(Concepts that are related to this approach: facelift, history as a quotation)</p>                                                                           |
|  <p>House Damiaan, Simpelveld</p>     | <p>_Implementing all elements out of the reference study</p> <p>_Connection between monastic complex and village</p> | <p>_Fruityard and vegetable/ herb garden that used to be in the surrounding of the monastic complex</p>                                                                                                                                              | <p>_Regionalise</p> <p>(Concepts that are related to this approach: 1+1=1, continuity, recapitulation, preservation through development)</p>                                      |
|  <p>Monastery Watersley, Sittard</p> | <p>_One main path with interesting places/views</p>                                                                  | <p>_Height differences, create a visible relation between public and private</p> <p>_Main path that refers to a cloister which is an open space surrounded by covered walks or open galleries</p> <p>_Landscape Plan Zuid-Limburg; plateaus open</p> | <p>_Regionalise</p> <p>_Commercialise</p> <p>(Concepts that are related to this approach: continuity, recapitulation, cultural history as a finding, palimpsest, hermit crab)</p> |

| MAIN CHALLENGE                                                                                                                                                                | SIMILARITIES AND DIFFERENCES<br>LANDSCAPE PLAN ZUID-LIMBURG                                                                                                                                                                                                                                                                                                          | STRIKING ELEMENTS IN DESIGN                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>_To connect monastic complex, castle and environment; resulted in a car-free zone</p> <p>_The implementation of the housing programme on the given surface (1 hectare)</p> | <p>_ The historic lane structure is truncated in order to connect the two different places</p> <p>_ Making the road car-free</p> <p>_ One building (building year around 1850) is demolished to make the connection between the two different places</p> <p>_ The rewetting of the vally floor is possible, the two squares of grass act as wadis; wet grassland</p> | <p>_The proposed connection between the monastic complex and the castle influences the whole design; different design as the connection was not the main focus</p> <p>_The rerouting of the roads (N595 and Van Plettenbergweg)</p> <p>_The design would be different if it had to fit on the given surface of 1 hectare, probably deepened parking lot</p> <p>_The design is based on the presence of the monastic community in the monastic complex, less freedom in designing</p> |
| <p>_To connect monastic complex, village and environment</p> <p>_The relation between steep slope and gentle slope</p>                                                        | <p>_ Cultural heritage is incorporated into the green structure, different then Landscape Plan</p> <p>_ Wet graslands on vally floors</p> <p>_ Steep slopes are planted</p> <p>_ Valley floor is planted, creating interesting walk along Eyserbeek</p>                                                                                                              | <p>_The connection between lower and higher parts of the area and the connection between village and area</p> <p>_The programme does fit on the monastic complex, except for a small part of the parking lot; different design when it has to fit on the given area, a part of the building or part of the garden then needs to be replaced by a parking lot</p> <p>_The cemetery is out of the entirety</p>                                                                         |
| <p>_The reuse of construction debris</p> <p>_ Visual seperation between public and private</p>                                                                                | <p>_Buildings have been demolished in order to anticipate shrinkage, ensures openness on the northeast side</p> <p>_No impediments for expanding the forest on the west side</p>                                                                                                                                                                                     | <p>_Because of the large amount of hectares (29), the main focus was on setting up the environment; afterwards focus on integrating monastic complex</p> <p>_The construction debris must remain on the property</p> <p>_The reference to the Catholic faith in general</p> <p>_Open area for nature development</p>                                                                                                                                                                 |

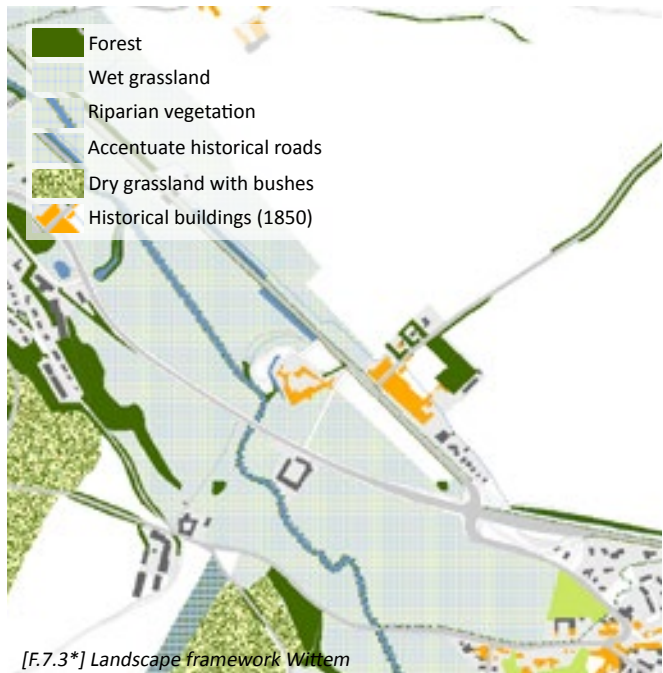
to be rerouted. In that case, it would have been extremely hard to make a connection between the different places. Furthermore, the parking lot determined the layout of the garden whereby the preservation of the current atmosphere cannot be guaranteed. In order to prevent this from happening, which is unfortunately often the intention of property developers, the surface was expanded.

Furthermore the stated landscape framework was not taken into account completely [F.7.2-3]. They proposed to preserve and expand structure of the alley, but then it would be hard to make a connection between the monastic complex and the castle. Hence the grass squares allow temporary water storage before it will be transported towards the stream Geul. This is in line with the wet grasslands of landscape framework. So although the design option has an iconic appearance within the area, the design contributes to the bigger picture.

All the implementations together make that the design refers to the concept 'modernise' as was mentioned while setting out the different approaches towards cultural heritage in Chapter 3. The structure of the alley, the connection between the monastic complex and the castle, and the orchard operate as a quotation of the history whereby additions, by means of new structures, were made in order to improve the landscape. The new plantings create a new identity for the area.

### 7.1.2 Sijpeveld

This monastic complex is isolated from the village due to railway track in between. There is only a visible connection between the village and the monastic complex. It was not without a reason that this complex is an isolated place though, since it used to be standalone and self-sufficient. A spatial connection on the other hand is not present. This spatial connection is tried to be made by adding a trigger at the village side of the tunnel and by adding another trigger by means of an alley of trees at the monastic complex side. It





was a challenge to create a relation between the valley floor, the steep slope and the gentle slope. Therefore, this alley of trees must arouse curiosity to go upwards to the top of the steep slope. It should act as a leading factor. Nevertheless, when people miss both triggers then the spatial relationship will not work out.

This monastic complex is the ideal location for implementing all the elements of the housing programme though. The surface of 4,5 hectares is a good size to work with, but due to the steep slope not all of the 4,5 hectares can be used. Only the gentle slope provides a good location for implementing the elements. Furthermore, the cemetery falls outside the entire whole, but serves as an additional unexpected element within the monastic complex.

However, the housing programme fitted the given surface except for a small part of the parking lot. The monastic complex and its programme should act as a place within a bigger place. So the complex should be embedded in its environment. From the outside world it is not visible that a new implementation was given to the monastic complex.

Hence, when the housing programme has to fit on the given surface, the parking lot needs to be expanded somewhere else. The height differences in the area are an issue when everything should be located on the given surface. The preference is not to park in front of the monastic building, because the main focus should be on building and not on the parked cars. When the parking lot is situated in the back, a nice transition between the building and the rest of the monastic complex arises. Therefore, the parking lot should partly be realised within a building or within a deepened parking lot.

Furthermore, the monastic complex complies with the stated landscape framework although not everything was elaborated as it was proposed [F.7.4-5]. The Landscape Plan Zuid-Limburg stated that cultural heritage should be



embedded within the green structure of the landscape which was also one of the starting propositions of this design option. Also the proposal for wet grassland on valley floor can be achieved. This wet grassland has no further influences on the monastic complex, it even contributes to enlargement of existing nature. The main difference in accordance to the landscape framework is the open valley floor. The design option propose trees on the valley floor of the stream instead of opening up the area. This because the monastic complex used to be enclosed as well. It is a reference to the past that strengthens the spatial seclusion from the outside world. It is possible to get access to monastic complex though.

All the implementations within the monastic complex made that this design refers to the concept 'regionalise'. All elements do fit within the area in order to achieve the best possible outline of the area. This achievement allows that the design is not extreme, perhaps even a bit on the bland side. Although, all the interventions relate to the past.

### 7.1.3 Sittard

Due to the scale of the monastic complex in Sittard, the housing programme could easily be adapted within the given surface. The scale of the complex was also the main issue within this design process though. In order to give an extra function to the complex, the monastic complex should be accessible for inhabitants of surrounding areas as well. They should be able to experience the openness of the plateau again. The area used to be open, but was planted when the additional buildings were built. The openness of the plateau can be achieved by means of getting rid of the additional buildings and by getting rid of trees that enclose the area.

Due to the population shrinkage in Zuid-Limburg, more and more buildings will become vacant in the future. In fact, the additional buildings on the plateau are already vacant at the moment. This allows the demolishing of the additional buildings. The released area will be given back to nature where the development of new nature is possible. It will

provide opportunities for the expansion of different habitats. A large part of the monastic main building will be torn down as well, since this part of the monastic building has less value for adaptive reuse (Gemeente Sittard-Geleen 2010) and enables the implementation of the gardens and a parking lot near the building.

The construction debris is reused within the area. This in order to lower the costs. The debris provides interesting routes because of the little height differences on the plateau itself. Within this design option the debris is located at the same locations as the former additional buildings. However, other options for the implementation of the construction debris could have been possible as well. There is one main route which refers to the Catholic religion. Along this main route, five places where you can settle down are present. One of those points is a view point from where the whole area can be overseen. The viewpoint provides a view towards the monastic complex as well as a view towards different sides of the surroundings. From here the different landscape types can be recognised. Another element which is incorporated within the main route is a series of Stations of the Cross. These Stations of the Cross largely determines the route of the main path. When excluding these Stations, the design would have looked different. The five places are the only connections with the paths in the environment and allow that the area is accessible for public.

Since there was only a small amount of historical background information and a few old pictures available, the inspiration for this design option had to come from something else. When more information was present though, the design option probably would have been executed in a different way. Nevertheless, the focus was on the implementation of the large surface. However, the design would have a different appearance when the focus would have been on the monastic main building and its surroundings. There would probably be a different and less considered design for the plateau.

In this design option the fruit trees provide a visual boundary between the plateau and the lower area. The height differences makes that privacy within the gardens at the bottom of the slope is guaranteed. The parking lot also embraces the gardens. This ensures that they are protected from being seen by other people. The parking lot and the gardens at the bottom of the slope are only visible from the plateau but not reachable. Again here the parking lot could have been situated in the front of the building. But focussing on the building, instead of focussing on the cars, is preferred more.

Furthermore, the design option varies from the landscape framework, because the opportunity arose to demolish the additional buildings [F.7.6-7]. Therefore the area is open at the north-east side. As stated in the plan the forest can be expanded on the west side. The view point then loses its function though. However, a view towards the area and monastic complexes is still possible.

All the implementations together make the monastic complex refer to the concepts 'regionalise' and 'commercialise'. These concepts are situated in the middle of the scheme of strategic approaches as stated earlier in this report. The concepts are conservative which makes the design option not really lash.

## 7.2 Conference centre/hotel

As shown in the previous chapter, the different design options for the implementation of the conference centre/hotel programme were also inspired by several elements. For example, the path structure of the monastic garden in Wittem was the starting proposition. On the other hand, the design of Simpelveld was based on the combination of the orchard -that once used to be there- and the route towards the building. In case of Sittard, a statement was made by means of the large amount of fruit trees.

Again, the implementation of all different elements gathered





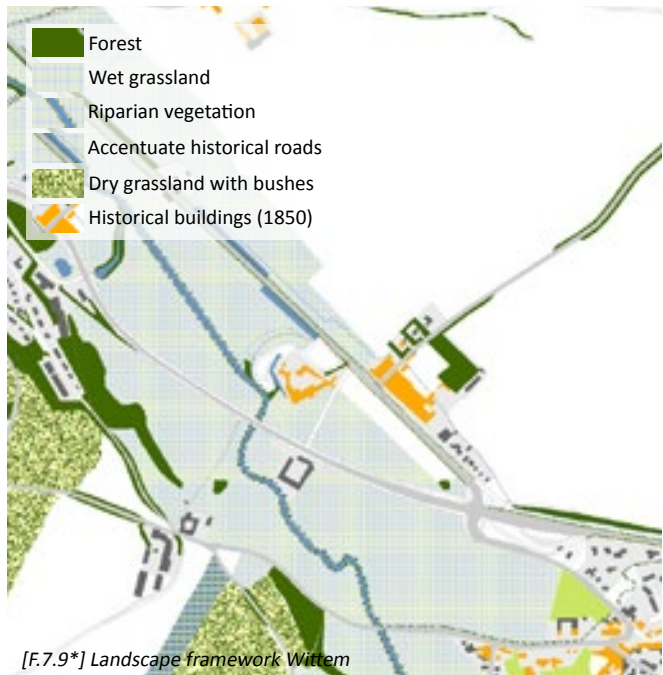
during the reference study and the literature study within the landscape framework of Zuid-Limburg was the most challenging part of this exploration of different design options. Especially dealing with the large amount of parking spaces sometimes needed some creativity. All striking elements, considerations and the justification of design choices are set out in a scheme [F.7.12].

### 7.2.1 Wittem

Again, it was hard to implement the programme within the given surface here. The large amount of parking spaces that are related to the programme of conference centre/hotel could not be implemented without causing damage to the existing garden. Therefore, none to a few interventions are made within the monastic garden itself. The large interventions are implemented only outside the existing garden.

The design should create two different worlds. It did not work out that way though. Within this design option there was not held strictly to the creation of two separate worlds. A first step towards a connection is given by the space that was created between the two complexes by rerouting the main road. In this case it would have been better not to reroute the main road allowing a spatial boundary between the different worlds. This would have resulted in one world for the monastic complex and one world for the castle. For example, the separation of parking lots and entrances would have strengthened the separation of the two worlds. However, it was not exactly necessary making the main road car free. The monastic complex could have been expanded at the back of the complex as well. This ensures that the building next to the monastic complex could remain.

The structure of the path is the most striking element of the design. This path structure also could have been implemented within another option for programming though and it does not specifically link to a function.



Furthermore, the structure of the alley, as was stated in the landscape framework, is interrupted [F.7.8-9]. The structure is different than they propose in the vision, but creates a visible boundary between the monastic complex and the castle. The castle is embedded in this alley structure, which gives the castle a world of its own. The alley, the road, the hedge and the ponds makes it hard to move from the one side to the other.

All the implementations together make the monastic complex referring to the concepts 'modernise' and 'commercialise'. The design did not worked out in the way it was supposed to be. This reflects in two concepts that are not directly in line with each other. On the one hand there is the concept 'modernise' whereby history should be incorporated as a quotation. However, there was held on to the structure of the alley which makes a spatial subdivision between the two worlds. On the other hand there is the concept of 'commercialise' whereby cultural heritage should function as a finding. The path structure is used, but it is directly translated into another path structure though. The finding could also have been used in a different way as well. The design probably would have been stronger if one concept was completely elaborated.

### 7.2.2 Simpelveld

The monastic complex is enclosed by the large parking lot. This parking lot also serves as a route towards the main entrance of the monastic building. The route is designed in such a way that it serves as relaxation before starting a meeting instead of immediately getting from one point to another. The orchard serves as the leading factor from the moment of entering the complex and should embrace everyone who is visiting the place. Since it was hard to implement the amount of parking spaces, the orchard and the parking lot are integrated. The parking lot has an enormous impact on other implementations. Since it is a large surface it had to be implemented first and then the other elements could be implemented as well.



[F.7.10] Design option conference centre/hotel - Sompelveld



[F.7.11\*] Landscape framework Sompelveld

| Conference centre                                                                                                       | FOCUS                                                                 | MAIN SOURCE OF INSPIRATION                                                                              | APPROACH TOWARDS CULTURAL HERITAGE                                                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>Monastery Wittem, Wittem</p>       | <p>_Creating two different worlds</p>                                 | <p>_The path structure in the garden that represents the logo of the monastic community</p>             | <p>_Modernise<br/>_Commercialise</p> <p>(Concepts that are related to this approach: history as a quotation, cultural history as a finding, hermit crab)</p> |
|  <p>House Damiaan, Simpelveld</p>     | <p>_The route towards the main entrance of the building</p>           | <p>_Fruityard that used to be in the surrounding of the monastic complex</p>                            | <p>_Commercialise</p> <p>(Concepts that are related to this approach: cultural history as a finding, palimpsest)</p>                                         |
|  <p>Monastery Watersley, Sittard</p> | <p>_Clear structured area, one main route and one secondary route</p> | <p>_The route towards the monastic main building</p> <p>_Landscape Plan Zuid-Limburg; plateaus open</p> | <p>_Modernise<br/>_Commercialise</p> <p>(Concepts that are related to this approach: facelift, hermit crab, cultural history as a finding)</p>               |



| MAIN CHALLENGE                                                                                                                                                                                | SIMILARITIES AND DIFFERENCES<br>LANDSCAPE PLAN ZUID-LIMBURG                                                                                                                                                                                                                                                                  | STRIKING ELEMENTS IN DESIGN                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>_The separation of the different worlds; world 1 monastic complex, world 2 castle</p> <p>_The implementation of the conference centre/hotel programme on the given surface (1 hectare)</p> | <p>_ The planting of the avenue is interrupted</p> <p>_ Making the road car-free</p> <p>_ One building (building year around 1850) is torn down to create a larger world for the monastic complex</p> <p>_ The rewetting of the valley floor is possible, the grass in between the paths can act as wadis; wet grassland</p> | <p>_The path structure</p> <p>_The worlds are not completely separated; different design when there are two separate parking lots, two separate access routes</p> <p>_Little interventions in monastic garden, only outside the monastic garden</p> <p>_Monastic complex embrace the castle</p> <p>_The conference centre/hotel programme does not fit on the given surface, deepened parking spaces are needed</p> |
| <p>_The amount of parking spaces implementing on the given surface</p>                                                                                                                        | <p>_Cultural heritage is incorporated into the green structure, different then Landscape Plan</p> <p>_Wet grasslands on valley floors</p> <p>_Steep slopes are planted</p> <p>_Valley floor is planted, provides shelter for conference center locations at the bottom of the slope</p>                                      | <p>_The parking lot has an enormous impact on the arrangement of the rest of the area, does not fit the given surface completely</p> <p>_The cemetery is out of the entirety</p> <p>_Personal preference for this location, visually strong by its simplicity and enjoyable to work on</p>                                                                                                                          |
| <p>_To implement the large parking lot near the monastic main building due to the steep slopes</p> <p>_The (visual) separation between private and public (paths do not intermingle)</p>      | <p>_Buildings have been demolished in order to anticipate shrinkage, ensures openness on the northeast side</p> <p>_No impediments for expanding the forest on the west side</p>                                                                                                                                             | <p>_The parking lot with the blossom trees is the eyecatcher on the property</p> <p>_The construction debris is moved on the property itself</p> <p>_The parking lot has the largest influence on the layout of the site; different design when parking lot needs to be in the surrounding of the monastic complex, probably deepened parking spaces</p>                                                            |

However, the parking lot is embedded in its green environment. The orchard is an eye catcher seen from its surroundings. Though it also creates a spatial boundary between the outside world and the inside world. The height differences make that it is easy to separate private and public. Whilst having difficulties in connecting the lower and upper worlds in the housing programme, this height differences now provide opportunities for separating private and public areas in the conference centre/hotel programme.

Furthermore, this design had the preference of the designer. It was an interesting challenge to combine different elements. Different rounds of fitting and measuring were needed to embed the parking lot on the given surface. Again, the cemetery is out of the entire whole here and therefore provides an additional world to the designed world within this design option.

Although not everything was elaborated as it was proposed, the monastic complex complies with the stated landscape framework [F.7.10-11]. The monastic building is embedded within the green structure of the landscape framework. There is also room available for the development of wet grassland on the valley floor and the steep slopes are planted as stated in the Landscape Plan Zuid-Limburg. The valley floor is also enclosed by trees though. This in order to provide shelter to the people who have their meetings in the additional conference locations.

All the implementations within the monastic complex make that the design refers to the concept 'commercialise'. Within this concept, the monastic complex faces a new implementation, also known as palimpsest. A new layer was laid over the surface of the monastic complex. The orchard serves as a finding which is implemented in the current time.

### 7.2.3 Sittard

Due to the scale of this monastic complex, the conference centre/hotel programme could easily be implemented within

the given surface. It is important to protect the area from being completely built though. Nevertheless, it was hard to implement the large parking lot in the surrounding of monastic complex due to the height differences and steep slope. Again, it was an option here to create a parking lot in front the main building but this would detract the building. The implementation of the parking lot has the biggest impact on the design. If the parking lot had to be built in the surroundings of the monastic building in order to make the building better accessible, than the parking lot should be brought into a building.

But since this is not the case, the parking lot has been realised on the plateau. Due to the population shrinkage in Zuid-Limburg, more and more buildings will become vacant in the future. This allows the demolishing of the additional buildings on the plateau. The plateau can be opened up at the north-east side and expansion of the forest at the west side is also possible.

There is tried to make the area as clearly structured as possible within this design option. There is one main path and a secondary path. These paths do not intermingle with public paths, there is only a visual connection. Again, the route is important here. This main route leads along the parking lot, from where the orchard is the leading factor towards the building. Again, a large part of the monastic main building was torn down since it has no additional value. The orchard -which serves as leading factor- is an eye catcher within the area. The orchard provides a transition from the closed forest towards the open plateau.

Since a monastic complex used to be self-sufficient, the construction debris is reused within the area. This reuse also lowers the costs. The construction debris in the north-east side of the plateau provides an enclosed space on the plateau without being planted by trees in order to enclose the area.

Furthermore, the design option varies from the landscape



framework, because the opportunity arose to demolish the additional buildings [F.7.13-14]. Again, the area is open at the north-east side of the plateau. As stated in the plan the forest can be expanded on the west side.

All the implementations together make the monastic complex referring to the concept 'modernise' and 'commercialise'. These two concepts are not in line with each other. Unlike the design option for Wittem with the same contrasting concepts, the design did work out here. The design is not very detailed though and that makes it hard to focus on one approach. The orchard functions as a place branding element while on the other hand it is also a clear addition to the landscape. Just like the design for Wittem, the design for Sittard would probably have been stronger if one approach was completely elaborated.

### 7.3 Conclusions

Within this chapter the six design options were subjected to a critical reflection. Not only the design choices were set out, but also the challenges that the landscape architect was confronted with during the design process were addressed. The design options were also compared to the landscape framework.

The most striking element that came out of the reflection was the link with the approaches towards cultural heritage. When the design option was linked to several approaches, the design was not as strong as it was supposed to be. These several approaches make that more elements are deepened out whilst focussing on one approach should probably strengthen the whole design. Despite the fact that there are several approaches linked to one design option, it is not very striking. This because some design options are, for example, less detailed than others. This lack of detailing the design options ensures that not one approach is carried out completely (yet).



Now that the six design options were subjected to a critical reflection, recommendations about adaptively reusing monastic complexes in relation to their location, size and programme will be addressed in the next chapter. Also recommendations about the design process will be discussed.





Monastery Watersley, Sittard



## 8\_ Recommendations

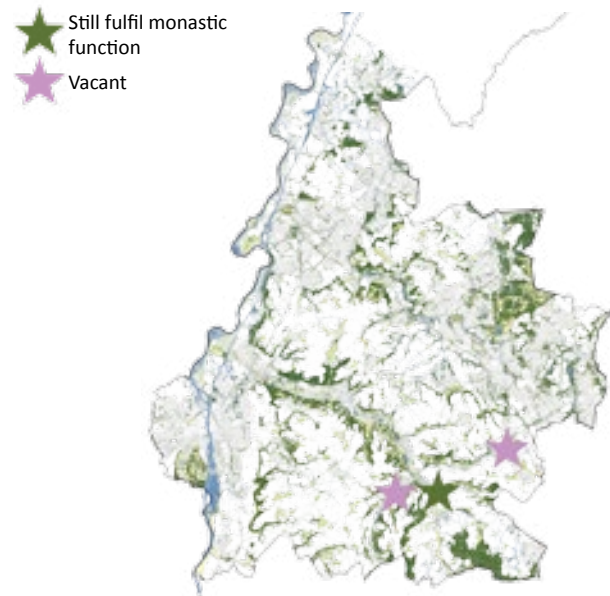
*The reflection on the six design options gave new insights in the design process whilst dealing with cultural heritage. In order to be able to give some advices to people who have to deal with adaptively reusing monastic complexes in the future, recommendations about their location, size and programme will be addressed in this chapter. Also recommendations for the design process will be set out. This in order to guard others for making the same mistakes.*

### 8.1 Location

Since the 17 monastic complexes that are vacant or still fulfil a monastic function at the moment are scattered out over the valleys, the slopes and the plateaus of Zuid-Limburg, they cannot all be addressed in the same way. It is important to take into account the landscape framework as stated by Landscape Plan Zuid-Limburg. This framework provides handholds at the start of the design process. The designs sometimes deviate from the landscape framework because cultural heritage was the directing source of inspiration within this thesis. Nevertheless, the design options contribute to the embedding of the monastic complexes in a larger green structure and it will counter the levelling and loss of structure in the landscape.

#### Valleys

Out of the 17 monastic complexes that are located in the rural environment of Zuid-Limburg, 3 others than Monastery Wittem in Wittem are situated within a valley [F.8.1]. The landscape framework proposed that the valleys need to be open except from plantings along the stream. This in order to strengthen the contrast between the valleys, slopes and plateaus. Since the valleys are visible from the plateaus and slopes, all the alterations that are made will have a large impact on its surroundings. However, when the intention is to create an iconic appearance, the location of the monastic complex within the valley is probably the best location.



[F.8.1] Monastic complexes located in valleys

#### Slopes

Out of the 17 monastic complexes that are situated in the rural environment of Zuid-Limburg, 5 others than House Damiaan in Simpelveld are situated on a slope [F.8.2]. The landscape framework proposed that the steep slopes are planted and that the moderate and gentle slopes are left open except for some planted bends. This allows that when a monastic complex is situated on the steep slope, the implementations are imbedded within the green structure of the plantings. This allows that many interventions are permitted, because the monastic complex is incorporated in the surrounding forest. However, the implementation of interventions is sometimes difficult, for example when the monastic complex is partly situated on a steep slope as was the case in Simpelveld. It is important that the forest remains

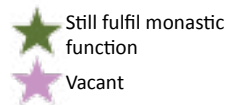
on the slopes though, since the plantings also contribute to the reduction of erosion sensitivity of the slopes.

### Plateaus

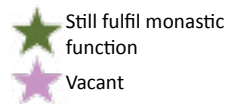
Out of the 17 monastic complexes that are situated in the rural environment of Zuid-Limburg, 6 others than Monastery Watersley in Sittard are situated on a plateau [F.8.3]. The landscape framework proposed that the plateaus need to be open. This in order to strengthen the contrast between the valleys, slopes and plateaus. This gives the opportunity that when a monastic complex is situated on a plateau, elements like, for example, additional buildings may be removed.

The design proposals of the Landscape Plan Zuid-Limburg provide handholds. But since the monastic complexes are situated on crucial locations within this vision, the natural element of the landscape framework can be deepened out better. Within this research there was sought for synergy between cultural heritage and the landscape. Nevertheless an additional layer 'ecology' can be implemented as well in order to strengthen this synergy. For example in Simpelveld the habitat of red list species Yellow-bellied Toad (in Dutch: Geelbuikvuurpad) could be expanded within the surface of the monastic complex. In case of Sittard the habitat of the European hamster (in Dutch: Korenwolf) could be expanded since this hamster is housed within the surroundings of the complex, but not (yet) on the monastic complex itself. Since the monastic communities want the best for their immediate environment, the reinforcing of nature on the monastic complexes is in line with their intentions. Therefore, it is important to not only the strengthen the landscape framework in a visual way, but also ensure that a high quality of nature is guaranteed.

In order to achieve the strengthening of the landscape, it is important to preserve the outdoor space of the monastic complexes since they are situated on crucial locations. As mentioned in the beginning of this report, the outdoor space is attractive to property developers whereby the



[F.8.2] Monastic complexes located on slopes



[F.8.3] Monastic complexes located on plateaus

interventions probably would exert pressure on the outdoor space. For example, when all the outdoor space of the 17 monastic complexes is completely built with offices, houses or parking lots -since these functions are the most cost effective interventions-, then the outdoor spaces will disturb the crucial chains in the landscape framework and it will not be able to enhance the landscape.

Besides the fact that the outdoor spaces are completely built and that they are not able to form links within the landscape framework, the most cost effective interventions are not in line with the thoughts of the monastic life. For instance, the overbuild of the outdoor space is in derogation with the area. For example in the case of Wittem when the programme had to be implemented within the given surface. This given surface was the existing garden of the monastic complex that is enclosed by a wall. This would have resulted in the implementation of the new programme that has nothing to do with the self-sufficiently and the thought of the monastic life as it used to be. In case of Sittard the implementation of new buildings makes that the area will become visually dominant within its surroundings. Whilst this was not the intention when addressing the issue of the adaptive reuse of monastic complexes.

Not only the location of the monastic complexes within the landscape needs has to be taken into account. Also the size of the specific complex provides limitations and opportunities and will therefore be addressed in the next paragraph.

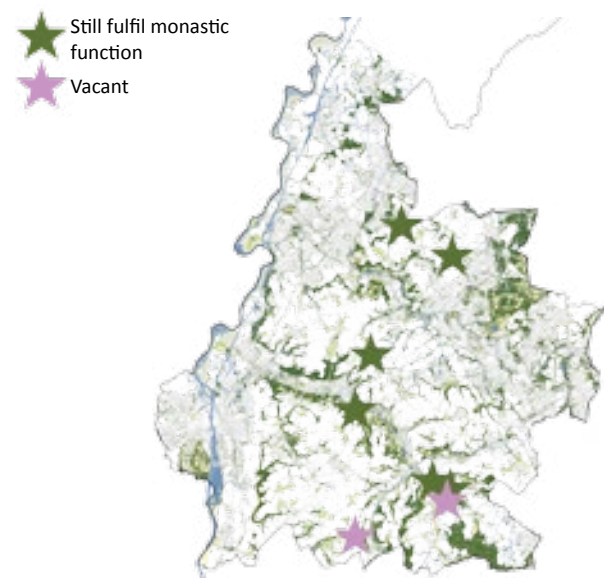
## 8.2 Size

The way of implementing interventions within a monastic complex also depends on the size of the monastic complex and whether the size of monastic complex can afford these implementations. Within this research two options for programming were addressed. But since the complexes vary in size, the implementations were one way easier than another. The outdoor space in Wittem, for example,

is approximately 1 hectare. Since the outdoor space is of value for the monastic complex, the consideration had been made to implement the program outside the existing outdoor. There are comparable monastic complexes in the rural environment of Zuid-Limburg where it is not possible to enlarge the outdoor space. Therefore, recommendations on the size of the given surface area will be addressed now.

### < 2 hectares

Out of the 17 monastic complexes that are situated in the rural environment of Zuid-Limburg and which were incorporated within this research, 8 others than Monastery Wittem in Wittem, have a surface of 2 hectares or less [F.8.4]. It is important to consider whether the implementation outside the outdoor space strengthens other elements as well. In case of Wittem the implementation contributed to the history of a larger area which allows the implementation outside the given surface. The implementation outside the



[F.8.4] Monastic complexes < 2 hectares



given surface makes that a new landscape architectural design challenge is created.

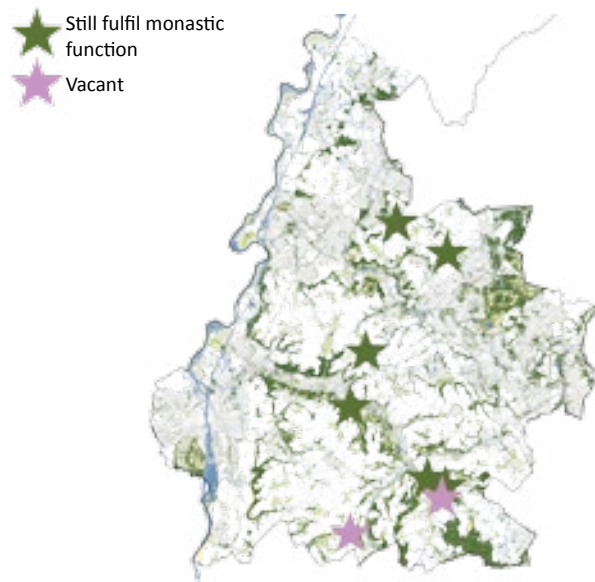
Sometimes the programme needs to be adapted to the given surface. For example, when the implementation of a new programme is the starting proposition and the programme needs to be implemented outside the terrain because there is little space available on the terrain itself, but implementing the programme outside the terrain does not contribute to a greater whole (for example the history of the environment). The programme then should be in proportion with the given surface, without affecting the elements of the outdoor space that are estimated of value. In this way the outdoor space can still be a link within the landscape framework of Zuid-Limburg whereby it can stick to its own values.

#### *2 -7 hectares*

Out of the 17 monastic complexes that are situated in the rural environment of Zuid-Limburg and which were incorporated within this research, 6 others than House Damiaan in Simpelveld, have a surface between 2 and 7 hectares [F.8.5]. Since these complexes are generally bigger, there is more flexibility in the implementation of new interventions. The programme needs to be adapted within the useful surface though, since the core qualities of the landscape framework are still important. Again, it is important to embed the monastic complex within the landscape framework. The design challenge here is to make the new programme subservient to the greater whole of the landscape framework.

#### *> 7 hectares*

Out of the 17 monastic complexes that are situated in the rural environment of Zuid-Limburg and which were incorporated within this research, no others than Monastery Watersley in Sittard consists of such a large surface. However, it might be possible that some monastic complexes, that are classified into the two other categories, turn out to be bigger than they were estimated. There is a chance that lands or



[F.8.5] Monastic complexes 2 - 7 hectares

woodlots were not taken into account yet since little research has been done on the 14 monastic complexes other than the selected three complexes. When it turns out that there are other complexes with this large amount of surface as well, it is important to exploit them as the largest link within the landscape framework. Many options are possible in order to strengthen the landscape within this given surface. The most important one is to get rid of additional buildings. The design challenge here is to embed different elements within the given surface whereby the main focus is on carrying out the landscape framework.

As shown in the previous recommendations on dealing with the size of the surface, again not all the monastic complexes can be addressed in the same way. It is important to tune the programme in to the given surface in order to prevent the outdoor space from being built over completely. It is important to be aware of the size of the monastic complex

and its existence, since a layer in the landscape can disappear very quickly as happened with the mining heritage.

Besides the size, also recommendations about the programme can be given. The implementation of all the elements of the programme makes that it is not always achievable within every given place.

### 8.3 Programme

Within this research two options for programming were addressed. Each option had its own fixed programme that was implemented in the three selected monastic complexes. Nevertheless, the same fixed programmes for both the housing and conference centre/hotel programme were implemented within the three selected complexes. Since the complexes do not have the same size, the implementation differs in its impact. In general: the smaller the surface, the bigger the impact.

However the implementation of the same fixed programme, within the three selected monastic complexes, gave insights in the visual and spatial impacts in the area. The monastic complexes cannot be lumped together though, and again the programme should be in line with the complex and the existing main building.

Different than the exploration that was done in this research, the decor of the landscape does not depend on the programme, but on how the area should profile itself. It is important to first set out the direction of the appearance of the area. This could be achieved by choosing an approach towards cultural heritage as stated at the beginning of this report. From there, spatial interventions, like structures, can be implemented within the landscape. When the main structures of the chosen approaches are set, the programme can be padded within these structures.

What came out of the different explorations was that the

implementation of the housing programme caused less challenges than implementing the conference centre/hotel programme whereby a large amount of parking spaces needed to be implemented as well. The implemented parking lots within the design options are generally bigger than the ones from the reference study, because all monastic complexes in the reference study are easy to reach by public transport and therefore not everyone comes by car. Therefore, it is important to check the amount of parking spaces that suit the specific monastic complex before implementing the stated numbers as suggested in this report.

Within the housing programme it is important to let the private and public areas intermingle [F.8.6]. This in order to split the costs of the maintenance since the property owners do not have to bear the costs of the whole surface by themselves. Therefore, there also is an additional parking lot implemented within the designs for people from outside [F.8.7]. The private and public areas within the conference centre/hotel programme, on the other hand, do not intermingle due to a distraction between the different worlds is preferable [F.8.8]. Although it was easier to implement the different elements for the housing programme than the large amount of parking spaces that were related to the conference centre/hotel programme, all the parking lots are approached in the same way. They are all covered by an orchard since it was easy to combine this former orchard with the parking lot. However, the iconic appearance of the parking lot also provides as location for events. Of course other ways of fitting the parking lot are possible as well. However, coincidentally they are all performed in the same way in these design options.

### 8.4 Design process

Within the exploration of different design options that have been carried out in this research, no limitations were addressed at the beginning of the design process. It would have been helpful to choose one approach towards cultural



[F.8.6] Housing - paths intermingle



[F.8.7] Housing - additional parking lot



[F.8.8] Conference centre/hotel - paths do not intermingle

heritage for each monastic complex though, and elaborate on that specific approach. The approach allows the different design choices and give handholds while designing. The design options within this research are not well detailed. Partly because the design options were not the main outcome of this research. Furthermore, every intervention was possible and everything was allowed. This ensures that the design options depend on the inspiration of the designer. When, for example, one approach was elaborated, the choice for certain implementations had been legitimate.

As, for example, shown in the design option for housing in Wittem, there were two divergent approaches related to the same design. If the design process was carried out well, only one approach should have been related to the design option. It is possible that several approaches are related to the same design option though, but then they need to be more in line with each other.

When designing with cultural heritage it is recommended to choose whether the approaches towards cultural heritage or the landscape is the starting proposition. The approaches allow that design choices can be legitimate, whilst on the other hand the landscape provides other interesting elements or structures. Hence, it is important to incorporate both elements in order to create synergy between the landscape and cultural heritage, whereby only the starting proposition may differ.

## 8.5 Conclusions

Different than the monastic complexes that are situated in the urban area, the monastic complexes in the rural area have a significant contribution to the appearance of the landscape. They are situated on crucial places in the landscape framework which allow them to contribute in strengthening the landscape of Zuid-Limburg. However, since all the monastic complexes differ in size and location, they cannot be addressed in the same way. The recommendations as stated above do not represent a clear action plan, they provide handholds for the reuse of other monastic complexes in the rural environment of Zuid-Limburg in the future though. The different recommendations that were provided for the location and the size of the monastic complexes, ensures that the monastic complexes contribute to the landscape framework, ecology and the expression of the Catholic religion in the region.

The implementations within the outdoor space do not depend on a specific programme. It is important to define



in advance what the (iconic) appearance of the area should profile. Then implementations can be made and can be padded with a new programme in the end. However, it also important to address the monastic complexes as stand-alone and self-sufficient places within the landscape as they once used to be. This makes that the complexes are not absorbed in the larger context completely, but that they serve as a string of beads in the landscape. This allows, for example, the plantings on the valley floor in Simpelveld.

Furthermore, it is important to adapt the new programme within the given surface in order to protect the outdoor space from disappearing and to be able to still adapt within the landscape framework. The design option for the conference centre/hotel in Wittem is therefore maybe not the best solution, because it rather undermines the place instead of contributes to the place.

The recommendations do not only provide handholds for the adaptive reuse of monastic complexes, but can also be used for instance as handholds for the adaptive reuse of other cultural heritage such as castles and estates.



House Damiaan, Simpelveld

# Discussion

Although this research gave insights in the different challenges the landscape architect was confronted with during the design process in dealing with cultural heritage, the way of addressing this research can be discussed. Within this research, six design options on the adaptive reuse of monastic complexes were explored. Three selected monastic complexes were at the basis of these design options. The monastic complexes vary in size, location and history, in order to show the differences in the end. However, these differences make it hard to compare though. The design options were created simultaneously by the author of this thesis. This makes that all design options are approached with the same amount of knowledge, the same amount of background information and with the same preferences of the designer.

In the research of Backhaus et al. (2012) also six design options were explored. Within this research six different independent design teams were addressing the same problem and location. This allows that the design outcomes are more diverse than the design options that were addressed in this research. Since in this research the design options were approached by one single person, the design options may not be the best designs, but nevertheless they will provide most insights since the starting propositions were the same.

As well in this research as in the research of Backhaus et al. (2012) the design options were compared in relation to different themes. In the research of Backhaus et al. (2012) the comparison reveals how differentiated knowledge is required for designing SUDS (sustainable urban drainage systems). In this research, about the adaptive reuse of monastic complexes, the comparison gave insights in the different design choices, challenges and focusses within the different options. Though it would be interesting to subject the six design options of this research (three selected monastic complexes, each with two options for programming) to six different independent design teams to see whether there

will be more diverse interpretations when dealing with cultural heritage.

Although the six design options are elaborated within the same amount of time, some of the design options are more detailed than others. It was hard to switch constantly between the different sizes, the different locations and the different options for programming. Certainly the amount of design options makes that one location in combination with one programme had the preference within this research. Every design option had the same amount of attention though in order to make the research comparable.

Within this research cultural heritage was the directing source of inspiration. The design options would probably have been different when the landscape framework as stated in Landscape Plan Zuid-Limburg used to be the directing source. Nevertheless, all the recommendations that were addressed are aligned with the landscape framework. However, if the landscape framework would have been the directing source of inspiration within these design options, other implementations should have been made. The alley in Wittem then would have been expanded for example in order to accentuate the historical roads in the landscape. In case of Simpelveld the valley floor would have been open in order to accentuate the differences between the valleys, slopes and plateaus. And in case of Sittard the north eastern part of the area still would have been enclosed. Though in case of Sittard it is not completely fair to compare it to the stated landscape framework, since in 2007 the foundation of Pergamijn was still present within the area.

Furthermore none of the design options has been created as a singularly correct answer to the problem of the fast release of monastic complexes. They are proposed to give insights in dealing with cultural heritage. The research of Weller (2008) is in accordance with this research since none of the stated scenarios has been created as a singularly correct answer to



the problem of housing 1.5 million people as stated in that research. However, the scenarios in the research of Weller (2008) have been presented as singular extremes. The extremes in different design options in this research could have been deepened out better in order to provide better design guidelines.

In addition, the research would have been more underpinned when the design guidelines would have been tested within an independent monastic complex in order to check whether the design guidelines provide handholds or not. On the other hand, from a pragmatic perspective, RTD can be described as the exploration of spatial contexts and/or spatially un(der) determined programmes through visioning and testing of possible transformations (Moulaert and Mehmood 2013). The ambition of the pragmatic approach of RTD is to produce context-based knowledge and focuses primarily on the development of knowledge, rather than on formal strategies. It is important to sustain a reflexive process rather than produce a final product (Schreurs and Martens 2005). From this point of view the research has been carried out to produce context-based knowledge on dealing with cultural heritage in order to create synergy between the landscape and cultural heritage.

Since in this research only two options for programming were elaborated, further research could provide insights in the implementation of other functions within the landscape and test whether they are more suitable. Furthermore, it would be interesting to test whether there are differences within the design options using either the landscape framework or cultural heritage as the starting proposition.





Monastery Witten, Witten



# Conclusions

The main purpose of this research was to answer the broad question on how to deal with released monastic complexes in the rural environment of Zuid-Limburg and monastic complexes in the rural environment of Zuid-Limburg that might be released in the future as well. In order to achieve this aim, a main research question was formulated and divided into four sub questions. The main research question is: *“What design guidelines support synergy between adaptively reused monastic complexes and the rural environment of Zuid-Limburg?”*. In this conclusion an answer will be given to this question.

The monastic complexes in the rural environment of Zuid-Limburg that are vacant at the moment or still fulfil a monastic function are situated on crucial places in the landscape framework as proposed by Landscape Plan Zuid-Limburg. The outdoor spaces of these monastic complexes can therefore serve as links in this framework. However, the reuse of the complexes and their outdoor spaces provide a greater purpose. Besides the preservation of (religious) cultural heritage, the outdoor spaces contribute to the strengthening of the landscape of Zuid-Limburg by means of accentuating the valleys, slopes and plateaus. The monastic complexes serve as a string of beads in the landscape and are simultaneously able to express the Catholic religion in the region.

However, the large complexes are attractive to property developers because of the presence of cultural heritage and their locations in the landscape. In order to preserve these monastic complexes, new functions need be sought whereby the implementations in the outdoor space strengthen the landscape framework. Other monastic complexes have been adaptively reused as for example health care centre, housing or conference centre. In this research, three selected monastic complexes were subjected to two of the examples; housing and conference centre. These two options were chosen since they differ in the temporality of the stay of people. The reference study showed that both the housing option

and the conference centre/hotel option, show similarities in the layout of the sites. The similarities were generalised and stated as a fixed programme for both the housing programme and the conference centre/hotel programme. They were used as handholds within the exploration of different design options.

Nevertheless, the implementation of the fixed programmes could not always be achieved within the given surfaces. However, the implementation outside the given surface allows that new connections can be made. This was for example the case in the design option for the implementation of the housing programme in Wittem. On the other hand, it is important to make well informed decisions in order to prevent the outdoor scape of the monastic complexes from disappearing in the landscape as once happened with the mining heritage in Zuid-Limburg. Therefore, the options for programming need to be adapted to the given surface. If the fixed programme would be the starting proposition, the outdoor space would be built over completely. The outdoor spaces of the monastic complexes then would serve as blockades in the landscape instead of serving as links.

Within this thesis, different design options were explored on dealing with cultural heritage as a landscape architect. The design options provided many insights. In particular, the different approaches towards cultural heritage show differences within the design options. The starting proposition as was stated by both the Landscape Plan Zuid-Limburg and the National Landscape, was ‘preservation through development’. Nevertheless, this starting proposition does not fit the design options for the outdoor spaces of the monastic complexes. Out of the six design options, only one design option referred to the starting proposition of ‘preservation through development’ and was thereby also the most modest one. Although this proposition suites the monastic buildings best, other approaches towards cultural heritage would provide more appearance to the outdoor space. Therefore, it is important to define in advance what

the (iconic) appearance of the area should profile. The choice for a specific approach makes that the design process will become easier.

Every single approach towards cultural heritage is able to support synergy between adaptively reused monastic complexes and the rural environment of Zuid-Limburg. However, in order to support this synergy, strategic guidelines about the size and the location are necessary. Furthermore, practical guidelines for implementing the housing and the conference centre/hotel programmes can be addressed as well. The strategic guidelines ensures that the landscape framework is the leading factor and stands above the programme. The monastic complexes and their outdoor spaces will be addressed as stand-alone places that are embedded in the landscape. They function as a string of beads in the landscape that serve as links within the landscape framework. Besides, the programme needs to be adapted to the landscape and not the other way around. Since the outdoor space of the monastic complexes vary in size, it is important to take into account the value of the outdoor space and prevent it from disappearing. The practical guidelines, on the other hand, show that the housing programme is in need for an additional parking lot since other people will visit the area as well. Therefore, the paths within the housing programme must intermingle in order to bear the costs of the outdoor space. The paths within the conference centre/hotel may not intermingle since privacy is required.

The design guidelines –that support synergy between adaptively reused monastic complexes and the rural environment of Zuid-Limburg- provide handholds for others who come into contact with the adaptive reuse of monastic complexes. However, all the design guidelines need to be customised before they can be implemented to a specific place.







Monastery Watersley, Sittard

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[F.5.21\*] walterskrutser (2010) <http://www.panoramio.com/photo/31964848>

[F.5.27\*] De Kollenberg (2014) <http://www.dekollenberg.nl/wp-content/uploads/2013/01/Watersley-Klooster-ca-1970-01.jpg>

[F.6.3\*] R. van Kessel Dienstverlening (2014) <http://www.postcardsfrom.nl/index.php?action=viewcard&data=199494>

[F.6.4\*] R. van Kessel Dienstverlening (2014) <http://postcardsfrom.nl/index.php?page=5&provincie=LB>

[F.6.13\*] Yesteryear.nl (2014) <http://www.yesteryear.nl/shop/catalog/images/yesprod29088.jpg>

[F.6.14\*] J.J.M. Timmers (1978) Drawing by Philippus van Gulpen (c 1840-60) [http://commons.wikimedia.org/wiki/File:Ph\\_van\\_Gulpen,\\_Wittem\\_kasteel\\_en\\_klooster.jpg](http://commons.wikimedia.org/wiki/File:Ph_van_Gulpen,_Wittem_kasteel_en_klooster.jpg)

[F.6.23\*] Rijckheydt (2009) <http://www.rijckheydt.nl/sjablonen/rijckheydt/pagina.asp?subsite=100&pagina=367>

[F.6.24\*] Picturesfrom.nl (2014) <http://www.picturesfrom.nl/card.php?id=198979>

[F.6.33\*] De Refter (2014) <http://www.refter.nl/main.php?id=6>

[F.6.34\*] Gopixpic (2014) <http://www.gopixpic.com/>

[F.6.53\*] M. van der Eerden (2013) <http://tu.maartenvandereerden.nl/p/stage/>

[F.6.63\*] De Kollenberg (2014) <http://www.dekollenberg.nl/wp-content/uploads/2013/01/Watersley-Klooster-ca-1970-01.jpg>

[F.7.3\*; 7.5\*; 7.7\*; 7.9\*; 7.11\*; 7.14\*] Provincie Limburg (2014) [http://portal.prvlimburg.nl/geoservices/landschapsvisie\\_hfdst4?VERSION=1.1.1&SERVICE=WMS&REQUEST=GetCapabilities&SRS=EPSG%3A28992&](http://portal.prvlimburg.nl/geoservices/landschapsvisie_hfdst4?VERSION=1.1.1&SERVICE=WMS&REQUEST=GetCapabilities&SRS=EPSG%3A28992&)





Monastery Watersley, Sittard

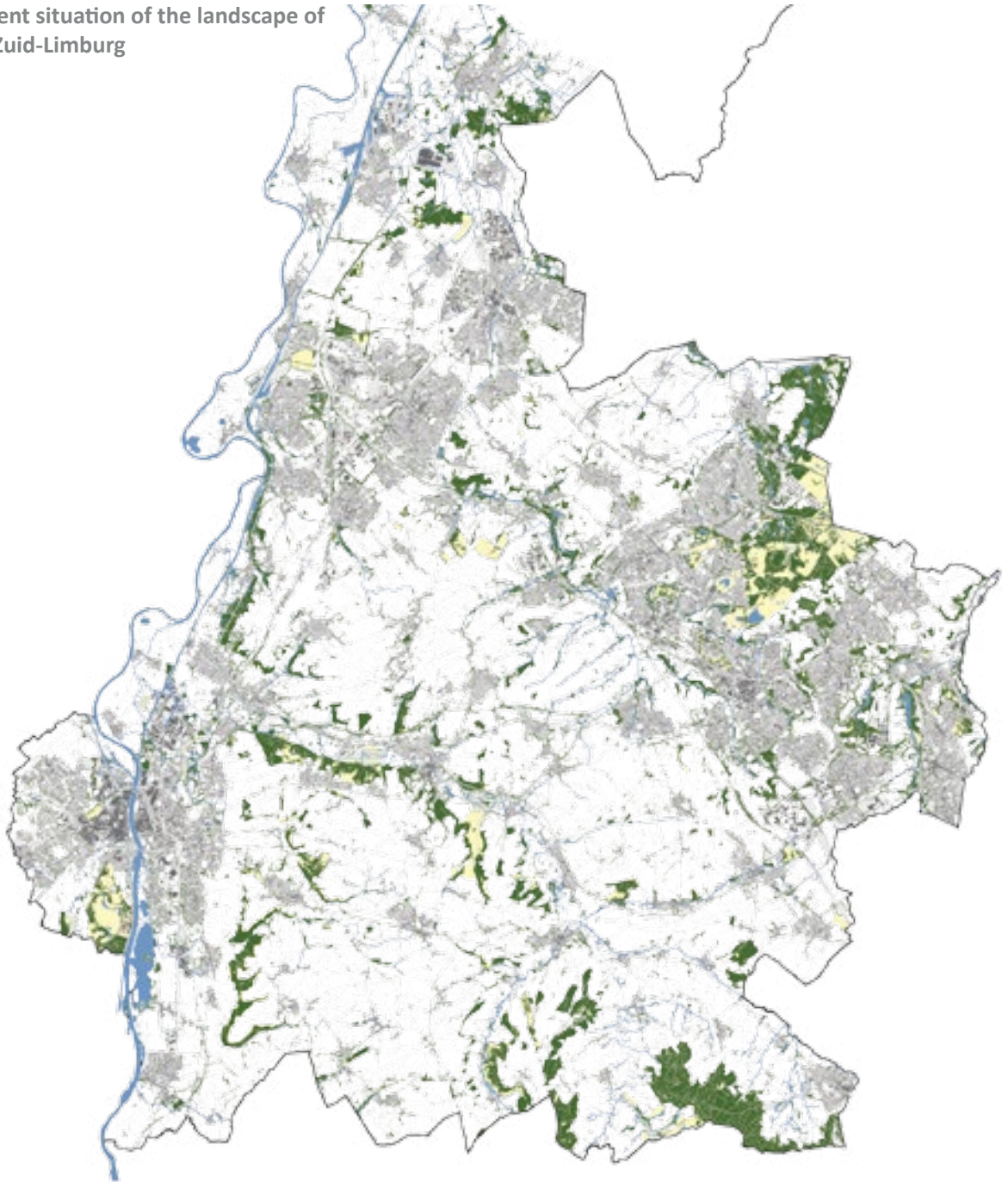




# APPENDICES



Appendix 1: Current situation of the landscape of  
Zuid-Limburg



Appendix 2: Selection of monastic complexes in Zuid-Limburg (vacant or monastic function) to founding year: rural

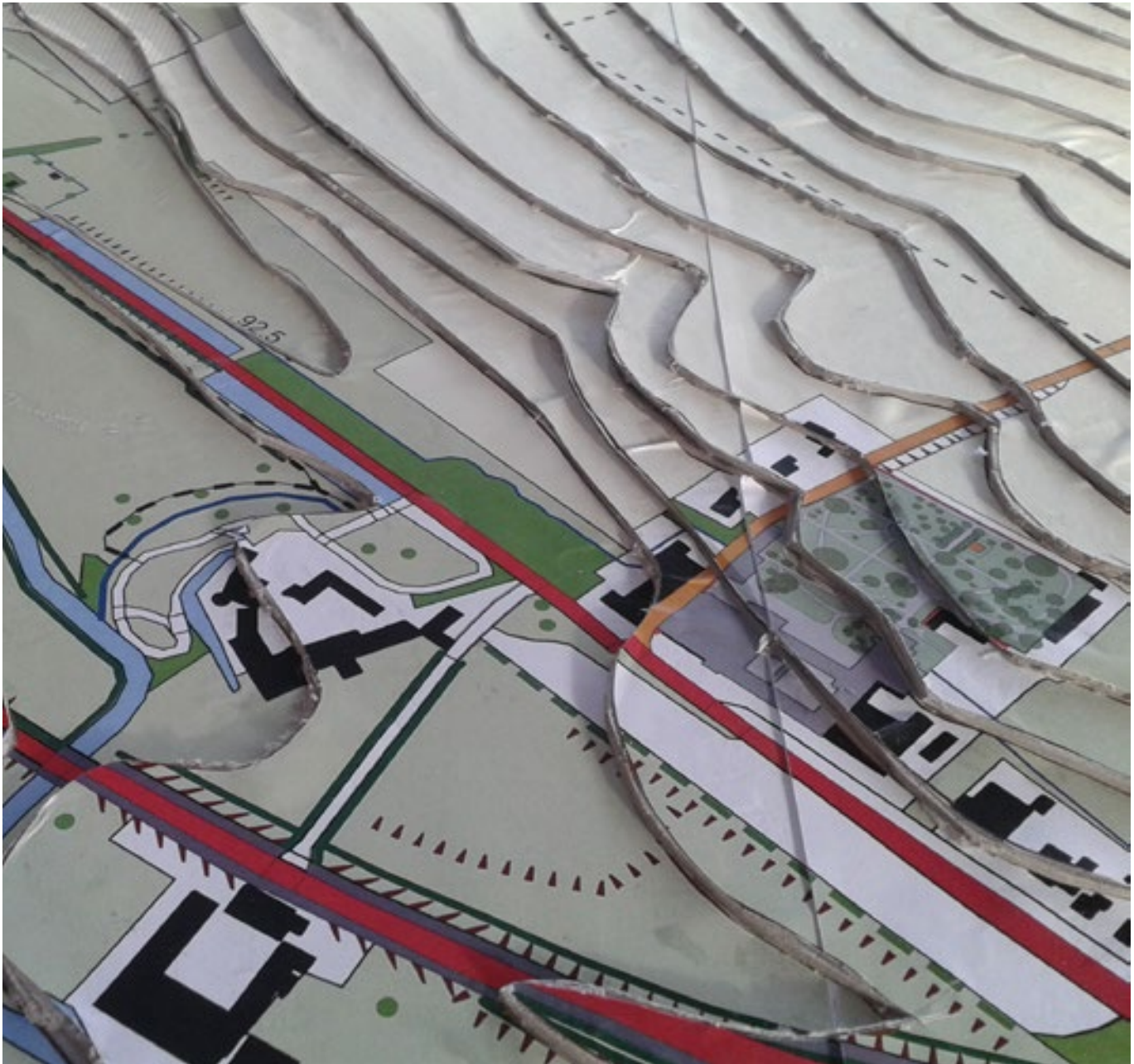
| Place            | Name                | Year                 | Congregation                                                                                                                      | Situation April 2014                                                                                     | Situation |
|------------------|---------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-----------|
| ● Noorbeek       | Hoogcruts           | 1496                 | Canons Regular of the Holy Sepulchre; since 1904 Dominican nuns; since 1945 Clarisses; since 1953 Franciscan nuns of Saint Joseph | Vacant, partly burnt out (Since 2011: Stichting Limburgs Landschap; refurbishing and open up for public) | Rural     |
| ● Wittem         | Wittem              | 1732<br>1836         | Capuchins<br>Redemptorists                                                                                                        | Monastery;<br>pilgrimage Saint Gerard Majella                                                            | Rural     |
| ● Partij         | Mariëndaal          | 1851                 | Redemptorist nuns                                                                                                                 | Monastery                                                                                                | Rural     |
| ● Gulpen         | Neubourg            | 1852<br>1944         | Sisters of Charity<br>Jesuits                                                                                                     | Vacant                                                                                                   | Rural     |
| ● Sijpeveld      | Loreto              | 1875                 | Sisters of the Poor Child Jesus                                                                                                   | Vacant                                                                                                   | Rural     |
| ● Sittard        | Watersley           | 1876                 | Franciscans                                                                                                                       | Stichting Pergamijn, soon vacant                                                                         | Rural     |
| ● Sijpeveld      | Damianeum           | 1896                 | Friars of Father Damien                                                                                                           | Vacant                                                                                                   | Rural     |
| ● Merkelbeek     | Het Korenveld       | 1901                 | Servants of the Heart of Jezus; Sister Oblates of the Assumption                                                                  | Contemplation house and monastery                                                                        | Rural     |
| ● Cadier en Keer | Blankenberg         | 1904<br>1925<br>1934 | Fraternity of Saint Blaise;<br>Redemptorists nuns;<br>Sisters of the Poor Child Jesus                                             | Vacant                                                                                                   | Rural     |
| ● Lemiers        | Sint Benedictusberg | 1922                 | Benedictines                                                                                                                      | Abbey Mamelis                                                                                            | Rural     |
| ● Hulsberg       | Regina Pacis        | 1923                 | Sister Oblates of the Assumption                                                                                                  | Monastery                                                                                                | Rural     |
| ● Wahlwiller     | Sint Clara          | 1950                 | Clarisses;                                                                                                                        | Monastery                                                                                                | Rural     |
|                  | Arnoldus Janssen    | 1978                 | Missionary Sisters Servants of the Holy Spirit                                                                                    |                                                                                                          |           |
| ● Valkenburg     | Regina Pacis        | 1958                 | Benedictine nuns of the Blessed Sacrament                                                                                         | Monastery                                                                                                | Rural     |
| ● Mechelen       | Maria ter Engelen   | 1978<br>1990         | Clarisses- Capuchin nuns;<br>Sisters of the Sacred Cross                                                                          | Vacant                                                                                                   | Rural     |
| ● Windraak       | Huize Seraphine     | 1978                 | Sisters of Mercy of the Precious Blood                                                                                            | Monastery                                                                                                | Rural     |
| ● Valkenburg     | Sint Joseph         | 1985                 | Franciscan nuns of Saint Joseph                                                                                                   | Monastery                                                                                                | Rural     |
| ● Arensgenhout   | Ravensbos           | 1995                 | Oblates of Maria                                                                                                                  | Monastic retirement home                                                                                 | Rural     |

● Vacant      ● Monastic funtion

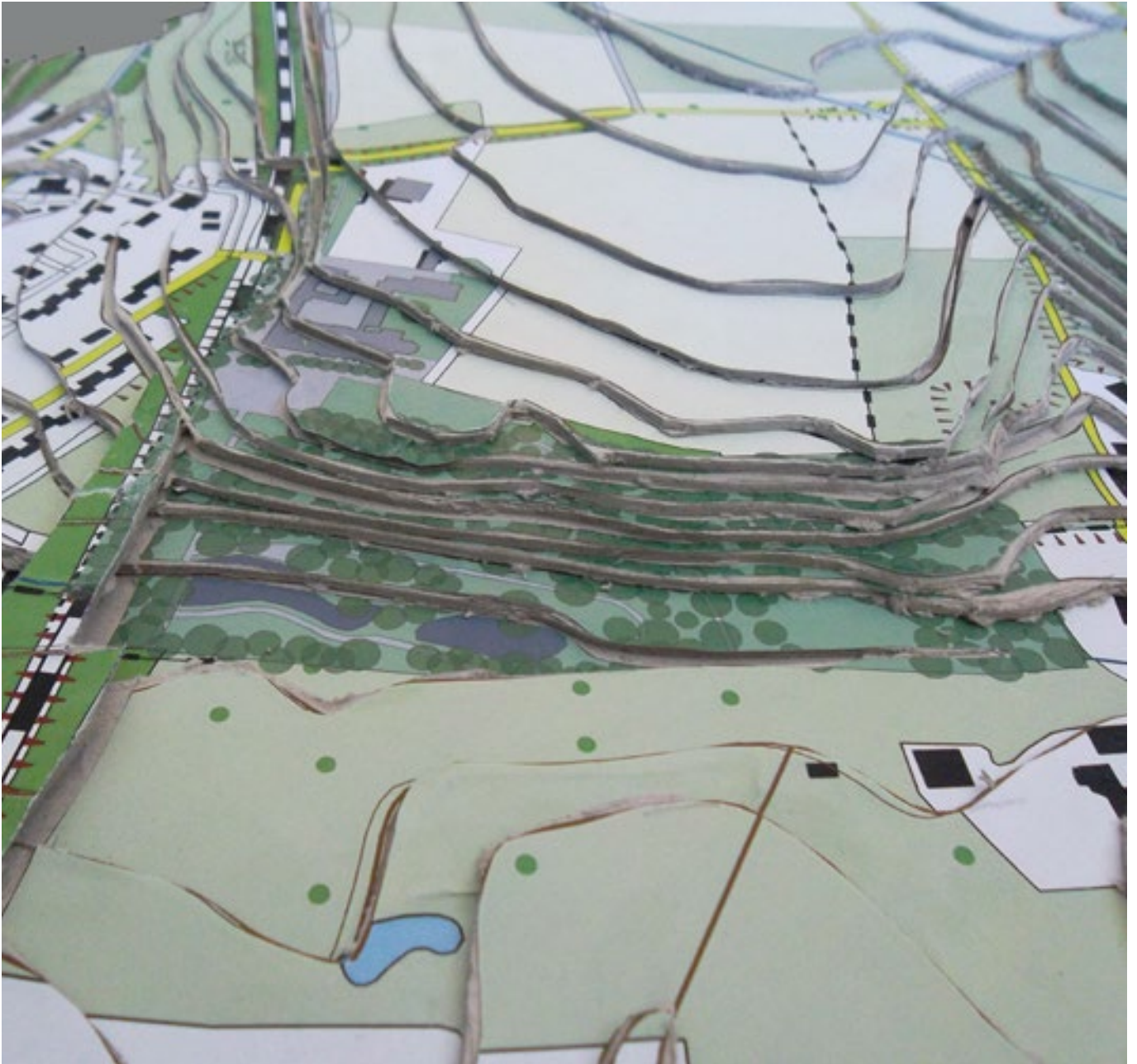


### Appendix 3: Models (maquettes) of the three selected monastic complexes

#### Monastery Wittem, Wittem



House Damiaan, Simpelveld





Monastery Watersley, Sittard

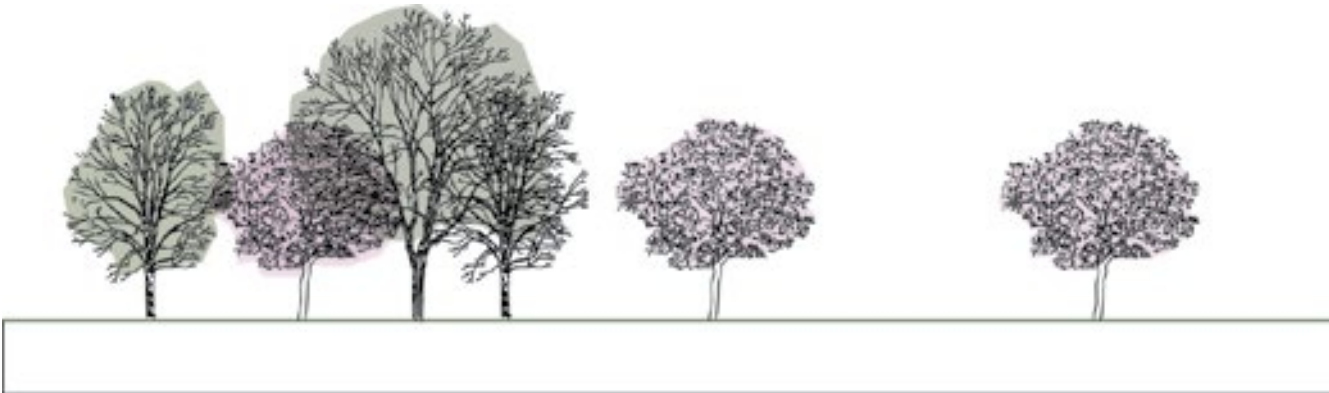




Appendix 4: Belvedere areas in the Netherlands



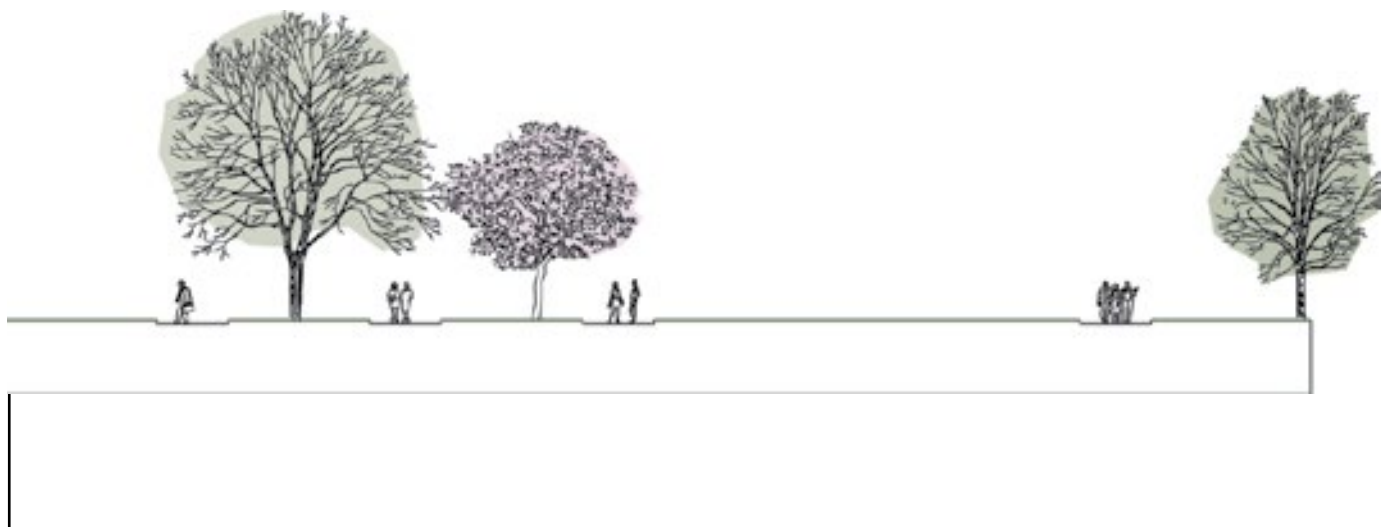
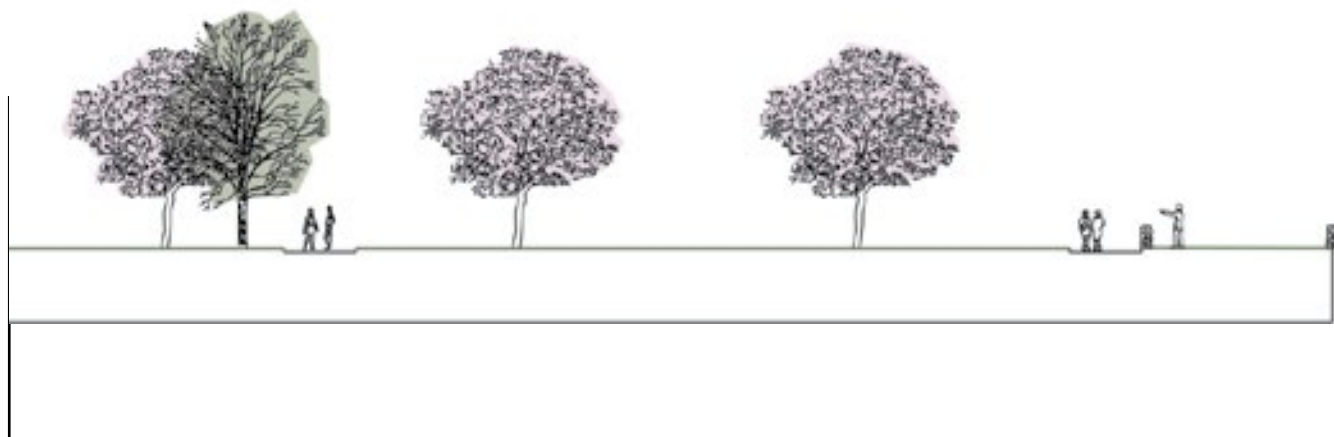
Appendix 5: Sections design options (large)



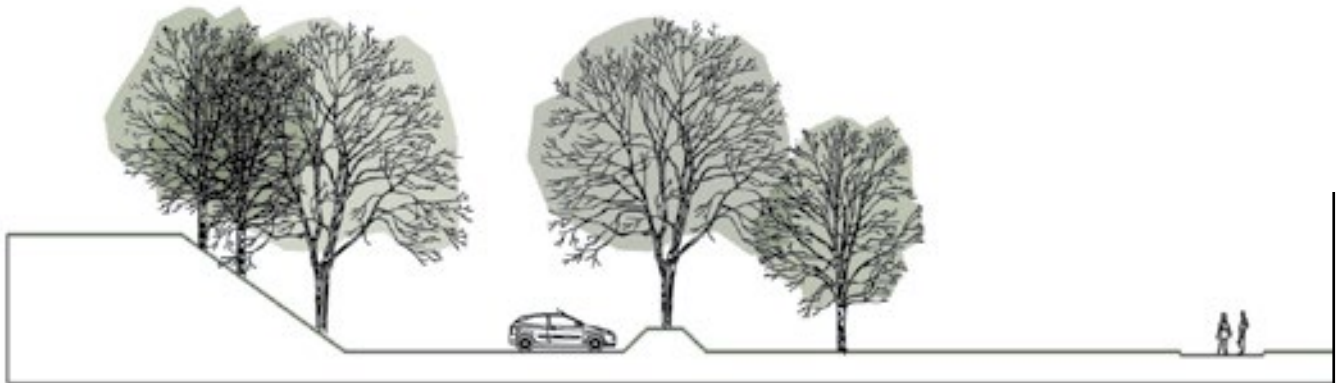
Wittem - housing



Wittem - conference centre/hotel



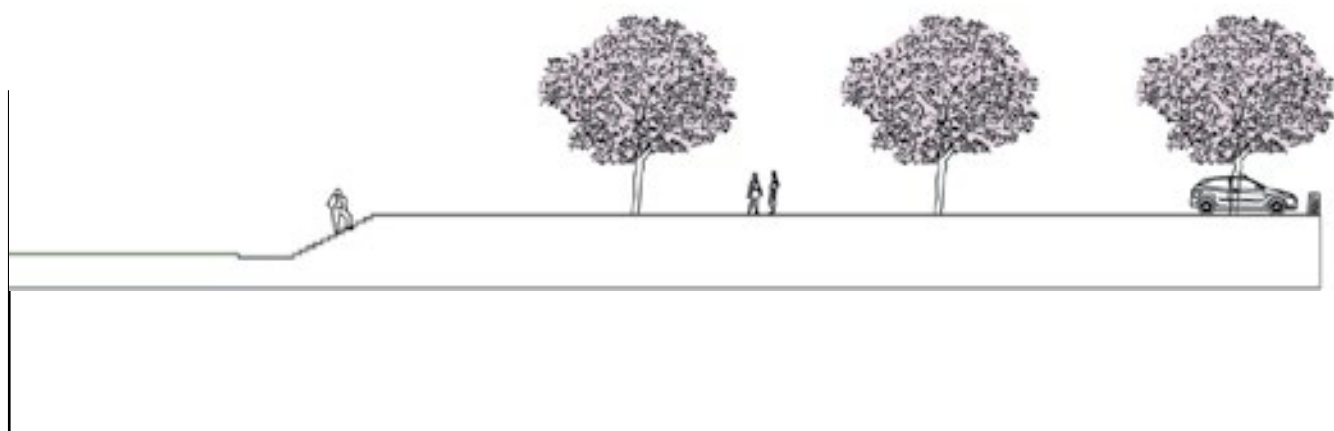
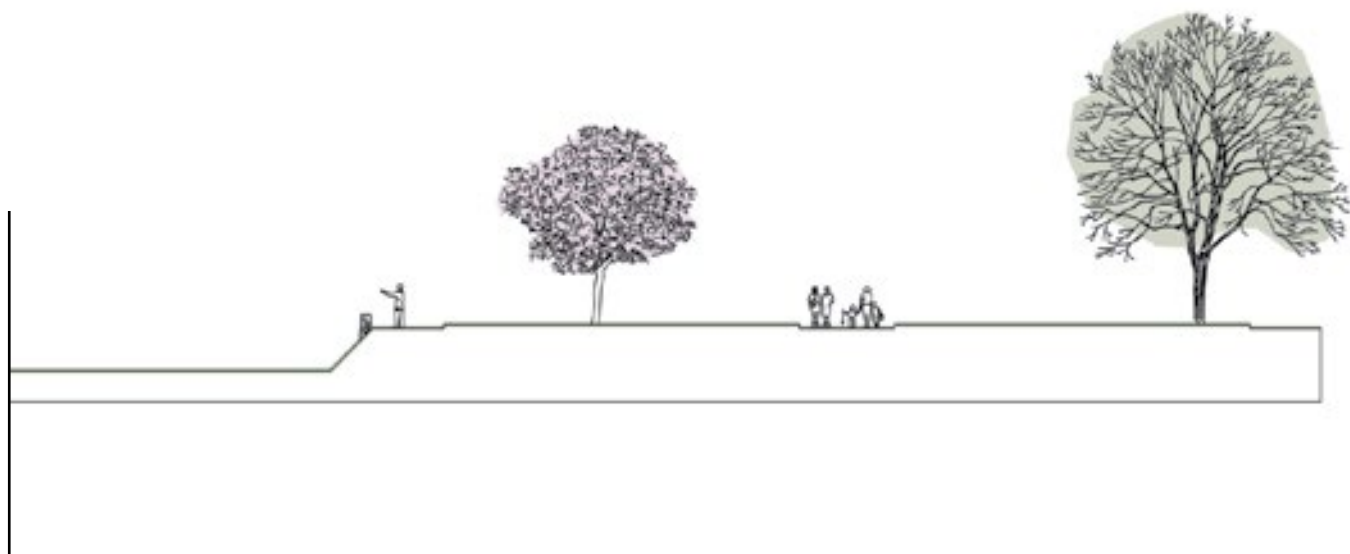




*Simpelveld- housing*



*Simpelveld - conference centre/hotel*





*Sittard- housing*



*Sittard - conference centre/hotel*



