Funerary places: between emotion and design

The essence of cemetery and crematorium design

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Funerary places: between emotion and design

The essence of cemetery and crematorium design
The last period of my MSc I spend working on my Master Thesis. A few months before I started, I decided that my topic would be ‘cemetery design’. Later on, this developed into the design of ‘funerary places’, a general term for cemeteries and crematoria. I have chosen this topic, because I wanted to do something with the emotional side of design. I would like to know how design could support people in difficult times.
Remarkably, everyone I spoke about this topic had an opinion about it. Some people did not understand it, they found it strange, or scary. Others thought that it would be boring: ‘But what can you actually design?’ But most people react quite enthusiastic. They thought that it was an interesting and important topic. And I still agree with them.
Death is a sensitive topic, it is about emotions and feelings. At cemeteries and crematoria, people are often in a vulnerable position. Within my research, I tried to find out what exactly is happening at funerary places, and how design can contribute to that. I have visited more than 40 cemeteries and crematoria, I have read literature, and I have made a design to find out what is really important according to the design of funerary places.
With this thesis, I hope that I can contribute something to the theory and practice of designing funerary places in the Netherlands.
Several people have helped me during my thesis, and without them, the result would not be the same. Thanks to Paul Roncken, my supervisor, who helped me through the difficult phases of research and design. And to Ank Bleekeer, my second supervisor, with all her experience and good advices.
I would like to thank Ada Wille, Erik de Jong, Hans Dijkstra and Peter Hermens for their useful information concerning funerary places and the plan area.
And last but certainly not least, I would like to thank my family and friends who listened to all my ‘funerary stories’ during the last year.

Suzan Keddeman
The design of cemeteries and crematoria is the topic of this thesis. At funerary places, emotion and design meet each other. To make a well-founded design, you have to know what exactly is happening at these places. Based on this aim, the main research question is:

*What should be taken into account according to the design of funerary places in the contemporary Dutch society?*

Several research methods like literature study, reference study and model study are used to answer this question. The results are tested in a design for a funerary place at the Lemelerberg (Overijssel).

The main function of funerary places is facilitating burials, cremations and the placement of ashes. Mourning, remembrance and contemplation are corresponding functions. Cemeteries and crematoria are used by the deceased, relatives, visitors and professionals working there. From the Middle Ages most people were buried inside the churches. Around 1829 this was prohibited due to hygienic reasons. From that time, cemeteries were realised outside the borders of cities and villages. Every period has its corresponding funerary style, influenced by religion, society, view on death and view on nature. Chronologically, these are: Christian cemeteries; Romantic cemeteries; Eclectic cemeteries; Modern cemeteries; Postmodern cemeteries and Recent cemeteries.

Cremation was prohibited in the Netherlands because of religious reasons for centuries. Modern cremation originates from the beginning of the 20th century, and was legalised since 1955. From that time, a lot of new crematoria were built, and nowadays more than 50 percent of the deceased are cremated.

Current funerary developments are: the increasing preference for natural cemeteries; the variety in funerary preferences; the trend of ‘accessorisation’ and the funerary developments outside cemeteries and crematoria.

Originally, most funerary places have no connection with the surrounding landscape. Walls, fences and hedges separate cemeteries and crematoria from daily life and landscape qualities. Including the landscape could provide identity for the place, relativity in daily life, and provide contemplation and
Funerary places are ritual places. Funerary rituals mark the transition from life to death. Rituals make people know what they have to do in a dramatic situation; they can express their grief and new social classifications can be clarified. People need rituals in difficult situations, and they play an important role during the mourning process.

The rituals of burial and cremation differ at certain points, the main is ‘bringing away’ versus ‘leaving behind’. And for cremation, there is a legal period between the incineration and the release of the ashes. This period is four weeks, which means an interruption of the transition ritual.

After a decline, now the use of funerary rituals is decreasing, and new rituals are developed. The design of funerary places can contribute to the use of these rituals.

The aesthetics of funerary places are important for the deceased, the relatives and the visitors. Based on aesthetical classifications these places are by definition Picturesque, and have the possibility for a Sublime experience.

At funerary places, there is a distinction between passive, active, positive and negative reacting relatives, with different aesthetical preferences. At contemporary funerary places, these types of people are often mixed, which can result in irritation and a shifting quality of the overall image.

When designing a funerary place these preferences should be taken into account. There should be a focus on the Positive Readers and Positive Poets, because there are few opportunities for them at the contemporary funerary places.

Research shows some problems, influencing the contemporary funerary places.

Diversity in funerary preferences: due to several societal developments, the contemporary Dutch society became a diversified one. People would like to have several options at cemeteries and crematoria.

A decrease in the use of funerary rituals: the use of funerary rituals has decreased tremendously since World War II. Since a few years, the attention for these kind of rituals is growing.

The invisibility of death: during the last decades, death became invisible in daily life. While the taboo on death is slowly disappearing, funerary places are still hided in the landscape.

The exclusion of the landscape at funerary places: cemeteries and crematoria are often enclosed by walls, hedges or fences. There is no connection with the surrounding landscape.

Based on the defined problems and the results of the research, design objectives are formulated. These objectives are tested in the plan area, situated at the Lemelerberg, a lateral moraine in the province of Overijssel. Nearby Dalfsen, the village where I grew up.

First a model study is done, and 11 design concepts were developed. The final chosen concept was the one where the design objectives were achieved the most. This became the foundation for the final design, a funerary place divided between two locations and a ritual route as connection.

The final result of the research and design is the formulation of some design principles, based on the tested design objectives. These are:

Separation of ceremony and burial/cremation: by separating the funeral ceremony and the burial or cremation, the (traditional) ritual of ‘bringing away’ is (re-)introduced.

Combination of burial and cremation: ceremonies for burials and cremations can take place in the same building. People can choose for a certain location, whether they want to be buried or cremated.

Inclusion of the landscape at funerary places: including the landscape at funerary places has several benefits. The landscape could provide identity for the place, relativity in daily life, and it can provide the possibility for contemplation and consolation at funerary places.
Different aesthetical options at funerary places: different aesthetical preferences can be a starting point for the design process.

By applying these design principles, the requirements of the contemporary Dutch society concerning funerary places can be taken into account.
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Introduction

The purpose of this thesis is to find assumptions for the design of funerary places in the contemporary Dutch society. Cemeteries and crematoria are important places because everyone has to deal with death during their life. A decease can have a high impact on someone’s life, and the surroundings of these moments should support people during difficult times. Funerary places are interesting from designer’s perspective, because you have to take both physical and emotional demands into account which requires understanding and empathy from the designer.

In the period from World War II till present, the taboo on death is slowly disappearing. Books, articles, programs on TV, websites: death becomes debatable. And the attention for old, impressive cemeteries is growing as well, but the attention for contemporary funerary places stays behind. Design and decisions are often based on time and money. Comprehensible, but this thesis shows that it is important to pay special attention to our funerary places. During my research, I have visited more than 40 cemeteries and crematoria. I have seen a lot of beautiful and well-designed places, but there were also places which looked and felt quite uncomfortable.

Cemeteries of the past can be quite characteristic, and every time period needs and deserves its own kind of funerary place that meets the requirements of that time.

Originally, the design of funerary places is a classic subject in the field of landscape architecture. Designers as Springer, Zocher and Roodbaard have designed a lot of well-known parks and also the well-known cemeteries of their time. After a long period of silence, it seems that the attention for funerary places in the field of landscape architecture is increasing, but it is still behind in relation to the societal developments of today. Municipalities, funeral care companies, landscape architects, religious organisations and other involved stakeholders should take their responsibility to make contemporary and future funerary places what they should be.
Method

The research part of this thesis has to clarify what is important for the design of contemporary funerary places. Formulating a main research question helps to structure the research:

**What should be taken into account according to the design of funerary places in the contemporary Dutch society?**

To answer this research question, three sub research questions are formulated:

**How are funerary places used?**

**How and why did the design and appearance of funerary places change from 1829 till present?**

**Can aesthetics and aesthetic theory contribute to (the design of) a funerary place?**

The answers on the sub questions are the first results of the research. These results are used to formulate a program of wishes and requirements for contemporary funerary places, based on the found problems and possibilities. Continuously, design objectives are formulated and tested in the plan area. The conclusion of Part one contains these design objectives.

Part two starts with a testing phase where a model study is done. Through several design phases, a final design for a funerary place is made. By the design, it is possible to see if the formulated design objectives are correct and realistic. The conclusion of the design phase describes what is important for a funerary place in this plan area. The final result is the formulation of some general design principles for funerary places in the contemporary Dutch society, which can be used and/or tested in other areas. The successive phases are shown in scheme 0.1.

Within the research, several methods are used: literature study, historical analysis, landscape analysis, reference studies, interviews and (research by) design. A full description of these methods is given in chapter 2: Research.
Scheme 0.1 Research scheme
Content of the report

Part one: Context

Chapter 1: Problem introduction contains a description of the problems and developments in the contemporary Dutch funerary culture. These problems should be taken into account when designing a funerary place.

In Chapter 2: Research the research methods are introduced, which are used for answering the research questions. This chapter also describes the research context, which defines the users and functions of funerary places.

Chapter 3: Funerary rituals explains what people are exactly doing at funerary places, and why this is important for the mourning process. Understanding of the users is important for designing.

Chapter 4: Development of funerary places from 1829 till present gives a historical overview of the development of funerary places from past till now. The factors which have influenced the funerary places in the past are described, which helps tracing the factors of this time.

Chapter 5: Funerary places in the landscape shows how cemeteries and crematoria are located and situated in the landscape. This is helpful in determining a location for a new funerary place.

Chapter 6: Funerary aesthetics explains the importance of aesthetics at funerary places. An aesthetical theory is introduced, and a connection will be made between theory and design.

The results of the previous chapters will be used to formulate a program of wishes and requirements, which is included in Chapter 7: Wishes and requirements.

Chapter 8: Conclusion – design objectives contains the design objectives, based on the program of wishes and requirements. These objectives have to be met in the design phase (Part two), and consist of theoretical and landscape requirements.

Part two: Research by Design

Chapter 9: Plan area consists of a landscape analysis of the plan area, which should be the base of every good design. The plan area is situated at the northern part of the Sallandse Heuvelrug, a collection of ridges originated during the penultimate Ice age.

Chapter 10: Model developments describes the first design phase, where at several locations is attempted to implement the formulated design objectives. Here is tested if the formulated design objectives are realistic and implementable.

Chapter 11: Design represents the final design of a new funerary place, with some detailed design included.

Chapter 12: Conclusion - design makes clear if and how it is possible to meet the design objectives in this specific plan area.

Part three: Discussion

In Chapter 13: Discussion research and design has been evaluated, both on process and product. Based on the result of Part one and two, general design principles are formulated. Beside this, Part three contains recommendations for research, design, the plan area and the contemporary Dutch funerary culture.
Part one - context
1 Problem introduction

1.1 Problems and developments

Between World War II and today, a lot has changed in the Dutch society. Several developments have influenced the Dutch funerary culture and therefore the appearance and design of funerary places too. This chapter contains a short description of the main developments and problems. The assertions are based on the outcomes of the research, which are described in the following chapters.

Diversity in preferences

Due to several developments the demand for multiple choices has grown. These developments are: individualisation, multiformisation, secularisation and democratisation (Van den Akker, 2006). Besides, the development of the multicultural society had also influence on this.

Individualisation means that people are making choices based on personal arguments, not on prescriptions of traditions or traditional institutions like family, church, neighbourhood or local community.

Multiformisation is the process of the existence of multiple choices which are all social acceptable, which makes it possible to choose between more options, instead of choosing the prescribed one.

Secularisation is the process of becoming disconnected from church and religion. People are making their own choices, instead of the prescribed options determined by the church.

And democratisation means, in this context, the resistance against authority and authoritarian structures. These four developments are interrelated, and are stimulating and strengthening each other.

The fifth development is the emergence of the multicultural society. After World War II, a lot of people from the former colony Indonesia emigrated to the Netherlands. And during the 1950’s, 60’s and 70’s a lot of migrant workers from abroad were attracted, initially to work here for a while, but a lot of them stayed permanently. Most of them were Turkish or Moroccan. During the last decades, a lot of asylum seekers are included from all over the world. Within a few decades, the Netherlands became a multicultural and therefore multireligious society. The main religions are Christianity, Islam, Judaism, Hinduism and Buddhism, and each religion or confession has its own funerary preferences. At the same time, more and more people become atheistic, which can require some adaptations of funerary places as well.
The combination of individualisation, multiformisation, secularisation, democratisation and the development of a multicultural society makes the funerary preferences of the contemporary Dutch society quite diverse. This should be taken into account when designing funerary places for people who are part of this society.

Decrease of rituals
The performance of funerary rituals has decreased tremendously since World War II. This is partly caused by the process of secularisation. Religion disappeared from daily life, and the corresponding rituals as well. Beside this, the professionalisation of the health care system and the funeral care system makes that people were ‘outsourcing’ death, and were not familiar anymore with the acts and rituals around death.
The last cause of the decrease of rituals is the increased cremation rate. Cremation is relatively new in the Netherlands, and has less corresponding rituals than burial has.
Research has shown that carrying out rituals is very important in the mourning process, so it is worrying that the use of it has declined (Van den Akker, 2006).

Invisibility of death
Since the last decades, death became debatable, but the landscape does not show that, death is scarcely visible in daily life. In the first place, this is caused by the mortality rate which has decreased due to professionalisation of the health care system. And, when a person has died, most things are regulated by funeral care companies and not by the relatives anymore. In addition, contemporary cemeteries and crematoriums are situated outside the city borders, often enclosed by shrubs or hedges. The invisibility makes the occurrence of death extraordinary, while in fact it is quite natural.

The excluded landscape
Within the design of funerary places, the surrounding landscape is often not taken into account. Often, a kind of tabula rasa situation is created. This is unfortunate, because landscape and funerary places can strengthen each other. Funerary places can be a good contribution to the landscape, and can bring some relativity to daily life. And landscape can give consolation and stimulate contemplation at funerary places. With the exclusion of the landscape many opportunities and qualities remain unused.

1.2 Research gap
A lot of literature is available about the history, the design and the appearance of (old) cemeteries. And there is a lot of information about suffering a loss, mourning, funerary rituals et cetera. But the area between emotions regarding the death and the contributing design is quite empty. What is exactly happening with people when they are losing a loved one? And how can you make a design for them? Contemporary funerary places often do not offer what the contemporary society needs. This needs will be defined in the next chapters and subsequently translated into design objectives.
2 Research

2.1 Research questions

Research has to clarify what is important for the design of contemporary funerary places. Formulating a main research question helps to structure the research:

What should be taken into account according to the design of funerary places in the contemporary Dutch society?

To answer this research question, three sub research questions are formulated:

How are funerary places used?
How and why did the design and appearance of funerary places change from 1829 till present?
Can aesthetics and aesthetic theory contribute to (the design of) a funerary place?
2.2 Research methods

The mixed methods of Creswell (2009) are used to do this research. Both quantitative and qualitative data are used for the formulation of design objectives and design principles. Both sorts of information are necessary, because the design objectives, the design principles and the design itself should be justifiable in both quantitative and qualitative way. Besides the different kinds of information, there is also a difference in the gathering of information. A combination of a literature study, historical analysis, landscape analysis, references studies, interviews and (research by) design provided all the required information.

Part one: Context

Sub question 1: How are funerary places used?
This question is important to clarify the exact function of funerary places. A literature study helps to define this, and a historical analysis describes the use of funerary places in the past. Reference studies explain how funerary places are used nowadays, and what has changed compared to earlier times. Interviews with people who are working in the funerary sector give practical information about the use of funerary places. And design exercises help to arrange all the funerary functions in a good way.

Sub question 2: How and why did the design and appearance of funerary places change from 1829 till present?
When designing something for today and the future, knowledge of the past is essential. From 1830 till now, a lot has changed at the Dutch funerary places. A combination of a literature study and a historical analysis shows and clarifies the reasons of this change. Landscape analysis explains where the funerary places are situated in the landscape during several periods, and the reasons for these locations. Reference studies show how old and new cemeteries look like at this time. And interviews can help by giving contributing information for these studies.

Sub question 3: Can aesthetics and aesthetic theory contribute to (the design of) a funerary place?
Intuitively, aesthetics seems important at funerary places. Why is that? And can an aesthetical theory contribute to the design of funerary places? Literature study helps to define what aesthetics exactly are, and aesthetical theories can be found here. Historical analysis shows how and which kind of aesthetics are used in the past. It also explains what kind of aesthetical theories were important in earlier times. Reference studies show the aesthetical preferences of relatives at contemporary funerary places. And by design, examples can been given of how to use an aesthetical theory when designing a funerary place.

The answers on these questions will be used for formulating wishes, requirements and design objectives for contemporary funerary places. The different research methods are described in scheme 2.1.
<table>
<thead>
<tr>
<th></th>
<th>Use of funerary places</th>
<th>Design &amp; appearance 1830 - now</th>
<th>Aesthetics &amp; aesthetical theory</th>
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<td></td>
<td>goal: location and situation of funerary places</td>
<td>source: maps, literature</td>
</tr>
<tr>
<td>Reference study</td>
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<td>goal: contemporary situation of old and new funerary places</td>
<td>goal: contemporary aesthetical preferences</td>
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<td></td>
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<td>goal: design objectives based on aesthetical theory</td>
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Scheme 2.1 Subquestions and research methods
Part two: Research by design

The formulated design objectives of Part one will be tested in a plan area. To do this, the landscape of the plan area first needs to be analysed.

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<thead>
<tr>
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<tr>
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<td>source: books, articles, websites</td>
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<td></td>
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<tr>
<td>Interviews</td>
<td>goal: contributing (practical) information</td>
</tr>
<tr>
<td></td>
<td>source: regional experts</td>
</tr>
<tr>
<td>Design</td>
<td>goal: to implement and test the formulated design objectives</td>
</tr>
</tbody>
</table>

Scheme 2.2 Research methods analysis plan area

A combination of a literature study and a historical and landscape analysis helps to understand the emergence and appearance of the contemporary landscape of the plan area. Interviews with people who are familiar with this region can contribute to this. Reference studies indicate how funerary places in similar landscape types are designed and constructed. And with the design itself it can be tested if the design objectives are implementable.

The design phase start with making models, based on a research-by-design method. This method helps to find a location, but it also shows at which places it is possible to achieve the design objectives. Changing the location or resetting the objectives are both possible. The chosen model will be the basis for the design of a funerary place in this plan area.

2.3 Research context

2.3.1 Cemeteries and crematoria
There are two types of funerary places: cemeteries and crematoria. At a cemetery the deceased are buried in a grave, directly after the funeral ceremony. At a crematorium, the deceased are incinerated in an oven after the ceremony. After four weeks, the relatives will receive the ashes from the funeral care company. A detailed description of cemeteries and crematoriums can be found in Chapter 4: The development of funerary places from 1829 till now.

2.3.2 Users
Funerary places are used and visited by several groups, and each user group has its own specific preferences. At first, you have the deceased themselves. Although
they are not consciously present at their funeral, it can for example be important for terminal ill people (and their family) to see and choose their last place. The acceptance of a predicted death can be very hard. To know that your last place is a nice one, can give a sort of consolation.

Second are the relatives of the deceased. They are using this space and place during the funeral ceremony and afterwards while visiting the grave, urn grave or columbarium. When designing a funerary place, the focal point should be on this group. If people are suffering a catastrophic personal loss, they can be weak and vulnerable. The funerary place could help and protect them during difficult times, and the cemetery aesthetics should contribute to this.

The third group are the visitors, occasional or on purpose, who want to see and experience a funerary place. Maybe they want to visit the grave of a famous person or a distant relative, but they are not directly emotionally involved in this place. Visitors can use funerary places for contemplation, remembrance and/or to enjoy the landscape. After a (long) time, it can appear that relatives will behave more like visitors. The cemeteries and crematoria are also used by the professionals who are working there. For them, the practical and organisational arrangement of the funerary place is the most important.

2.3.3 Mourning
After a dramatic personal loss, people will go through a mourning process. This process explains the behaviour of relatives in the period after the death of a loved one. This is also the period when relatives will visit a funerary place most.

In 1969, Dr. Elisabeth Kübler-Ross introduced the Model of Coping with Dying. This model describes the way people are coping and dealing with grief and tragedy. At first, this model was only used for and based on people diagnosed with a terminal illness. Later on, it was also used for people who are suffering a dramatic loss, for example the death of a family member.

The model consists of the five following stages: denial; anger; bargaining; depression and acceptance.

Scheme 2.3   Model of coping with dying (Kübler-Ross, 1969)
The first phase, denial, is usually only a temporary defence of the individual. What happened is so heavy, that emotions are simply blocked. An instinctive way of survival. The second phase is anger, when the individual recognises that denial cannot continue. Because of this anger, the person is very difficult to care for, due to feelings of rage and envy. The third stage, bargaining, involves the hope that the individual can somehow postpone or delay death. This phase is mainly applicable to (terminal) ill people and their relatives. For relatives who already lost someone, this stage is less relevant, because the loss has been suffered already. Depression is the fourth phase. During this stage, the person begins to understand the certainty of death. Because of this, the individual may become silent, refuse visitors and spend much of the time crying and grieving. This process allows a person to disconnect from things of love and affection. The last stage is acceptance. The individual begins to come to terms with her/his mortality or that of a loved one. He/she is able to pick up the ‘normal’ life (Kübler-Ross, 1969).

Not everyone will go through all the phases, nor will they pass the phases in this specific order. But everyone will at least experience two of these five stages. Switching between two different phases is common (Santrock, 2007).

An important event in a mourning process is the funeral (Polspoel, 1995, cited in Van den Akker, 2006). The less the relatives are involved with the decease, the funeral and the last place, the harder it will be to process the grief (De Vos, 1988). For a ‘good’ mourning process, it is important that relatives are actively involved during the funeral, as well when they are visiting the funerary place afterwards. The acts which people are performing during the funeral and visits, are called rituals. Carrying out these rituals can be a good contribution during the mourning process. The use and function of rituals is described in chapter 3: Funerary rituals.

2.3.4 Remembrance
Funerary places are also be used for the remembrance of certain events. Remembrance is often related to larger dramatic incidents, such as a war, which can be visualised and memorialised by a monument. People can visit the monument, bring some flowers, lighten a candle or participate in a commemoration event.

2.3.5 Contemplation
Relatives and visitors can come to funerary places for contemplation, a function which is often underestimated. The combination of a beautiful park / landscape, and the dark side of death (the Picturesque, 6.2) gives food for thought and perspective. Research has shown that contemplation has a lot of beneficial effects for body and mind: ‘a calm, relaxed state, including a lowering of blood pressure and a lessening of muscle tension; heightened self-awareness, improved concentration, empathy and perceptual acuity (...) alleviation of many symptoms in the chronically ill, and more effective performance in a broad range of domains from sports and academic test-taking to creativity.’ (Krinke, 2005). Traditionally, a lot of people found their need of contemplation in religion, but in the contemporary secularised society people try to find it in other ways and places (secularisation, 1.1). Funerary places can be suitable for this, which is for example visible at a well-known cemetery in Stockholm, Skogskyrkogarden. In this place ‘contemplation is triggered by external stimuli that invoke memories of essential life situations.'
of the individual and collective human past. Archetypal
design elements such as: forest sanctuary, thresholds,
open air altars, sacred mountain, and axis mundi,
speak directly, across distances of time and space,
to the human understanding of the temporality and
continuity of life, and our essential link to the natural
world’ (Krinke, 2005).
In the contemporary society, funerary places should
be places which fulfil the need of contemplation.
Photo 3.1   Mourning flowers at a coffin
3 Funerary rituals

3.1 Rituals
During a funeral, people are often performing rituals. Rituals are ‘natural/obvious, single or repeated, often symbolic acts, regularly accompanied by corresponding formulas and texts, which involves people physically and interactively in a reality that is represented by the ritual’ (Van den Akker, 2006).
These acts are part of a certain tradition, which is often connected to a society or culture. Connected is the process of ‘ritualisation’: the development of new symbols and definitions (Quartier, 2008).

Types
There are three types of rituals: cyclic rituals, transition rituals (rites de passage) and crisis rituals. Cyclic rituals are returning regularly. This can be daily, seasonally or yearly. Examples are a birthday or the day when someone has deceased. Transition rituals are performed in time of change, for example in case of migration. And crisis rituals are carried out in extreme situations, to avert more calamity. The silent marches against futile violence are a modern example of this.
Funerary rituals are transition rituals, because they mark the passage between life and death. These transition rituals consist of three parts: separation; transition and inclusion (Van den Akker, 2006). The main funerary ritual is the funeral itself, where relatives bring the deceased from the realm of the living to the realm of the dead, after which they return to daily life.
Rituals have several functions. An important one is to know how to act in a dramatic or traumatic situation. When a person has deceased, the burial or cremation has to occur within a few days. In the Netherlands, the legal period is five (working) days. Within this short period, everything should be arranged for the funeral, while the relatives can be completely in shock. People who are in such a traumatic situation often revert to well-known acts, called rituals. It makes them know what they have to do. They can give themselves an attitude, when they do not know how to act. It can give them consolation and distraction of the pain and the grief. By using a ritual, people can express what they cannot say, the unspeakable (Quartier, 2008).

Rituals do also have a social function. People feel the need to share their loss with the community. Performing a ritual together symbolises the recognition of the loss by the society. It can give consolation when grief is recognised. And rituals can clarify the new social classification of a community, when one of the members has died. An example is the eldest son who is closing the coffin of his father, which symbolise the shifting role from father to son (Van den Akker, 2006).

3.2 Burial rituals
Since the Netherlands was Christianised around 800 AD, most of the funerary rituals were based on the Christian religion and determined by the church and its clergy. Most people were buried in or around the church, but from 1829 this was prohibited. Cemeteries were laid outside the city borders (see 4.1), and specific burial rituals were developed.

A traditional Dutch burial consists of:
- a funeral ceremony in the church (or in an auditrium, if someone is not religious)
- a walk or ride to the cemetery and the grave
- burial of the coffin in the grave
- informal reception with coffee, cake or rolls

<table>
<thead>
<tr>
<th>Ritual</th>
<th>Deceased</th>
<th>Relatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>separation</td>
<td>farewell of the living (definitely)</td>
<td>farewell of the living (temporary)</td>
</tr>
<tr>
<td>transition</td>
<td>to the realm of the dead</td>
<td>from the realm of the dead to the realm of the living</td>
</tr>
<tr>
<td>inclusion</td>
<td>in the realm of the dead</td>
<td>in the realm of the living</td>
</tr>
</tbody>
</table>

Photo 3.2  Church (Dalfsen)

Photo 3.3  Auditorium (Kranenburg, Zwolle)

Photo 3.4  Funeral procession (Blaricum)
Photo 3.5  Cemetery (Rozendaal)

Photo 3.6  Grave (Heukelum)

Photo 3.7  Reception room (Bergen op Zoom)
3.3 Cremation rituals

Cremation in the Netherlands was only legalised in 1955, which makes the tradition of cremation a lot younger than the tradition of burial. The history of cremation is described in paragraph 4.2.

A traditional Dutch cremation consists of:
- a funeral ceremony in the auditorium of the crematorium
- leaving the coffin behind in the auditorium
- informal meeting with coffee, cakes or rolls

Last years, it turned out that leaving someone behind can give an unpleasant feeling to the relatives. Crematoriums are increasingly offering the possibility to bring the coffin to the oven yourself (see 3.6).

After the incineration, the ashes will be stored, this is required by law. This means that the ritual is interrupted. After four weeks, the relatives will receive the ash, and they can choose if they want to put it in a columbarium, at home, in an urn grave, scatter it out, or choose one of the other several possibilities.
Photo 3.11  Ashes

Photo 3.12  Ash boxes

Photo 3.13  Columbarium (Zuiderhof, Hilversum)
Photo 3.14  Scattering field (Moscowa, Arnhem)

Photo 3.15  Urn garden (Driehuis-Westerveld, Velsen)

Photo 3.16  Urn graves (Westerbegraafplaats, Enschede)
3.4 Use of rituals – decrease and increase

After the Second World War, the use of funerary rituals decreased tremendously. This was caused by the process of individualisation, multiformisation, secularisation and democratisation, developments which had a high impact on the Dutch society (Van den Akker, 2006).

**Individualisation** means that people are making choices based on personal arguments, not on prescriptions of traditions or traditional institutions like family, church, neighbourhood or local community.

**Multiformisation** is the process of the existence of multiple choices which are all social acceptable, which makes it possible to choose between more options than before.

**Secularisation** is the process of becoming disconnected from church and religion. People are making their own choices, instead of choosing the one that is prescribed by the church.

And **democratisation** means, in this context, the resistance against authority and authoritarian structures.

After ages, people had the freedom to choose what they want, and they were resisting against all the strict rules and expectations of earlier times. Often, this led to a decrease in use of funerary rituals. A funeral became a kind of business operation with a functional character and little attention for emotions.

During the 1960’s and 70’s, again a lot was changing in the Dutch society. People became more conscious about the world and their environment, and paid more attention to death, funerals and its rituals as well. At that time, more and more people noticed that the funerals indeed were functional and practical, but with a lack of emotion and personal attachment.

Gradually, new funerary rituals were developed to fill the gap that had arisen. These new rituals were connected to the imagination of individualised people in a secularised society which the Netherlands has become. There are some differences between the old, traditional rituals and the new developed rituals, caused by the following changes (Van den Akker, 2006):

**Vision of illness and death**

Traditionally, death and its rituals were part of the daily life. After WWII, death suddenly disappeared. Due to an improved health care system, the death rate declined tremendously. And when people died, this often happens in hospitals, instead of home. Death became invisible, and people did not talk about it. During the transition period in the 60’s and 70’s, the vision of illness and death changed, and death became more visible and debatable. This contributes to more personalised funerals with personalised rituals.

**Connection with a religion vs. connection with a person**

Originally, the funeral rituals were based on church and religion, and focused on God and the afterlife. The new developed rituals are more focused on the deceased and its relatives. Individuals instead of institutions are the starting point. Nowadays, a funeral is often a memorial ceremony.

**Recognition and connectedness vs. emotional support**

Traditional rituals give a sense of connectedness with the society, and a recognition of loss and grief. This can give consolation to the relatives, but there was often a kind of distance. New developed rituals are more focused on the emotional support of the relatives, to let them feel that they are not alone.

**Routinely and formal vs. real and personal chosen**

Old rituals are standardised and are performed according to a protocol. New rituals are the results of reflection and conscious choices of the deceased and relatives themselves, which makes it much more personal.

**Professionals vs. relatives**

The traditional rituals were performed by professionals of the church and funeral care organisations. From the 1980’s, relatives are more actively involved in all the phases of a decease, from illness, death, funeral to final resting place.
Emotions
During earlier times, it was not common to show your emotions in public. Grief should be carried with dignity, because a loss of control could lead to a damaged reputation.

Cremation rate
In 2010, 57 percent of the Dutch deceased has been cremated, while in 1960 it was only 4 percent (LVC, 2011). Because this kind of converting is relatively new, there are only a small amount of rituals, especially when compared to the traditional funeral rites of the (Christian) burial. This lack of rituals can be a reason for people to choose for a burial instead of cremation. Nowadays, the ritualisation around cremation is increasing, and specific cremation rituals are developing.

3.5 New rituals
During the last years, some new funerary rituals are developed or introduced. Sometimes they are based on rituals from other cultures, and sometimes they are completely new. These new, personalised rituals are characteristic for this time.
Some examples are:
- letting of balloons or lanterns
- making a personal website
- organising silent marches (in case of a violent decease)
- making photographs or recordings of the funeral ceremony
- several options for ash scattering (water, flares)
- jewellery with ash, a piece of hair or a fingerprint
- painting the coffin
- laying out at home (reintroduction)
- presence of a mourning clown (for little children)
3.6 Rituals and design
The facility of carrying out rituals should be taken into account when designing a funerary place. ‘Without an agreed set of ritual practices, then both architecture and design are without the unifying elements or imperatives that link ritual, plan, processional and built form in one coherent whole’ (Worpole, 2003).

While aesthetics are influenced by rituals, it can also be the other way around: aesthetics can stimulate the use of rituals as well. This can be an interesting design tool for cemeteries and crematoria.

One of the main principles of a burial ceremony, is to bring the coffin away and bury it. At a cremation ceremony, the coffin is often left behind in the auditorium, which can give the relatives a feeling that the funeral is not completed.

At the cemetery IJsselhof in Gouda, the oven is placed separately from the auditorium. After the funeral ceremony, the coffin is brought away to this oven, instead of left behind (Wille, 2004).

Relatives would like to have an active role during a burial or cremation ceremony. In this case, it is stimulated by the aesthetics of the place (Van den Akker, 2006).

3.7 Conclusion
Funerary places are ritual places. By performing rituals, relatives mark the transition of the deceased from life to death. Rituals help people in dramatic situations, it makes them know what they have to do. By rituals, relatives can show their grief. And by performing rituals, the new classification of a social group can be symbolised and clarified.

There are differences between the rituals of burial and cremation. The main difference is bringing away versus leaving behind. At a burial ceremony, the coffin is brought to the grave, while after a cremation ceremony, the coffin is often left behind in the auditorium. Another characteristic of cremation is the legal period between incineration and the release of the ashes. This period is four weeks, and means an interruption of the transition ritual.

After a decline after the Second World War, now the use of rituals is decreased, and new rituals are developed. The design of funerary places can contribute to the use of rituals.

Photo 3.20 Cremation oven (IJsselhof, Gouda)
4  The development of funerary places from 1829 till present

4.1  Cemeteries

A cemetery is a place for the burial of dead people. The word cemetery originates from the Greek word ‘koimeterion’ and the Latin word ‘coemeterium’, which means literally ‘sleeping place’ (Webster, 2010).

4.1.1  Burial in the church

When Christianity arose in Europe, around 800 AD, cremation was stopped and prohibited. Every deceased had to be buried, because Jesus Christ was buried too (well, actually interred). Christians honoured the martyrs who were died or killed because of their religion. These persons were canonised, and churches were built above and around their graves. A sacred grave made the church sacred as well, and in the oldest Dutch churches a tomb was used as an altar.

In time, the habit of burying inside the church, near by the altar, has evolved. This place was only accessible for the high clergy (bishops, abbots), monarchs and dignitaries. High prices were paid, which made the burials a large source of income. Often, up to five layers of graves were ‘constructed’ above each other. Poor people, who could not effort to buy a grave inside, were buried next to the church at the graveyard.

The best time for a burial was on Sundays, during the mass. This means that the graves were open while people were visiting the church. An unhygienic situation, which contributed to the occurrence of epidemics. When the graves were opened often, the floor could prolapse, and sometimes even the church’s foundations were damaged. Besides, the smell of the open graves must been terrible.

From 1600 AD governors tried to prohibit this inside burials. But the clergy obstructed this time after time, because their source of money was threatened, which was sometimes more than 70 percent of all the income (Kok, 1994).
4.1.2 Christian cemeteries

During the 18th century, a few cemeteries were developed outside the churches, by people who want to stimulate the use of these cemeteries. Well known is the cemetery Ter Navolging (For Emulation) in Scheveningen, which looks exactly like a church floor. But, at this time, most people were still buried inside the churches.

From the 1st of January 1829, inside burials were prohibited by Royal Decree, primarily based on the unhygienic situation inside the churches. From this time, every municipality had to develop a cemetery outside the borders of the city or village. The resistance of the church and civilians was still strong, but now they were forced by law to change their customs.

The first cemeteries were, as in Scheveningen, exact copies of the burial places in the church. The plan was based on a Latin Cross, orientated towards the East. Sometimes, a chapel was built on the intersection, the same place of the altar in a church. The most expensive graves were situated along the paths, and around the chapel. In literature, this cemeteries are called Christian cemeteries (Geuze & Guinee, 1989).
4.1.3 Romantic cemeteries
At the end of the 19th century, the appearance of cemeteries was changing. At this time, the Netherlands was developing quite fast, due to the Industrial Revolution. Cities became crowded and dirty, and parks based on English Landscape Style were laid out for recreation and fresh air. The same applies to cemeteries of that time, where an intimate connection between life, death and nature was created. Death was glorified in a created setting of ideal nature. This was leading to green cemeteries, with curving paths and impressive, dramatic monuments. Sadness and sorrow was the main theme at these places (Kok, 1994).
4.1.4 Eclectic cemeteries

At the beginning of the 20th century, the sphere at cemeteries became more austere. Due to scientific and societal developments, death became more distant to daily life. This is visible at the cemeteries from that time. Compared to the irregular, curvy paths of the Romantic cemeteries, the forms were more geometrical. Squares, circles, triangles, straight paths and broad avenues are characteristic for this type of cemetery. It makes the sphere more formal and sober (Kok, 1994).
4.1.5 Modern cemeteries

After the Second World War, rebuilding the country was the most important theme. Emotions were turned off, which made the sphere of architecture, neighbourhoods, parks and cemeteries functional, distinctive and austere. People wanted to forget their recent history, and were looking forward to the future.

Due to the improved health care system and the professionalisation of the funeral companies, death became completely invisible in the Dutch society. Cemeteries of that time are characterised by orthogonal path systems and square or rectangular grave fields. The individual was subordinate to the whole, which for example resulted in the use of identical stones for all the deceased at some cemeteries (Kok, 1994).
4.1.6 Postmodern cemeteries

During the 1970’s and 80’s, as reaction on the chilliness and austerity, the trend of Postmodernism arose. People became more connected to nature and each other, and were resisting against strict rules and regulations. Cemeteries became green, irregular and informal places, comparable to the urban design of that time. Sometimes, a cemetery became even a part of the neighbourhood, as in Almere Haven. Here, a bicycle path is crossing the cemetery.

Map 4.5 Postmodern cemetery (Oosterdreef, Almere, 1977, Zalm)

Photo 4.5 Postmodern cemetery (Oosterdreef, Almere, 1977, Zalm)
4.1.7 Recent cemeteries

Nowadays, almost no new cemeteries are developed. Most of the times, existing cemeteries are extended or restructured. Well known designers are Copijn and Ada Wille, their style is a kind of postmodern. Good examples are De Akker in Bunschoten, and the extension of Kranenburg in Zwolle.
4.1.8 Natural cemeteries

Nowadays, there is a growing preference for natural burial places. Within this trend, there are some differences with the traditional forms of burying. Contrary to the most traditional cemeteries, the structure is not architectural but based on natural forms. For this reason, natural cemeteries have a little influence on the existing landscape, they are taking the landscape as basis. They ‘meld into the uncultivated landscape as quickly as possible, returning to a ‘state of nature’ as if the human presence on earth had never been’ (Worpole, 2003).

A difference with traditional cemeteries, which are often separated from daily life with fences or hedges. Another difference is the grave density. Traditional cemeteries can have a density of about 1600 graves per hectare. At a natural cemetery, 150 graves per hectare is the maximum, if affection of the nature area is not desirable (De Molenaar, 2009).

The grave monuments at natural cemeteries are often made of wood, boulders or just plants.

And between Ede and Arnhem, a natural cemetery without grave monuments will be realised. Relatives will only receive some GPS data, which can help them to localise the grave. In fact, this is contrary to one of the principal functions of a burial ritual, which is to leave ‘a permanent record for posterity of each individual life lived’ (Worpole, 2003).

A well known British example of a natural cemetery is the Colney Wood Burial Park, which is part of a publicly accessible landscape.

In the Netherlands, there are three natural cemeteries at this moment, the oldest and well known are Westerwolde in Assel (Veluwe) and Bergerbos in Sint Odiliënberg (Limburg). There are several plans to develop new natural cemeteries.
Photo 4.8  Natural cemetery (Bergerbos, Sint Odiliënberg)

Photo 4.9  Natural cemetery (Westerwolde, Assel)
4.1.9 Extensions
Most cemeteries are designed in one style, connected with the time period of the first construction. But when the cemetery was full, an extension was laid out, often in the style of that period. This developments results in cemeteries with several styles next to each other. Sometimes this is giving the opportunity to choose between different spheres at one cemetery. But sometimes it affects the original design negatively, which happened at the Nieuwe Algemene Begraafplaats in Doorn.
Map 4.10  Doorn, original design

Map 4.11  Doorn, with redevelopment
4.1.10 Mausoleums and wall tombs
Above-ground burial is most common in the southern part of Europe. Originally a pragmatic choice, because often the soil consist of rock, which makes burying in the ground almost impossible. Mausoleums and wall tombs are rare in the Netherlands, but there are some examples in Zwolle, Enschede and Heilig Landstichting. Remarkably, most of the graves are used by foreign people, for example from Italy.
Zorgvlied, a well-known cemetery in Amsterdam, has recently build a new mausoleum, called ‘Lalibellum’.

Photo 4.10 Wall tombs (Oosterbegraafplaats, Enschede)

Photo 4.11 Scale model mausoleum Lalibellum (Zorgvlied, Amsterdam, 2010, Wille)

Photo 4.12 Wall tombs (Heilig Landstichting)
4.1.11 Grave monuments
The main function of a grave monument is recognition. The monument marks the place of the grave, which makes it able for relatives to find it. Another important function of a monument is an emotional one. Relatives use the monuments for memorising and honouring their lost ones, to express their sorrow.
And, graves were often used as status symbol too. The place and the appearance of a grave, can symbolise a certain status that someone or some family has within the society.
Often, the most expensive graves were situated around the main paths and the chapel (if present), while the cheaper ones were placed at the borders of the cemetery. This is for example visible at the plan of the cemetery of Venlo, were the colours symbolise the class of the graves. Green is first class, yellow second class, orange third class, grey and blue are rental graves, and pink are the rental graves for the poor who were paid by the church.
The Netherlands is often characterised as sober and Calvinistic, but expressive and striking monuments are increasingly visible at the contemporary funerary places.
Map 4.12 Classification of a cemetery (Nieuwe Begraafplaats, Venlo)
4.2 Crematoria
A crematorium is ‘a furnace or establishment for the incineration of corpses’ (Webster, 2010).
Bodies are burned in an oven, and afterwards the ash can be used or processed in several ways.

At the end of the Bronze age, around 1100 BC, tribes from Middle Europe came to the West. They brought the habit of cremating their deceased with them. In the beginning, they buried the remaining incineration ash in existing burial mounds. Later on, they buried the urns with ash in separate graves, which they covered with surrounding ground. During decades, large urn fields were arising.
Funeral pyres were made from the wood of oaks, beeches, pines and junipers. Often, the horse of the deceased was killed, and cremated as well. As a sacrifice for the gods, and the horse could serve its owner in the afterlife.
Around 800 AD, when the Netherlands was Christianised, cremation was prohibited by the Church, and disappeared completely for eleven centuries (Kok, 1994).

4.2.1 The first crematorium
In the second half of the nineteenth century, advocates of cremation organised themselves. They were supported by physicians, who prefer cremation because of unhygienic consequences and the lack of burial space in the cities. While cremation was already possible in France, Italy and Germany, in the Netherlands it was still prohibited.
In 1874, a group of advocates raised ‘De Vereeniging tot invoering der Lijkverbranding in Nederland’, an association who wants to stimulate legalisation of cremation in the Netherlands.
In 1913, the first Dutch crematorium was opened, Driehuis-Westerveld in Velsen, and in 1954 the second one in Dieren. All this time, cremation was still illegal, but tolerated. Finally, in 1955, cremation became legalised (LVC, 2011).
Crematorium Driehuis-Westerveld is developed next to an existing cemetery. The design of the park and architecture is quite impressive. The building is situated above a dune, so visitors have to ‘climb’ to reach it. Funerals were quite distinctive and austere at that time, and the possibilities for ashes were unpersonal. Most ashes were scattered out, and there was the possibility to place an urn in the columbarium (urn wall), where all the urns were identical. It was also possible to place an urn outside in the urn garden, where the urns were identical as well.
4.2.2 Crematoria from 1955
After the legalisation, the popularity of cremation increased significantly. During the 1960’s, 70’s and 80’s, a lot of crematoriums were built, a majority of them next to an existing cemetery (see chapter 5: Funerary places in the landscape).
The first of them in a time of Modernism, which resulted in formal spheres and settings. Later on, when Postmodernism was developing, the design of crematoriums and their surroundings became more green and informal.
The most crematoriums consist of a building and a surrounding park. The building contains a reception room, one or more auditoriums and cremation ovens. The park offers possibilities for ashes, like columbaria, scattering fields and urn grave fields. Most of the times, relatives are free to choose an urn or stone, instead of the prescribed ones at Driehuis-Westerveld.

4.2.3 Ashes at cemeteries
Beside the possibilities for ashes at crematoria, there were also facilities created at existing cemeteries. Columbariums were built, scattering fields and urn grave fields were laid out. Often, this occurred at the borders of the cemetery, which can give the feeling of hiding or pushing aside these elements.
Photo 4.20  Scattering field (Westgaarde, Amsterdam)

Photo 4.21  Urn graves and urn wall (Rusthof, Amersfoort)

Photo 4.22  Columbarium (Westerbegraafplaats, Enschede)
4.2.4 New possibilities for ashes

Traditionally, the possibilities for ashes are urn walls, scattering fields, urn graves and urn gardens. During the last years, a lot of new possibilities are developed. For example, it is possible to let a tree grow on the incineration ash. After a year, you will receive a tree, which can be planted for example in the garden. It is also possible to put a little of the ash in a tattoo, in a jewel, or to make a diamond of it. It is even possible to put the ash in a flare, which you can let off in the air.

All these possibilities are making cremation more personal.

Nowadays, more attention is paid to the possibilities for ashes at the development of a new cemetery or an extension of an existing one. Remarkable is the design of Karres en Brands for De Nieuwe Oosterbegraafplaats in Amsterdam. The design is a kind of bar code, with a lot of different possibilities for ashes.
4.3 Different cultures

The Netherlands has a multicultural society, which results in different funerary preferences. Most cultural preferences are based on religious requirements. The main religious groups in the Netherlands are: Christians, Muslims, Hindus, Jews, Buddhists and Chinese. There are some main differences between the religions for the period between decease and funeral, but these requirements have not much influence on the appearance of funerary places. Some specific requirements are not (yet) common for the traditional Dutch cemetery (Uitvaart.nl, 2011).

Eternal graves
Jews and Muslims require that graves will never be cleared, because they expect a day of resurrection. At contemporary Dutch cemeteries, most graves are cleared after a period between 10 and 30 years.

Orientation
Muslims have to be buried laying on their right side, with their face in the direction of Makkah. The orientation of Chinese graves has to be determined at the place itself, based on the guidelines of Feng Shui. Traditional Christian cemeteries were orientated to the East, but at contemporary funerary places the orientation seems less important.

Cremation
Hindus and Buddhist have to be cremated. While more than 50 percent of the deceased is cremated, this is not a problem (anymore).

Flowing water
The ashes of Hindus have to be scattered in flowing water, which refers to the river Ganges. Only a few contemporary funerary places offer this possibility, most of the times the ashes are scattered out about the North Sea.

Sacred ground
The burial place of Catholics has to be sacred, this can be done by a representative of the Catholic Church.

No trees
The graves of Jews should not be disrupted by trees.

This should be taken into account within design and maintenance of funerary places.
4.4 Accessorising

Traditionally, a grave consisted of a standing or lying grave stone, sometimes accompanied with some plants. Most of the time, the appearance was sober, which was stimulated by the Calvinistic culture of the Netherlands. Nowadays, some people feel the urge to add something personal to the grave by decoration. This can be with figurines, plants, plastic windmills, toys, drawings et cetera. Most of the time this is happening at the graves of early died people, like children, teenagers or young adults.

For relatives, this decoration can give a kind of consolation. They can do something, which is in fact a kind of ritual. And by doing this, they can express their grief, and make it visible for others. Due to developments as individualisation and secularisation (see 1.1), people feel more free to do what they want.

Accessorising can be very helpful for relatives. But cemeteries are public places, and ‘neighbours’ of these decorated graves, are not always content with the result, because it is quite dominant. Managers of cemeteries are not pleased with this development too, because it can distort the maintenance at and around the monuments. And, these kind of graves dominates the overall appearance of the cemetery.
4.5 Besides the funerary place

For decades, the death was almost not visible in daily life. Nowadays the taboo on death is disappearing more and more. There are for example programmes on Dutch television, completely based on someone’s (expected) death. Beside this general attention, personal expression became also more visible. After a decease, relatives are using internet to show their grief. They open for example a special condolence website. Or they are looking for consolation at special internet forums for relatives of deceased people.

It is also visible in the monuments along the road, raised for people who have died in a traffic accident. And some relatives establish a foundation, to prevent that more people will die by a deadly disease. Or they organise a silent march, especially when someone was killed by meaningless violence.

Remarkable was the manifestation after the murder on well-known film director Theo van Gogh in 2004, where people were making noise instead of being silent.
4.6 Children
The decease of a child is extremely heavy, it is and feels unnatural and unfair. In earlier times, children were often buried within the grave of family members. And unbaptized children were buried at the borders or outside the cemetery. From the 1970’s and 80’s, special sections for children were developed. Parents prefer to bury their deceased children together, instead of in between adults. During the last years, a lot of attention is paid to the children’s areas at cemeteries and crematoria, and increasingly a special design is made for these places. Parents can leave their child at a nice and enclosed place. Through all the expressive monuments and accessories, the overall appearance is sometimes overwhelming. If this is not desirable, working with themes can be a solution.

4.7 Conclusion
Between 1829 and now, a lot has changed at the funerary places. Cemeteries were laid out after 1829, when burial in the church was prohibited. Every period has its corresponding funerary style, influenced by religion, society, view on death and view on nature. Modern cremation originates from the beginning of the 20th century, and was legalised since 1955. From that time, a lot of new crematoria were built, and nowadays more than 50 percent of the deceased are cremated. Current developments are the increasing preference for natural cemeteries, the variety in funerary preferences, the trend of accessorisation and the funerary developments outside cemeteries and crematoria.

Photo 4.35 Children (Rusthof, Amersfoort)

Photo 4.36 Children (Bergerbos, St. Odiliënberg)

Photo 4.37 Children (Dieren)
5 Funerary places in the landscape

The first Dutch cemeteries were placed outside the city borders, and enclosed by a high wall. There was no connection with the surrounding landscape, similar to the churches of that time. During the two centuries that followed, this stayed the same. All the Christian, Romantic, Eclectic, Modern and Postmodern cemeteries are enclosed by a wall, hedge or fence. It would be better if funerary places are more connected to the surrounding landscape, for the relatives as well as for other visitors.

5.1 Locations of cemeteries
After the introduction of the new law in 1829, cemeteries had to be developed outside the city borders. During the time, cities were growing, and nowadays most old cemeteries are enclosed by neighbourhoods. From the 1960’s and 70’s, when more people were able to use a car, cemeteries were laid out even further away from the centre. This is visible clearly visible in Dalfsen (see next page).
Map 5.1 Churches and cemeteries in Dalfsen

1 Protestant church
2 Catholic church
3 Old municipal cemetery (1805)
4 Catholic cemetery (1855)
5 Jewish cemetery (1855)
6 New municipal cemetery (1978)
5.2 Locations of crematoria
The location of crematoria is often connected to existing cemeteries. Sometimes, new crematoria were developed separate from any cemetery.

I - Crematorium next to existing cemetery
Crematorium Kranenburg in Zwolle is developed next to the cemetery Kranenburg.

Image 5.1 Crematorium next to existing cemetery

Map 5.2 Kranenburg, original design

Photo 5.3 Crematorium Kranenburg

Map 5.3 Kranenburg with new crematorium
II - Crematorium at existing cemetery
At the Nieuwe Oosterbegraafplaats in Amsterdam, the existing auditorium is replaced by an auditorium for burial and cremation ceremonies. The ovens are placed in the building.
At Rusthof, Amersfoort, the crematorium is built next to the existing auditorium.

Image 5.2 and 5.3  Crematorium at existing cemetery

Map 5.4  Crematorium at Rusthof, Amersfoort
Map 5.5  Crematorium at Nieuwe Ooster, Amsterdam
III - Combination of cemetery and crematorium
At Westgaarde in Amsterdam, the cemetery and crematorium are developed at the same time.

IV - Separate crematorium
The crematoria of Dieren and Usselo (Enschede) are not connected to a (existing) cemetery.

Image 5.4  Combination cemetery/crematorium
Map 5.6  Cemetery and crematorium Westgaarde (Amsterdam)

Image 5.5  Separate crematorium

Map 5.7  Crematorium Dieren
Map 5.8  Crematorium Usselo (Enschede)
5.3 Exclusion of the landscape
The exclusion of the landscape at contemporary Dutch funerary places can best be illustrated by pictures. Fences, hedges and walls disconnect the cemeteries and crematoria from their surroundings. This makes the funerary places enclosed and isolated from daily life.

Photo 5.7 High wall around Jewish cemetery (Mosowa, Arnhem)

Photo 5.8 Fence at the entrance of the cemetery (Heidehof, Apeldoorn)

Photo 5.9 Fence at the back of the cemetery (Oosterbegraafplaats, Enschede)
Photo 5.10  High hedge around Catholic cemetery (Dalfsen)

Photo 5.11  Graves in the hedge (old municipal cemetery, Dalfsen)

Photo 5.12  A closed auditorium (De Nieuwe Oosterbegraafplaats, Amsterdam)
5.4 Benefits of including the landscape

Connecting a funerary place with its surroundings has several benefits.

Identity
Traditional cemeteries are often created in a kind of tabula rasa situation. A plot was cleared, paths were laid out, a fence was constructed, and trees were planted. The result is often a place with no specific identity, because it could be almost everywhere in the Netherlands.

By using the existing landscape in the design, it is possible to give a new funerary place its own specific identity.

Death visible in daily life
As early described, since World War II death became invisible in daily life. Nowadays, death is a more common ‘topic’, but the funerary places are still hided. Like Worpole (2003) says: ‘the longstanding spatial relationship between ‘life space’ and ‘burial space’ is becoming attenuated’.

It is important to make funerary places more visible, simply because death is part of life. Remarking a funerary place can be a source for relativity and contemplation.

Consolation and contemplation
Because of the fences, walls and hedges, funerary places are enclosed worlds. Most buildings have even no, or only high windows, due to reasons of privacy.

‘It fails to employ any of the many consolatory effects that landscape can bring’ (Worpole, 2003).

When you are in an emotional situation, nature can give you consolation. You can see that there is so much beauty beside your sorrow.
Photo 5.16  Bergerbos has no fences or hedges, the border is a sandy road between the cemetery and the fields.

Photo 5.17  Natural cemetery Bergerbos in St. Odiliënberg has an auditorium for ceremonies outside.

Photo 5.18  A view from Bergerbos to the surrounding landscape.
Photo 5.19 The old municipal cemetery in Dalfsen has a small gate which gives a view on the surrounding landscape.

Photo 5.20 At cemetery Kranenburg in Zwolle, some landscape elements are added to the cemetery.

Photo 5.21 and 5.22 Cemetery Oosterdreef in Almere offers the possibility of a magnificent view over water.
Photo 5.23  The auditoria of Skogskyrkogarden (Stockholm) are reached by a long, upward path.

Photo 5.24  At Skogskyrkogarden, graves are subordinate to the environment.

Photo 5.25  Meditation grove at Skogskyrkogarden.

Photo 5.26  At Skogskyrkogarden, the landscape is part of the funeral ceremony.
5.5 Conclusion

Originally, most funerary places have no connection with the surrounding landscape. Walls, fences and hedges separates cemeteries and crematoria from daily life and landscape qualities. Including the landscape could provide identity for the place, relativity in daily life, and provide contemplation and consolation at funerary places.

Photo 5.27 One of the scattering fields of the crematorium of Usselo (Enschede) is placed in a meadow.

Photo 5.28 The surrounding landscape is part of the cemetery at Laarmanshoek in Ommen.
6 Funerary aesthetics

From a functional point of view, death does not need aesthetics. The deceased are not conscious of their environment anymore. A corpse can be buried in the ground, where it takes about 10 years till it is completely perished. The incineration time of a dead body in a cremation oven is about 1.5 hour. Actually, a mass grave or a large pyre is enough to convert the dead bodies. But this methods are exceptional. Most of the time people are buried or cremated at special, intimate and/or sacred places. All over the world, even since prehistoric times, a lot of time, money and attention is given to the last place of the dead (Kok, 1994). Also in the Netherlands, with about 4000 cemeteries and 67 crematoria nowadays. Through all the times, it seems that the aesthetics of funerary places are quite important.

6.1 Aesthetics

Aesthetics are a component of the field of philosophy. An object is aesthetical when it has ‘an artistically beautiful or pleasing appearance’ (Schram, 2010). The aesthetic value of an object or environment is determined by its ‘aesthetics’. In the field of aesthetics, there is a distinction between ‘aesthetics’ and ‘environmental aesthetics’. While aesthetics are mostly related to art, environmental aesthetics are related to ‘almost everything other than art’ (Carlson, 2007). Another significant difference between aesthetics and environmental aesthetics, is the condition of observation (Carlson, 2007). Most of the times, you can experience art in conditioned circumstances, like in a museum or gallery. Environmental aesthetics are often dependent on weather, season, time of the day, position of the spectator and other influences. Cemeteries and crematoria are not simply a form of art. These are places with several functions, often with an aesthetical appearance. The aesthetics of funerary places belong to the field of environmental aesthetics.
6.2 Environmental aesthetics
The study of environmental aesthetics originates from the 18th century. In this period, Burke (1757) introduced a distinction between three different conceptualisations: the Beautiful, the Sublime and the Picturesque. Carlson (2007) gives the following descriptions for these concepts:

**Beautiful**
The Beautiful tends to be ‘small and smooth, but subtly varied, delicate, and ‘fair’ in color. (...) The beautiful readily applies to tamed and cultivated European gardens and landscapes’ (Carlson, 2007). It is about ‘beauty in art and nature; symmetry, balance, order and form’ (Maslow, 1943). Experiencing the Beautiful gives people a nice, pleasant and positive feeling.

**Picturesque**
The Picturesque is a combination of the Beautiful and the Sublime, it is placed in between. It is ‘complex and eccentric, varied and irregular, rich and forceful, and vibrant with energy’ (Carlson, 2007). ‘Picturesque’ literally means ‘picture-like’ and the theory of the picturesque advocates aesthetic appreciation in which the natural world is experienced as if divided into art-like scenes, which ideally resemble works of arts, especially landscape painting, in both subject matter and composition’ (Carlson, 2007). Picturesque settings in landscapes, paintings and pictures often exist of a beautiful foreground and a threatening background. Experiencing the Picturesque gives a positive feeling, because the scary part is at a distance, so people do not feel themselves threatened directly.
Sublime

The Sublime is ‘powerful, vast, intense, terrifying, and definitionless. (...) In the experience of the Sublime, the more threatening and terrifying of nature’s manifestations, such as mountains and wilderness, can be aesthetically appreciated, rather than simply feared or despised’ (Carlson, 2007).

Experiencing the Sublime gives people a feeling of fear, a negative feeling. But if they are not directly at risk, they can see something positive through the negative feelings: ‘When danger or pain press too nearly, they are incapable of giving any delight, and are simply terrible; but at certain distances, and with certain modifications, they may be, and they are delightful, as we every day experience’ (Burke, 1757). This combination results in a mix of (conflicting) positive and negative feelings, which is characteristic for the Sublime (Karmanov, 2009).

The Sublime can be a good contribution to the aesthetics of daily life. Seeing and feeling something positive through the negative can be an intense (environmental) experience. Life is not just only nice and beautiful, and environmental aesthetics should reflect that. In this way, the landscape shows an extra function, which is a function of experience.
6.3 The Sublime experience

In 2011, Roncken introduced a new view on the aesthetic experience of environments. He states: ‘Environmental aesthetics are constructed by a combination of both the senses and a concept that is needed to make sense of what we sense. All aesthetic experiences are by nature open to change, yet western culture has put great emphasis on a statically defined judgement of the Beautiful, the Picturesque and the Sublime. Instead of a renewed judgement every time people enter a moment of environmental aesthetic sensation, they take the beaten track of culturally educated pre-judgements. This is very beneficial in a fast paced world with lots of ready-made products to choose from. To be able to choose fast, means to make the most of pre-judgemental abilities’ (Roncken, 2011). But these pre-judgements also ensure that environmental experiences often get stuck in the Beautiful and the Picturesque. When people step aside from what they have learned, they can be open to experience the Sublime. It is a choice if you want to ‘see’ it or not.

‘The Sublime is however the one aesthetic principle that resists pre-judgemental abilities. It renders a sense of humbleness. During a Sublime moment a person has no control over its judgemental abilities. The senses are too dominant to make any sense. This is a very uncomfortable position to most people and it will ignite a counter reaction by enforcing a conceptualisation, even when this does not meet any logical coherence. In such moments myth can be born, or superstition or firm belief in illogical coherences. This might be characterised as a ‘survival-mode’ built into human perception. The Sublime directs almost all attention from the individual towards the environment (or that what is perceived as ‘outside’). Any enforced conceptualisation will be part of the imprint of that particular moment. Such imprints can be very strong and long lasting’ (Roncken, 2011).

During an extreme situation of negatively perceived change people are - at least for a prolonged duration - confronted with something we can call a ‘sublime environmental experience’. The occurrence of death as concept is for most people inconceivable or unacceptable. Therefore the mourning process (see 2.3.3) could be regarded as a prolonged Sublime experience.

If people experience the Sublime, they value this in different ways which results in different types of reaction. There are two variables, from positive to negative and from passive to active (Roncken, 2011). If they like experiencing the Sublime, they feel positive, accept the situation and unify themselves with the experience. If they do not like it, the feeling will be negative, and they will distance themselves from the experience.

Whether they perceive the Sublime as positive or negative, people’s reaction can be passive or active. A passive reaction means immersion by the experience, to go along with what is happening. An active reaction means that people feel themselves encouraged to react on the experience, and to contribute something to it.

Combining the component of positive-negative with the passive-active component, results in a

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Scheme 6.1 Experiencing the Sublime (based on Roncken, 2011)
classification of four archetypes (scheme 6.2). Passive responders are called ‘Readers’ because they register the situation, and the actives, who want to modify the situation are called ‘Poets’.

A Positive Reader is someone who likes and is been absorbed by the Sublime.
A Positive Poet likes the experience as well, but wants to contribute something to it.
A Negative Reader does not like the Sublime experience, and is taking distance of it.
And a Negative Poet neither likes it, is taking distance as well, but is trying to change something in here.

<table>
<thead>
<tr>
<th>Positive position</th>
<th>Positive reader</th>
<th>Positive poet</th>
<th>State: unifying experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative position</td>
<td>Negative reader</td>
<td>Negative poet</td>
<td>State: distancing experience</td>
</tr>
<tr>
<td>Strategy: to register</td>
<td>Strategy: to modify</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Scheme 6.2 The four archetypes of experiencing the Sublime (Roncken, 2011)

6.4 Mourning process and the archetypes

The four main phases in a mourning process are: denial, anger, depression and acceptance (see scheme 2.3, Kübler-Ross (1969)).

The present mourning phase at or just after a decease determines someone’s reaction on what happened. Continuously, the reaction on the prolonged Sublime experience (which death is) determines like which kind of archetype someone will react. And, as result of this reaction, every archetype has its own aesthetical preferences for funerary places. In the contemporary society, some archetypes and their funerary preferences have a major impact on the cemeteries and crematoria of this time.

The phase where someone is standing in the mourning process (which determines someone’s archetype) is influenced by several factors:

**Expectation**
When someone is terminally ill, the mourning process already starts when the expected death is announced. This applies for both the ill person as for the relatives. When death has come, the relatives can already be in the phase of depression or even acceptance. Conversely, when a decease is unexpected, people are often in the denial or anger phase when the funeral takes place.

**Age**
In the Netherlands, the life expectancy is about 80 years. Dying around that age is natural, and relatively easy for relatives to accept. But when a child or a young adult dies, it seems and feels unfair. Especially when a child dies earlier than its parents. For relatives, it can be difficult or even impossible to reach the phase of acceptance.
Cause
Every decease has its cause. But sometimes, death seems unnecessary. This occurs when someone has died because of violence, an accident, an aggressive untreatable disease or medical negligence. Relatives can stay in the phase of anger for a long time, because (they think) that death could have been prevented. This applies also to situations when people do not know what has caused the death.

Background
Someone’s background has a large influence on the mourning process. It is about character, personality, what someone has been through before, social class, religion, culture, et cetera. In the contemporary society, it is more accepted to show emotions, and to express angry or sad feelings. Because of this, the differences in emotions between people become more visible. Relatives could experience the same decease in a very different way.

The phase in the mourning process determines if someone would react positive or negative on the decease. Moreover, the acceptance of a decease does not mean that the relatives are not sad, it only means that they can accept the new situation. Whether someone’s reaction is passive or active, is more dependent on the personal background.

Of course, the distinction is not always as sharp as shown in scheme 6.3. People’s reaction can be somewhere between passive and active, sometimes people go through the same mourning phase several times, and shifting between passive and active reactions is possible as well. Besides, the scheme shows that, in time, people can reach the phase of acceptance, while in practice a part of the relatives will never be able to accept the decease. Still, these four archetypes show that the experience and reaction on death are quite diverse, and this diversity causes differences in the aesthetical preferences of funerary places. Not everyone has the same preferences when experiencing a decease. The aesthetics of funerary places should react on that through various options for funeral, burial and cremation.

![Scheme 6.3 The four archetypes during the mourning process](image-url)
6.5 Funerary preferences of the archetypes

According to Roncken (2011), funerary places are excellent sites to add possibilities for Sublime experiences. Cemeteries are often beautiful, green and serene places. Opposite to that are the monuments which reflect the grief and sorrow which was felt at this place. The combination of the beauty of the place and the dark, threatening side of death makes funerary places by definition Picturesque. It is possible to experience the Sublime in the Picturesque settings of funerary places, as explained in 6.3. At funerary places, this can be a good contribution in several ways. In the first place for the funeral itself, where the Sublime can show something positive on a very sad day. It can also be helpful for the relatives who are visiting the grave afterwards. Through all the grief, they can experience something positive at the funerary place. Furthermore it can be useful for visitors who come to a funerary place for contemplation. In several situations, the Sublime can be a source of relativity.

Because people are reacting differently on Sublime experiences, their aesthetical preferences are a direct result of that. When designing a funerary place, these preferences could be a good guideline, the archetypes can be used as target groups. The described preferences below are formulated from the perspective of the relatives.

Positive Reader

A Positive Reader accepts the occurrence of the decease, and is able to see something positive in the negative of a loss. This is mainly related to the death of old(er) people, when life naturally has come to an end. For them, the funeral ceremony is often a memorial of life. Positive Readers prefer a positive landscape where the individual is subordinate to its surroundings, which makes it possible to immerse in the landscape and in the experience. For them, death means the return to the circle of life. That is why they often choose for a natural cemetery, where you can give someone back to nature. Readers are often introvert, and literally and figuratively the graves require little attention too.

Photo 6.4 Natural cemetery (Bergerbos, St. Odiliënberg)
Positive poet
A Positive Poet accepts the death as well, but wants to keep the memory alive. This is often visible when a well-known person has died. People are sad about the loss, and they want to honour their lost one, which makes the memorial often a tribute to someone’s life and career. Positive Readers prefer a positive landscape where the surroundings are subordinate to the individual. This makes it possible to react on the landscape and the experience, by adding something (positive) to it. Poets are extravert, and the graves requires attention as well. They have a preference for expressive monuments, the deceased is unique and the monument should express this. The landscape of a funerary place should be able to absorb and counterbalance this, which is possible in a kind of remembrance park.

Negative reader
A Negative Reader does not accept the decease, is wallowing in grief and feels powerless to what is happening. A victim, who is suffering by death. The funeral ceremony will express sadness and sorrow, and bringing a loved one to the last place is experienced as an inevitable last journey. Negative Readers prefer a negative landscape where the individual is subordinate to its surrounding, which makes it possible to immerse in the landscape and the experience. For them, death is overwhelming, and the funerary place should express the grief that is felt. This is happening at Gothic cemeteries, laid out in a style in between the Christian and Romantic cemeteries. The monuments express the suffering, and the overall appearance is quite melancholic.
Negative poet

A Negative Poet does not accept the decease and is resisting against it. This often occurs when a young person has died, or when death is caused by violence, illness or accidents. In the ceremony anger and grief are shown, and the funeral procession can be interpreted as a protest march. Negative Poets prefer landscapes where the surroundings are subordinate to the individual. They can react on the landscape, and add something (negative) to show the injustice felt by the relatives. They often raise expressive monuments, which are attracting a lot of negative attention, they almost scream: 'Give my loved one back!'

In fact, the place itself is not important, it is all about the deceased. Relatives do not only express their feelings at the funerary places, but also outside, see 4.5.

<table>
<thead>
<tr>
<th>Positive reader</th>
<th>Positive poet</th>
<th>Negative reader</th>
<th>Negative poet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ceremony</td>
<td>Procession</td>
<td>Funerary landscape</td>
<td></td>
</tr>
<tr>
<td>Memorial</td>
<td>Bringing the body back to nature</td>
<td>Positive immersion</td>
<td></td>
</tr>
<tr>
<td>Tribute</td>
<td>Bringing the loved one to the last place</td>
<td>Positive contribution</td>
<td></td>
</tr>
<tr>
<td>Sadness &amp; sorrow</td>
<td>Inevitable last journey</td>
<td>Negative immersion</td>
<td></td>
</tr>
<tr>
<td>Anger &amp; grief</td>
<td>Protest march</td>
<td>Negative contribution</td>
<td></td>
</tr>
</tbody>
</table>

Scheme 6.4 Funerary preferences of the archetypes
6.6 Current options

Positive Readers prefer to bury or scatter their loved ones at natural cemeteries. Nowadays, the Netherlands has three cemeteries of this type, and a few will be developed in the next years. But at this time the options are quite limited.

To raise an expressive monument for a deceased, as Positive Poets prefer, is almost never possible. Most cemeteries and crematoria have strict rules about sizes, distances and material. Managers of funerary places want to keep their places neat and tidy, which is limiting personal freedom.

Negative Readers can find their place at old cemeteries in Gothic style. Since a few years, at some old, closed cemeteries it is possible to buy an old grave again, but only if you keep the original monument. The atmosphere stays the same, and the cemetery remains in use, which can finance the maintenance.

For Negative Poets, a funerary place is not enough. You can find their monuments at every cemetery, recognisable by expressive monuments (if allowed) and with a lot of decoration at and around it. In practice, Negative Poets can find their place with the Positive Poets at a remembrance park, but they need also some additional ways of expression outside the funerary place.

At funerary places currently in use, the archetypes are often mixed because there is no choice, which can result in irritation. Mostly this occurs between Readers and Poets, because their way of (re)acting is quite different, and their aesthetical preferences as well. The mix of archetypes also causes a mix of styles, which is not always preferable.
6.7 Conclusion

Funerary places are not only functional places for burial and cremation. The funerary aesthetics are important for the deceased, the relatives and visitors. Based on aesthetical classifications these places are Picturesque, and they can give the possibility for a Sublime experience. At funerary places, there is a distinction between passive, active, positive and negative reacting relatives, with different aesthetical preferences. At contemporary funerary places, these types of people are often mixed, which can result in irritation and a shifting quality of the overall image.

When designing a funerary place these preferences should be taken into account. There should be a focus on the Positive Readers and Positive Poets, because there are few opportunities for them at the contemporary funerary places.
Photo 7.1  Wheelchairs and walkers (rollators) at Rusthof, Amersfoort
7 Wishes and requirements

The content of this chapter is based on the research, described in the previous parts. A program of wishes and requirements is the starting point for any design project. The formulated requirements are necessary to let the design functioning. The wishes are the solutions for the found problems, described in chapter 1. The wishes and requirements are spatially translated into design objectives, described in chapter 8. Preconditions are important as well, they determine if something is possible or allowed regarding the functioning of the design, for example by law.

7.1 Requirements

Entrance
The entrance of the funerary place is visible, findable and reachable for cars, busses, cyclists and walkers. The road is at least 7 meters wide to make passing easy, and to make the entrance recognisable for visitors.

Parking lot
The parking lot can accommodate about 250 cars, which means a surface of about 4000 m². There is also place for bicycles, preferably under a roof. The parking facilities are surrounded with green.

Buildings
The auditorium is an important building for relatives and employees, and has to facilitate both groups. The building offers possibilities for all kind of funeral ceremonies. It contains three separate rooms, which can connected if necessary. The small room has 30 seats, the medium room 70 seats and 50 standing places and the large room 250 seats and 150 standing places. The overall capacity is 650 persons. Privacy within the ceremony is important, a funeral ceremony is an intimate event.
When developing a new funerary place, a crematorium is necessary to make it profitable. Moreover, more than half of the people is cremated instead of buried, so cremation has an important role at contemporary funerary places.
There is also a cafe, where relatives can meet after a funeral, and where other people can drink something after visiting the cemetery. The funerary place needs also a maintenance building, for employees, equipment and management.
Routing
The funerary place has logical routes, marked with signs, and shown at an information panel near the entrance. It makes that people know where they have to go. There is a distinction between primary, secondary and tertiary paths. The buildings are reachable by primary paths, the graves are reachable by secondary and tertiary paths.

Facilities
These facilities are necessary to make the visit of funerary places comfortable and practical, especially for relatives.
- toilets
- benches
- water taps
- trash bins
- vases
- wheel chairs
- chairs
- wheelbarrows
- rakes and brooms
- a covered waiting room

Funerary options
- graves
- urn graves
- urn field
- scattering field
- wall graves

Children
Some separate parts of the funerary place are set up especially for children. Most parents of deceased children prefer to bury them together at a special place. This can be combined with a playground for the remaining siblings.

Religious requirements
- eternal graves (Jews, Muslims)
- orientation (Muslims, Chinese)
- cremation (Hindus, Buddhists)
- flowing water (Hindus)
- sacred ground (Catholics)
- no trees on the graves (Jews)

7.2 Wishes
Offering multiple choices
Due to several societal developments, the demand for multiple options at funerary places is growing. A new funerary place should offer several possibilities for the relatives. A distinction can be made between active or passive; and negative or positive reacting relatives.

Place for (new) funerary rituals
During a mourning process, rituals are very important. A funerary place should support this, and design interventions can stimulate the use of rituals. Especially for cremation ceremonies, where corresponding rituals are still little.

Death visible in daily life
In former times, death was a normal part of life, but today it seems extraordinary. The visibility of death can give relativity to daily life. And the understanding of mourning people can be increased by making death more visible.

People instead of process
Whether a deceased person is buried or cremated, it is still a person. A funeral is about a person, not about the difference in process. A funerary place should offer several possibilities for both burial and cremation ceremonies. But the focus should be on the farewell ritual and the preferences of the relatives. Whether someone will be buried or cremated is less important. This applies as well at the grave fields, where a distinction between graves and urn graves is unnecessary, because it is about a person’s last place, not about the used method.

Inclusion of the landscape
Funerary places should be visible in the landscape, which makes them visible in daily life (see above). The design of funerary places should be based on the existing landscape, because this gives more identity to the place than when a tabula rasa situation is created.
And, the landscape qualities for consolation and contemplation can be used when the landscape is
7.3 Preconditions

In the Netherlands, a law determines rules and regulations around burial and cremation. It is called the ‘Wet op de Lijkbezorging’ which can be translated as ‘Burial and Cremation act’. This law exists since 1869, and has been updated several times.

It contains rules about the treatment of a corpse in an orderly manner when someone has deceased. It contains as well technical instructions for the process of burial and cremation, for example about the ground water level, soil quality, distances between the graves and the temperature of the ovens.

Finally, it contains instructions regarding the environment, clearing of the graves, transport et cetera (Wille, 2004).

When designing a funerary place, all these rules and instructions should be taken into account. The book ‘De laatste tuin’ (The Last Garden) of landscape and cemetery architect Ada Wille (2004) is a good source for this kind of information.

![Image 7.1 Minimal distances between graves (Wille, 2004)](image)
Photo 8.1  Coffin bicycle
8 Conclusion - design objectives

The design objectives are based on the results of the research, they are the ‘spatial translation’ of the wishes and requirements, formulated in chapter 7. The objectives consist of theoretical requirements and landscape requirements, and should be met in the design phase. The distinction between these two types of requirements is sometimes vague, and can be influenced by the (features of) the plan area during the design process.

8.1 Results of research

The answers on the research questions are necessary to formulate the design objectives. The main research question was:

What should be taken into account according to the design of a funerary place in the contemporary Dutch society?

Three sub research questions were formulated to answer this main question. The answers on these sub questions are described below.

How are funerary places used?

Funerary places are used by the deceased, visitors, professionals and mostly by relatives of the deceased. The main function is facilitating the funeral, including the process of burial or cremation. Beside that, funerary places are also important for mourning, performing funerary rituals, remembrance and contemplation. The possibility of performing rituals plays an important role during the mourning process.
How and why did the design and appearance of funerary places change from 1829 till present?
Funerary places can be divided into cemeteries and crematoria: cemeteries are used for burial, crematoria for the incineration of corpses.
From the Middle Ages, burial was the common method, and cremation was prohibited. Since 1829, it was obliged to bury everybody outside the city borders, instead of inside the church. Since then, every municipality had to develop a cemetery.
Every time period has developed its own funerary style. Consecutively, these are Christian, Romantic, Eclectic, Modern, Postmodern and Natural cemeteries. The differences in style and design are caused by several influences: the view on death of that time; the influence of church and religion; the view on nature; and influences of the society.
Differences at the cemetery itself are caused by different religions, different classes, and by later developed extensions.
The most crematoria are developed after 1955, when cremation became legalised. Originally, the design was quite functional, similar to the Modern cemeteries of that time. Later more attention was paid to the emotional side, similar to the Postmodern cemeteries.
When people were buried in the church, death was a part of the daily life. With the development of cemeteries and crematoria, death became invisible. Still, funerary places are hided, and have no connection with the landscape. This strengthens the invisibility, and it hampers the contribution of landscape qualities as consolation and contemplation at funerary places.
From 1829 till present, funerary places were designed in one style and sphere, determined by the client and/or designer. Nowadays, people have and want more choice, the funerary preferences are more diverse, and contemporary funerary places should reflect that.

Can aesthetics and aesthetic theory contribute to (the design of) a funerary place?
From a functional point of view, a funerary place will meet its requirements quickly. But it is more difficult to meet the emotional requirements of the relatives. Traditionally, every time period had its specific funerary style. Differences at the cemetery were determined by religion and class. Nowadays, people are free to choose what they want, religion or class are less important, and the personal preferences of the relatives have much more influence on the contemporary funerary places. These funerary preferences are partly determined by personal background, and partly by the phase of the mourning process where someone is in at the moment of the decease. By using the aesthetical theory of Roncken (2011) the relatives can be divided in four archetypes, based on someone's reaction on a decease. The reaction can be negative or positive; and passive or active, which results in these archetypes: Positive Reader, Positive Poet, Negative Reader and Negative Poet. These four archetypes can be used as target groups while designing a funerary place for the contemporary Dutch society.

8.2 Design objectives

Problems
During the research, the following problems were identified at contemporary funerary places:
- Diversity in preferences: relatives want to choose between different options.
- Decrease of rituals: less use of rituals, while they are important during the mourning process.
- Invisibility of death: death is not visible in daily life.
- Exclusion of the landscape: the qualities of the landscape for consolation and contemplation are often unused.

Wishes
Based on the found problems, the following wishes were formulated:
- Offering multiple choices
- Place for (new) funerary rituals
- Death visible in daily life
- Focus on people instead of process
- Inclusion of the landscape

The formulated wishes can be translated into spatially solutions: design objectives for the design of funerary places in the contemporary Dutch society.
1 Separation
One of the traditional funerary rituals is to bring
the coffin from the church to the cemetery. Due
to secularisation and the increased popularity of
cremation, the use of this ritual has declined. When
the funeral is at a cemetery, there is still a procession
from the auditorium to the grave. But during a
cremation ceremony there is no procession at all:
most of the time the coffin is left behind in the
auditorium. This can give the relatives an unpleasant
feeling, because they are leaving instead of doing
something, which is in fact the essence of a ritual.
By the disassembly of the auditorium and the place
for burial and cremation, this ritual can be (re)
introduced at funerary places. The funeral ceremony
will take place in the auditorium, and subsequently a
procession will lead to the place where the deceased
will be buried or cremated.

2 Combination
Traditionally, funerary places are divided into
cemeteries and crematoria. Cemeteries are used
for burying, and crematoria for cremating. Often,
crematoria and cemeteries are situated next to each
other, but a combination of both options is quite rare
in the Netherlands. Only in Amsterdam, at De Nieuwe
Oosterbegraafplaats, Westgaarde and Zorgvlied, both
cremation and burial is possible at the same location.
A funerary ceremony and the location for this should
be based on the person, not on the process that is
preferred. Funerary places should offer both options
at the same place. And also other possibilities, as
lyophilisisation (freeze drying) should be available.

3 Inclusion of the landscape
The landscape at and around funerary places can be
used in three different ways:

Use of the existing landscape
Traditional cemeteries are often created in a kind of
tabula rasa situation. By using the existing landscape
for the design, it is possible to give a funerary place
its own specific identity. Factors can for example be:
relief, green, history, water, and everything else that
is characteristic for the landscape of that place.

Photo 8.2   Use of the existing landscape (DriehuisWesterveld, Velsen)

Make funerary places part of the landscape
Funerary places should be more visible in the
landscape, because death is part of life. Hiding
does not let the death disappear. And remarking a
funerary place can be a source of perspective and
contemplation.

Photo 8.3   Funerary place as part of the landscape
(Oosterdreef, Almere)
Make landscape part of funerary places
Within an emotional situation, nature can give consolation. There is so much beauty beside the sorrow. Auditoria should have windows, which make it possible to look outside. And the landscape outside the borders of a funerary place can be a good contribution to the design.

![Photo 8.4 Landscape part of the funerary place (Laarmanshoek, Ommen)](image)

5 Grave orientation
The graves should be situated in an East, West, South or in-between direction for two reasons. The first is related to the sun: when a grave is directed northwards, a monument provides shade on the grave, which is undesirable.
The second one is related to the Islam, which requires a certain direction of the graves: deceased are buried on their right side, and their should be directed to Makkah. In the Netherlands the angle is about 127 degrees, a Southeast direction.

![Image 8.1 Grave orientation](image)

4 Offering multiple options
By using the four aesthetical archetypes of Roncken (2011) as target groups, it is possible to meet the diverse demands of the contemporary society. Funerary preferences are merely no longer based on religion or class, but on aesthetical preferences. By offering several options, relatives get the possibility to choose. And by facilitating the experience of the Sublime, a new dimension is added to the landscape of funerary places.

<table>
<thead>
<tr>
<th></th>
<th>Ceremony</th>
<th>Procession</th>
<th>Funerary landscape</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive reader</td>
<td>Memorial</td>
<td>Bringing the body back to nature</td>
<td>Positive immersion</td>
</tr>
<tr>
<td>Positive poet</td>
<td>Tribute</td>
<td>Bringing the loved one to the last place</td>
<td>Positive contribution</td>
</tr>
<tr>
<td>Negative reader</td>
<td>Sadness &amp; sorrow</td>
<td>Inevitable last journey</td>
<td>Negative immersion</td>
</tr>
<tr>
<td>Negative poet</td>
<td>Anger &amp; grief</td>
<td>Protest march</td>
<td>Negative contribution</td>
</tr>
</tbody>
</table>

Scheme 8.2 Funerary preferences archetypes
Part two - research by design
Photo 9.1  Lemelerberg in wintertime
9 Plan area

The plan area is situated at and in between the Eelerberg and Lemelerberg, the two northern hills of the Sallandse Heuvelrug.

The Lemelerberg is the highest point in the province of Overijssel, with a lot of relief compared to the rest of the Netherlands. It is a challenge to design with this relief, especially because the surroundings of this area are quite flat.

Furthermore, the area contains a lot of different landscape types. There are forests, heather fields, pastures, blowing sand dunes, river valleys and canals. The diversity makes the landscape quite interesting.

This region is situated nearby the village where I grew up, Dalfsen. I am familiar with the area, and I wanted to investigate it is possible to situate a nice and well-functioning funerary place here.
Map 9.2  Province of Overijssel

Map 9.3  Relief of plan area
Map 9.4  Topography of plan area
9.1 Landscape

According to the well-known triplex model (Kerkstra et al., 1976), the appearance of the landscape is influenced by three factors: abiotic, biotic and anthropogenic factors. Abiotic are the factors like geomorphology, hydrology and soil condition. Biotic factors are the flora and fauna living on the abiotic surface. And anthropogenic factors are the influences of people who are living on the landscape and are using it. Below a short description of the abiotic, biotic and anthropogenic factors that have contributed to the contemporary landscape of the plan area. This is mainly based on the situation from 1850 till now, because older maps are not available.

Abiotic

The area consists of two ‘hills’ with a kind of valley (the Veld) in between. These hills are lateral moraines, formed by glaciers during the penultimate ice age Saalien, about 200,000 years ago. Comparing the water, soil and geomorphology maps makes the relationship between these factors visible.
Biotic

From 1850 till now, the biotic layer is heavily influenced by man. When agriculture emerged in this area, the lateral moraines here were used by farmers letting their sheep graze. The land was covered with dry heather, and at certain places sand dunes appear due to intensive grazing. Sods of heather combined with sheep manure was used to fertilise the fields at the border of the moraines. The Veld was impassable and unusable for agriculture, because it was too wet. At the beginning of the twentieth century, the farmers started using artificial fertiliser, which made the heather fields redundant for its agricultural function. The hills were planted with trees for forestry and recreation, and the heather fields became smaller. The Veld was cultivated, a combination of fertilising and draining makes it suitable for pastures (Landschap Overijssel, 2006).

Nowadays, the Eelerberg is completely covered with forest. The Lemelerberg is partly covered, in combination with heather. The Veld has still an agricultural function and the meadows are mainly used for cattle breeding.
Anthropogenic

In the last 150 years, people added much to this landscape. Important is the construction of the Overijssels Kanaal (1851-1855), a canal between Zwolle and Vroomshoop which facilitated the transport of the textile industry in Twente. The canal was dug between the Lemelerberg and the Eelerberg and intersects the area, and the adjacent road does as well (Smolders, 1989). The ditch from the canal to the Eelerberg is connected with the development of the estate here.

The amount of roads increased tremendously. Remarkable are the roads in the Veld, laid out during the cultivation period around 1900. And the N347 and N348, regional roads which are crossing the landscape are important because they connect the area with other regions. Beside this, during the last decades a lot of recreational routes are laid out at the hills.

The village Lemele has grown from a few houses to a little village with 1200 inhabitants, which was stimulated by the construction of the Overijssels Kanaal. The name Lemele originates from the Dutch word ‘leem’, which refers to the loam which was mined around the lateral moraine.
9.2 Eelerberg

For centuries, the heather fields of the Eelerberg were used by farmers who lived nearby. In 1847 Hendrik Meinesz, a wealthy tax inspector, started with buying plots here. He built a farm, used the parcels for agriculture, and after some years he noticed that the soil was too poor. He ordered to dig out the Boksloot (a ditch for little boats) from the Overijssels Kanaal to the Eelerberg, to facilitate transport of manure and organic waste to fertilise the plots. After another few years, the focus was shifting from agriculture to forestry, due to problems of profitability.

In 1864, Hendrik’s son Sjoerd Anne Vening Meinisz became owner of the Eelerberg. He developed an estate with a park, lanes, a villa with a coach house and some associated buildings. The forest around is a combination of deciduous and coniferous trees, which reached its current surface area at 1882, which clearly visible when comparing the maps of 1850 and 1900.

In 1951, the family sold the estate and forests to Staatsbosbeheer, the State Forestry.

Nowadays, the Eelerberg is part of the Nation Park Sallandse Heuvelrug, the main function is recreation and nature development. A lot of paths are laid out at and around the estate (Van Laar, 1993).
9.3 Veld

The Veld consists of a lot of pastures, some straight cultivation roads and the intersecting Overijssels Kanaal. At the map of +/- 1850 the canal is already drawn. It was not exactly finished at this time, it was dug out between 1851 and 1853. There are also some new roads, but no buildings were built yet.

Between 1850 and 1900 a lot has changed. More roads appeared, pastures were cultivated, wooded banks were planted between the parcels, and a lot of houses and farms were built next and nearby the canal. A functional agricultural pattern was spread out over the landscape.

Between 1900 and now, the changes are less remarkable. Some more houses were built and all the wet parcels became cultivated. Due to a land consolidation, the parcels became larger and some planted parcel borders disappeared. Nowadays, the landscape is flat, wide and open, and the roads are planted with oaks. The area is mainly in use for agriculture.
9.4 Overijssels Kanaal
This canal is a connection between Zwolle and Vroomshoop. At Zwolle, the river IJssel can be reached, and at Vroomshoop the waterway was connected to a canal towards Coevorden and Almelo. This connection was created to facilitate the transport of the textile industry in Twente, which developed during the Industrial Revolution. The canal was dug out between 1851 and 1853, all by men. After over 100 years of use, the canal was closed in 1964. Nowadays, the canal is only used for water drainage and boating with canoes, and most bridges are replaced by culverts (Smolders, 1989).

Photo 9.8 Overijssels Kanaal

9.5 Lemelerberg
When the agricultural function disappeared, the fields of the Lemelerberg were sold to different land owners, who used these areas for hunting and recreation. They were rich families from Twente, who acquired their wealth in the textile industry. The southern part was owned by family Ledeboer, the middle part by family Van Heek, and the northern part by family Van Wulft-Palthe. They started with planting trees, especially coniferous species, which were used for forestry and were preventing sand drifts. And they laid out several hiking routes through the forest and heather fields.

In the second part of the twentieth century, when the textile industry was shrinking, the landowners could not effort it anymore to keep and maintain their properties. Part by part, the whole Lemelerberg has been sold to Landschap Overijssel, a non-profit organisation for nature and landscape in the province of Overijssel.

Due to a gradient from high to low, and from dry to wet, the Lemelerberg contains more than 40 different types of vegetation. The most important are the Juniper thicket (83 hectares), poor heather grassland, dry and wet heather vegetations and drift-sand vegetations. The Junipers were also planted to prevent sand drifts.

Special animal types are the sand lizard, night swallow and some different types of dragonflies. The heather fields are managed with sheep, which prevents the heather from afforestation. And parts of the forests are cut, to increase the total heather area. Nowadays, the main aim of Landschap Overijssel is to focus on the restoration, conservation and optimisation of natural values. They take the image of 1900 as source of inspiration (Landschap Overijssel, 2006).

Because of the variety in the landscape, the Lemelerberg is quite attractive for recreation as well. The area has a supra-regional function for hiking, cycling, horse riding and ATB. A restaurant is placed on the road that crosses the hill. While recreation is important, nature seems the most important characteristic of the area.
Map 9.13  The Lemelerberg

Photo 9.10  Forest Lemelerberg

Photo 9.11  Heather Lemelerberg
9.6 Funerary places in the region
In the Netherlands, every city or village has its own cemetery. In total, there are more than 4000 Dutch cemeteries. Crematoria are less common, especially in this region. At the map below, the crematoria near by the plan area are circled. The crematorium in Hoogeveen will be developed in the near future. Because the cremation rate is still increasing, a new crematorium at the plan area is justifiable.
10 Model development

After the analysis of the plan area, a model study is done to identify the best location for a funerary place. Using this method has several benefits, beside finding a good location. It helps to understand the landscape, and it helps to define what is really important for a funerary place. It is a research-by-design method, which means that designing is used for gathering usefull information.

10.1 Method
There are four different ways to find suitable locations. The first is the traditional way, which is been taught in the Wageningen University Landscape Architecture program. It means, that the designer is looking for structures in the landscape, where the design can fit in. By this, the existing landscape can be strengthened. The existing landforms are used, and ecology and cultural history are important factors to take into account.

The second manner is to enlarge the necessary surface of the design. With this enlargement, more landscape types can be involved within one design.

The third way is to look at long lines in the landscape. This can for example be roads, water ways or long landscape elements like dikes.

The fourth method is to look for connections between the design and infrastructure or architecture. Villages, cross roads and other (infrastructural) nodes can be used for this.

Developed designs
By using this method, I have developed 11 design models at 11 different locations. Of these 11, 5 are designed a second time. This chapter gives a short description of every model.
10.2 Traditional

- use of existing structures
- strengthen the landscape
- use the relief
- keep ecology and cultural history

Possible locations
- Lage Veld (Inkepingen)
- Contrast
- Archemerberg
- Archem
- Lemele
- Lemelerberg
- Park 1813

10.2.1 Park 1813

- use of the existing path structure of an old park
- use of existing green
- formal sphere
- graves in the forest
10.2.2 Archem – ‘burying on an estate’

- several spheres: forest, es, meadow, stream valley
- characteristic buildings
- restore historical lines
- economical support of the estate
10.2.3 Lage Veld

- graves in forest strips and heather strips
- view over the open landscape
- routes contrary to the structure
- variety between open and enclosed
- contemporary contribution to the area
- combination of burying and nature production
10.3 Enlargement

- use of more than one landscape type

Possible locations
- Moraine – Stream valley – Moraine
- Moraine – Stream valley – Sandy ridge
- Moraine – Meadows
- Moraine – Es – Stream valley
- Archem – Eerde
- Es – Stream valley – Es
- Moraine – Meadows – Moraine

10.3.1 Es – Stream valley – Es
‘burying on the es’

- every es has its own little cemetery
- emphasized with several trees
- ‘burying within the landscape’
- makes death visible in the landscape
10.3.2 Archem – Eerde

- two estates connected
- experience of the stream valley
- history as inspiration
- a formal entrance at Eerde
- Archem, the informal part
- several routes
- spread burial locations
10.3.3 Moraine – Meadows – Moraine ‘dead road’

- two cemeteries
- visible from long distance
- panoramic view
- use of the existing relief
- symbolism
- rituals

First design
- connection between two moraines, visible in the landscape
- Eelerberg: ceremony
- Lemelerberg: burying / ash disposal
- Dead road: ritual route from south to north

Re-design
- ritual and ceremonial route from Eelerberg to Lemelerberg
- Eelerberg: auditorium, ceremony, shadow
- Overijssels Kanaal: the lowest point, crossing the Styx
- Lemelerberg: cemetery, sun
- Design: location auditorium, route, cemetery, rituals
10.4 Long lines

Use the long lines in the landscape

Possible locations
- Length moraine
- Contour moraine
- Regge valley
- Overijssels Kanaal
- N348 (provincial road)
- Sandy ridges along the river Vecht
- N347 (provincial road)

10.4.1 Length and contour moraine
‘around and on the moraine’

- views
- a different sphere on each location, determined by the landscape
- the Lemelerberg as park
- graves on viewpoints
10.4.2 N347 – ‘new burial hills’

Originally, burial hills were located next to important roads

First design
- next to continuous roads
- next to N-roads is difficult because of the speed of the traffic

Re-design
- especially a concept / design principle / starting point
- not connected to a specific landscape, just to roads
- based on prehistoric burial hills, and mausoleums in Athens
- death visible in daily life
- design: central services, ceremony place
10.5 Connection with infrastructure and architecture

Possible locations
- Nieuwe Brug
- Dalmsholte
- Lemelerberg
- Lemele
- South side Lemele
- Hankate

Image 10.16 Possible locations ‘infrastructure-architectures

10.5.1 Nieuwe Brug

- recreation node
- ground water level VI
- cemetery with water

Image 10.17 Nieuwe Brug
10.5.2 Lemele

First design
- cemetery next to the village
- cemetery is growing in the direction of the village, instead of reverse

Re-design
- Kerkweg as majestic entrance
- auditorium with view at the es
- graves in forest and forest border
- connected routes
- visible in daily life, but not too direct
10.5.3 Hankate – ‘cemetery island’
- junction of river Regge and Overijssels Kanaal
- formal structure, caused by the canals

First design
- cemetery island
- contrast between open and enclosed
- impressive entrance
- canals

Re-design
- chance for classic cemetery outside the village, with
  a cause in the landscape
- in history: Havezat the Rhaan
10.6 Designing with relief

The plan area contains a lot of relief. I have visited Begraafplaats Heiderust in Rheden, which is situated a place with the same kind of relief. The design of this cemetery looks like a classic romantic cemetery. In this kind of landscape, curving paths are the best choice. It makes walking comfortable, and provides the best views.

Photo 10.1 Heiderust, Rheden

Photo 10.2 Heiderust, Rheden

Map 10.1 Heiderust, Rheden
Image 10.22  Map of Heiderust placed on map with relief
Image 10.23  Design study of possible paths at the relief of the Lemelerberg
10.7 Conclusion - chosen concept

Using this model-making method was a great help in formulating the design objectives (see 8.2). Research and design are combined in a cyclical process, and have influenced each other (see Introduction). At the end, the conclusion is that the following design objectives should be achieved when designing a new funerary place for the contemporary Dutch society:

- Separation (of ceremony and burial/cremation)
- Combination (of burial and cremation)
- Inclusion of the landscape
  - use of existing landscape
  - funerary place as part of the landscape
  - landscape as part of the funerary place
- Grave orientation (East – South – West)
- Offer multiple options

From the 11 models, 10 are rejected for several reasons. Some of them were not exiting enough, especially the ones from the traditional category. Some of the models had not enough connection with the surrounding landscape, for example the design for Hankate. And some were too extreme in my point of view, like the cemetery nearby Lemele, and the burial hills along the road. Death should be visible in daily life, but not too near.

To achieve the formulated design objectives, the model for an extended funerary place between the two moraines (10.3.3) is the best to achieve the formulated design objectives. How and why is explained in the following chapter (11.1).
11 Design

My aim is to design a funerary place that meets the requirements of the contemporary Dutch society. There is no tabula rasa situation, so the requirements should be fit in the existing landscape of the plan area. It is a challenge to combine all these factors in one design.

11.1 Concept

Instead of one place, this funerary place is divided in two parts, connected with a route. At the southern location, on the edge of the Eelerberg, the auditorium for the funeral ceremony is situated. After the ceremony, the relatives will take a procession towards the northern location, the Lemelerberg. The route is about 4 kilometres, and can be followed by walking, driving or boating. By this route, the original ritual of a funeral procession from church to cemetery, from bringing someone away, is reintroduced and emphasised. Experiencing the transition from the enclosed start of the route at the Boksloot to the open landscape in between the two moraines, can give people a feeling of Sublimity. The same applies to the visibility of death in the daily life landscape. The final destination of the route, the Lemelerberg is the place for burial and cremation.

Due to differences in height, both locations are visible from the other side. From the auditorium at the Eelerberg there is a panoramic view on the last place, the Lemelerberg. And from a platform at the Lemelerberg, you can look back and see the auditorium across.

The position of the sun gives some extra symbolism. The auditorium is located at the northern side of the moraine, the shadow side. The actual cemetery and crematorium are situated at the southern side of the moraine, the sunny side. Because of this, relatives are walking from the darkness of the Eelerberg into the light of the Lemelerberg.

Image 11.1 Relation concept to the sun
Image 11.2 Concept
Map 11.1 Concept
11.2 Plan
At this map, the three parts of the new funerary place are displayed. In the south, the auditorium is situated at the Eelerberg. The auditorium can be reached by the Steenhaarweg and the Nieuwe Twentseweg. From the auditorium, the funerary route is starting at the Boksloot. This ditch is followed till the end, where it flows into the Overijssels Kanaal. The route follows the canal for about 1300 meters, and then changes direction towards the Lemelerberg between two small canals. At the Lemelerberg, cremation ovens, graves and ash facilities are located.
11.3 Eelerberg

The auditorium is situated at the edge of the estate, where some forest has been removed to create the best location. The dimensions of this place are based on the surroundings of the adjacent villa. There is a parking lot for about 250 cars, placed nearby the road. From the parking a straight path leads to the auditorium. The front of this building is closed, and it is enclosed by green. By entering the building, which is heightened from the ground, visitors will experience the wide and open landscape between the Eelerberg and the Lemelerberg. A good way of including the landscape, one of the design objectives. The building will be constructed from concrete, wood and glass, and contains several rooms to serve different groups.
Photo 11.1   Reference image front auditorium

Photo 11.2   Reference image interior auditorium

Photo 11.3   Reference image backside auditorium
Image 11.3  Scale model Eelerberg - southern direction

Image 11.4  Scale model Eelerberg - southern direction
Image 11.5  Scale model Eelerberg - northern direction
11.4 Route
The route leads from the auditorium at the Eelerberg to the actual funerary place at the Lemelerberg. It is following a route of water, and can be taken by boat. But walking, or driving by car is possible as well. For this, the existing paths are used, and at some places a new path will be laid out.

The route starts at the Boksloot, nearby the auditorium. This ditch originally is dug out for bringing manure to the estate Eelerberg to fertilise the agricultural fields here. Nowadays, one part of this ditch is unused and another part is used for the water management of the region. A new function as funerary route can easily be added.

After 2000 meters, the Boksloot almost reaches the Overijssels kanaal, but first it makes an angle in Northeast direction. A detour, which walkers can avoid by taking the short cut towards the canal. Along the Overijssels kanaal a new path is made in the slope of the canal, at the quiet side where few cars are passing. After the crossroad, the route is changing into northwards direction, towards the Lemelerberg.

Two new ditches are dug out here, a narrow and a wider one, and a small dike is constructed in between. A curving path through forest and heather gives access to the Lemelerberg itself.

The cross-sections at the next pages give an impression of this route.

Image 11.6 Location of cross-sections

Photo 11.4 Mourning boat

Image 11.7 Funeral procession
Photo 11.5   Boksloot in the forest

Photo 11.6   Boksloot in the open
Image 11.8  Route in the forest

Image 11.9  Route along the Boksloot
Image 11.10 Route along the Overijssels Kanaal

Image 11.11 Route towards Lemelerberg
11.5 Lemelerberg

The southern part of this moraine accommodates the end of a funeral procession: the burial or cremation. The curving entrance path ends at a large platform with a panoramic view over the surrounding landscape. At the horizon the auditorium at the Eelerberg is visible. From the platform, relatives can bring the deceased to their grave or the crematorium. After this last act, they can meet each other at a café which is placed next to the platform. The relatives of cremated people can receive the ashes four weeks after the cremation. They can bury this in an grave, place it in an urn garden or scatter it out. Currently, the Lemelerberg is a nature area. The management of nature areas is expensive, and there is an ongoing discussion in the Netherlands about the affordability of this. A mixed function of nature conservation and extensive burial can be a good solution for this area (Vollmer & Partners, 2011).

Roads

There are three types of roads at the south side of the Lemelerberg. A cross of two primary roads makes the area reachable for cars and trucks, and all the buildings are situated along these roads. These roads are already present at the existing landscape. The secondary roads are following the relief of this area, which makes walking here easy, and are wide enough for one hearse (car for corpses). The tertiary paths are hiking paths, curving upwards to the highest point, curling around the existing vegetation of Pines and Junipers. By this paths, the graves are reachable, located preferably not more than 15 metres from a path. With a desired density of approximately 150 graves per hectare in a nature area (De Molenaar, 2009), the paths should not be more than 30 meters apart. The small paths, drawn on the map, are just a suggestion. Actually, they should be plotted in the field to determine the exact location. The paths are connected with existing routes to make the area accessible from the surrounding landscape. Visitors of the funerary place can make a walk on the Lemelerberg and Archemerberg, and visitors of this nature area can visit the funerary place easily.

Buildings

There are four buildings on this part of the Lemelerberg. The first is the cafe, situated at the panorama platform. A multifunctional building, with several rooms for several groups. Beside this, visitors of the funerary place can drink here something as well. The second building is the crematorium, located at the highest point, enclosed by forest. A special place for the relatives, not directly visible by visitors. There is also a Swiss chalet, built by the family who owned this land before. This little house has a magnificent view over the heather fields, and can be used as an extra location of the cafe. The last building is an original sheepfold, which can be used for the sheep, responsible for the maintenance of the heather.

Vegetation

Most of the existing forest is preserved. At the west side, some forest strips are developed to offer extra possibilities for burial in or next to the wood. The present vegetation of Junipers is quite extraordinary for the Netherlands, so that should be preserved as well. The heather fields can be maintained by letting sheep graze here.
Map 11.5 Elements Lemelerberg

1 arrival
2 entrance
3 parking lot
4 platform
5 cafe
6 primary path
7 secondary path
8 tertiary path
9 Swiss chalet
10 sheep fold
11 crematorium
12 forest strips
13 Junipers
14 heather
15 sand pit
Map 11.7   Existing paths Lemelerberg

Map 11.8   New paths Lemelerberg

Map 11.9   Existing forest Lemelerberg
Image 11.12  New and existing green Lemelerberg
Image 11.13  Scale model Lemelerberg - north-east direction

Image 11.14  Scale model Lemelerberg - north-west direction
11.6 From Positive Reader to Positive Poet

Based on the theory of Roncken (2011), there are four archetypes with different aesthetical preferences at contemporary funerary places: Positive Readers, Positive Poets, Negative Readers and Negative Poets. For Negatives there are several options, but the possibilities for Positives are limited nowadays (see 6.6). Therefore, I have chosen to focus my design on the Positive Readers and Positive Poets.

Positive Reader

A Positive Reader accepts the occurrence of the decease, and is able to see something positive in the negative of a loss. This is mainly related to the death of old(er) people, when life naturally has come to an end. For them, the funeral ceremony is often a memorial of life. Positive Readers prefer a positive landscape where the individual is subordinate to its surroundings, which makes it possible to immerse in the landscape and in the experience. For them, death means the return to the circle of life. That is why they often choose for a natural cemetery, where you can give someone back to nature. Readers are often introvert, and literally and figuratively the graves require little attention as too.

Positive poet

A Positive Poet accepts the death as well, but wants to keep the memory alive. This is often visible when a well-known person has died. People are sad about the loss, and they want to honour their lost one, which makes the memorial often a tribute to someone’s life and career. Positive Readers prefer a positive landscape where the individual is subordinate to its surroundings, which makes it possible to react on the landscape and the experience, by adding something (positive) to it. Poets are extraverts, and the graves requires attention as well. They have a preference for expressive monuments, the deceased is unique and the monument should express this. The landscape of a funerary place should be able to absorb and counterbalance this, which is possible in a kind of remembrance park.
The actual design does not have a strict distinction between the Readers and Poets. This funerary place offers a lot of different possibilities, where people can choose between. The options are based on a gradient from Reader to Poet.

The actual location of the graves is determined by the relatives self.
Natural graves
Deceased or relatives who prefer the sphere of a natural cemetery, can choose a place in the heather fields (open) or the forest parts (enclosed). A distinction is based on the type of monuments. Areas where monuments are not used are placed at the borders of the cemetery. By this, a gradual transition is created between the funerary place and the rest of the Lemelerberg. More to the middle of the area, temporary monuments will be used. They can be made by unprocessed timber or by planting plants or a tree. In time, the graves will become invisible. At the centre, permanent monuments can be placed, made of unpolished natural stone.
At a natural cemetery, the spreading of the graves is important to reduce the disturbing effect (De Molenaar, 2009). An exception can be made for children, because most parents prefer to bury them not separate but together. Per children’s place, one theme can be chosen to guarantee visual stability.

Photo 11.9  Heather field at Lemelerberg
Photo 11.10  Heather field with Junipers

Photo 11.11  Forest at Lemelerberg
Photo 11.12   Monument of wood

Photo 11.13   Grave with moss

Photo 11.14   Monument of stone
Burial mounds
Based on the prehistoric practice, burial mounds can be build, both for individuals (small) and groups (larger). Exact locations should be determined in the landscape. The mounds are a monument by itself, so extra decoration is not desirable.

Burial chambers
The burial chambers are situated in the forest strips at the west side of the Lemelerberg. There are chambers in the strip and at the edges. Within these ‘rooms’, relatives can do and place what they want to express their feeling. The influence of striking monuments will absorbed by the green walls.
A chamber can be shared by people who do not know each other, but with a similar taste. Then one style of monuments can be applied, for example of glass, bronze, Belgian bluestone, a romantic style, statues, temples, everything is possible.
A chamber can also be used by a group of relatives, for example family, friends, children or people with the same religion. They can have their space the way they want.
The burial chambers can also be used for individuals who wants or deserves their own special place. Especially suitable for those who are well-known and/ or played an important role in the society. Or for the Negative Poets, who can express their (negative) feelings here without influencing the whole funerary place.
Wall graves
As addition, wall graves can be realised in the sand pit at the southern edge of the Lemelerberg. This will only be done if there are people who wants this. Because a wall of graves where the most are empty looks very desolate.

Scattering fields
Scattering out ashes is possible in the whole area. Placing a monument here is not allowed. Scattering out is a symbol of giving back to nature, and a monument does not fit within this symbolism. If relatives want to raise a monument, they can choose one of the other options at this funerary place.

Urn walls
There are no urn walls at this funerary place. To my opinion, urn walls often have no connection with the surrounding landscape. If fact, it is a wall of personal monuments, which can be easily created in a building, or at home. But, if relatives want to place an urn in an urn wall at this funerary place, in can be created in combination with the wall graves in the sand pit.
12 Conclusion - design

The design phase of this thesis started with an analysis of the plan area, and a subsequent model study to find the best location to achieve the formulated design objectives. The chosen model, a funerary place divided in two parts, seemed the best solution. But, was it possible to achieve the design objectives in this concept?

Separation of ceremony and burial or cremation
The funeral ceremony takes place at the Eelerberg, while the burial or cremation takes place at the Lemelerberg. In this design, both acts are clearly separated. And by this separation, the ritual of bringing someone away is (re)introduced.

Combination of burial and cremation
At the Lemelerberg, burial and cremation practices are combined. Relatives can choose for this location, whether the deceased will be buried or cremated. Differences are determined by personal choices, not because of the chosen method.

Use of existing landscape
The existing landscape is used for the entire design. In fact, the present relief is the basis for the whole concept. The locations of the main buildings are emphasising this. And by following the route from the Eelerberg to the Lemelerberg, the landscape of the plan area can really be experienced.

Funerary place as part of the landscape
Several parts of the new funerary place are visible in the landscape. The auditorium at the Eelerberg is a high building visible from a long distance. This applies as well for the platform and cafe at the Lemelerberg. A funerary procession can be seen at the canals or roads between the two locations. And the graves at the Lemelerberg are part of a public accessible nature area. This makes the funerary place a part of daily life in the plan area.

Landscape as part of the funerary place
The landscape is in several ways part of the funerary place. The auditorium gives a panoramic view over the landscape. The route between the Eelerberg and the Lemelerberg leads through the landscape. And at the Lemelerberg, in fact the landscape itself is the funerary place.
Grave orientation (East – South – West)
People are free to choose the place and direction of a grave, so a direction to Makkah is always possible. And with the orientation on the south side of the Lemelerberg, it is always possible to direct a grave to the sun.

Offer multiple options at funerary places
According to the theory of the modern Sublime (Roncken, 2011), there are four different archetypes. Before the design process, it was my aim make my design for all these archetypes. During the design phase, I realised that it would not lead to the best result. I decided to focus on the Positives. This does not mean that it is not possible to design for the Negatives, but it was difficult to combine this in one concept.

Based on this design, it can be concluded that it is possible to achieve almost all the formulated design objectives in this specific plan area. But I am aware that I have worked in an idealised situation. Is it also possible to achieve these design objectives with less ideal circumstances? I will discuss this in Chapter 13: Discussion.
Part three - discussion
13 Discussion

13.1 Design principles
These design principles are based on the design objectives, formulated in Part one and applied in Part two. These design principles could help people who want to design a funerary place at the present time. But are they generally applicable?

Separation
With this principle, the place of the ceremony and the place for burial or cremation are separated. This gives the opportunity to have a procession after the ceremony, a mourning ritual. At existing cemeteries, there is always a (small) walk to the grave, but at contemporary crematoria this is hardly possible. In my design, this separation is exaggerated, to express the transition from life to death. But it would be a good idea anyway, to place the cremation ovens at a certain distance from the auditorium, and to introduce the ritual of bringing away in the cremation ceremony as well.

Combination
Apart from three exceptions in Amsterdam (De Nieuwe Oosterbegraafplaats, Westgaarde and Zorgvlied), auditoria from cemeteries and crematoria are always separated from each other. A distinction purely based on the process, not on people. A funeral symbolises the transition from life to death, the process is less relevant. A funerary place is the last place for deceased, whether they are buried or cremated. When designing a new funerary place, one auditorium should be created for both burial and cremation ceremonies.

Use of the existing landscape
Traditional cemeteries are often created in a kind of tabula rasa situation. By using the existing landscape as basis for the design, it is possible to give a funerary place its own specific identity. Factors can for example be: relief, green, history, water, and everything else that is characteristic for the landscape of that place.

Funerary places as part of the landscape
Funerary places should be more visible in the landscape, because death is part of life. Hiding does not let the death disappear. And remarking a funerary place can be a source of perspective and contemplation.
Landscape as part of funerary places
Within an emotional situation, nature can give consolation. There is so much beauty beside the sorrow. Auditoria should have windows, which make it possible to look outside. And the landscape outside the borders of a funerary place can be a good contribution to the design.

Grave orientation
The graves should be situated in an East, West, South or in-between direction for two reasons. The first is related to the sun: when a grave is directed northwards, a monument provides shade on the grave, which is undesirable. The second one is related to the Islam, which requires a certain direction of the graves: deceased are buried on their right side, and their face should be directed to Makkah. In the Netherlands the angle is about 127 degrees in Southeast direction.

Offer multiple options
By using the four aesthetical archetypes of Roncken (2011) as target groups, it is possible to meet the diverse demands of the contemporary society. Funerary preferences are merely no longer based on religion or class, but on aesthetical preferences. By offering several options, relatives get the possibility to choose. And by facilitating the experience of the Sublime, a new dimension is added to the landscape of funerary places.

Discussion
Funerary places are not really dynamic. Of course, every day or week, people are buried here. But most graves stay closed for 20 or 30 years, and older graves sometimes forever. This makes it difficult to realise changes at existing cemeteries. Especially when the rest periods of graves at one field are different, for example 10 versus 30 years. But because of this slow ‘metabolism’, funerary places often became a monument of a certain period. Every important style of the last 150 years is visible at the cemeteries of that time, in fact they can function as library or museum. Due to the slow changes, the formulated design principles are mainly applicable at new funerary places or at the extensions of existing cemeteries. These principles resemble the requirements of the individualised and diversified contemporary Dutch society. By using these principles, a design can be made that meets the requirements of this time.
13.2 Recommendations

The modern Sublime
Soon, Paul Roncken will introduce his new aesthetical theory, the modern Sublime (2011). What I have used from this theory, is the difference in reaction between people on certain occurrences. Difficult, because this theory only describes and explains the differences between reactions. It does not give any design tools, I developed them myself, in consultation with Paul. The assumption is, that someone’s reaction determines someone aesthetical preferences. But there remain some questions. Can a decease be experienced as Sublime? Determines someone’s phase in the mourning process really the reaction on a decease. Determines a reaction someone’s aesthetical preferences? And can you use these preferences as design tool? To come from research to design, I made some assumptions. It would be interesting to investigate and test if this assumptions also can be used for other design assignments. Perhaps an idea for the thesis of another landscape architecture student.

Contemporary funerary places
During my thesis, I visited a lot of cemeteries and crematoria, and I spoke with a lot of people about it. Most cemeteries are owned by municipalities, and most crematoria by funeral care companies. Commercial premises became more important during the last decades. Comprehensible, because municipalities do not want to lose money on their cemeteries, and funeral care companies have to make profit on their business. But sometimes this results in funerary places where space and money plays a bigger role than place and emotion. Realising where the relatives of a deceased are going through during a mourning process is very important for the design of funerary places. I have seen the graves of Positive Readers, who want to immerse in the landscape and the experience. And I have seen the graves of Positive Poets, with expressive memories of the deceased. These types are so different, why should they share the same place, only because they are deceased in the same period? To offer a suitable place for everyone should be the starting point for the contemporary funerary places in the Netherlands. And of course, not everything has to be realised at every cemetry or crematorium. But, to my opinion, the possibility to choose between several options should be realised in every region.

Plan area
The plan area has a varied landscape with a rich history. A lot has changed during the last 150 years, but today it seems a little bit sleepy. Especially on the Lemelerberg, where the owner and manager wants to reconstruct the situation of 1900 because of natural and cultural-historical reasons. My design is using the possibilities of the entire landscape, from south to north. But it is not extreme striking, I have used the qualities and features of the existing landscape. I know that my plan is fictive and magnified compared to contemporary funerary places. But I also know, that if this plan is implemented, it will be a good addition to the plan area. The funerary place can have a regional function, like some well-known Dutch cemeteries like Zorgvlied already have. And by combining nature with funerary functions, the costs of the maintenance can be paid by selling graves in the nature area.
13.3 Evaluation

Process
From the start of my thesis, I knew that I wanted to design a cemetery. Most theses start with a problem (sea level rise; climate change) or a plan area (a lake, a river delta), but I started with a subject: cemeteries. During my thesis, I both identified the current problems and developments; and I did a model study to find the right location for my design. Beside this, I did some theoretical study to find the link between emotion and design, and I visited more than 40 cemeteries and crematoria. All this work together resulted in a comprehensive thesis. For me is Part one: context a good foundation for Part two: research by design. But it took a lot of time, instead of 6.

In the beginning, I had no idea where I would end up, I think a problem that often occurs by students who working on their thesis. I wanted to do and to know everything, to be as complete as possible. Of course, this is impossible. By defining more strict in the beginning what a exactly was going to do, I think that I could have saved some time. But it stays difficult in the field of landscape architecture, between research and design.

Research and design
During my BSc and MSc, I learned a lot about the landscape, and all the contributing factors. Doing research, finding causes and consequences, and describing this in a comprehensible way is something I have internalised during the years. What I also learned, was to use all this practical and factual information when making a design. Making an analysis; defining the problems; formulating solutions; combining these solutions spatially in a concept; and making a final design. Often it was not as simple as described. But, within a MSc thesis, you have to use some design theories to make a connection between the results of the research and the design. This step, the synthesis, was new for me, and difficult to reach.

Design
From the beginning, I felt intuitively that funerary places should offer more possibilities where relatives can choose from. But this starting point did not help me in the design. After a period of orientation and reference studies, I started with designing, guided by Paul. His advice was to start with a model study, because it helps to find a location, but also by defining what a new funerary place exactly needs. Unconsciously, I already made a lot of design decisions that helped me through the continuation of the design process. When everything is possible, it is difficult to make choices, and a design method can help here. Through several design cycles, I went from 11 models to 5, and from 5 to 1 model. I developed a concept, and now I needed some assumptions to complete the design. The new aesthetical theory of Paul (Roncken, 2011) and the contributing archetypes helped me with this. The formulated design objectives are just tested once. In science, of course this is not representative. But I think that these design objectives can make designers more conscious of what they are designing exactly (see ‘contemporary funerary places’). As designer, you cannot determine what relatives should do. You can only offer a framework of several possibilities. The given design principles can help by constructing this framework.
Appendixes
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Images

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