# LONG LIVE THE GENIUS LOCI - RESEARCH TO THE EMBEDDING OF URBAN AND LANDSCAPE ARCHITECTURAL DESIGNS TO THE CONTEXT FOR NEW TRANSFORMATIONS

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#### **ABSTRACT:**

In the Netherlands, almost every location, building and landscape is designed by men. In the Netherlands, the reuse of buildings, urban structures or landscape architectural plans will be important in new design strategies in the 21<sup>st</sup> century. To understand architectural design, landscape architectural or urban designs, not only the plan or design itself should be examined, but also the surrounding or the context should be taken into account. And how the design is anchored to its context- to the genius loci. To understand the design tools to anchor a design to its context, research to Dutch historical villas and country houses will be shown. These villas, having a large garden, house in the countryside, which were built in the west of the Netherlands and used the characteristics of the Dutch polder landscape. Villas like Hofwijck and Duivenvoorde have connections to the landscape they are situated in. Understanding the context of these villas will help to maintain or give a direction to reuse it, without harming the original design and giving room to new developments.

# **KEYWORDS:**

Design strategies, globalization, urban-rural, context, local identity, embedding, historic villas.

#### 1 INTRODUCTION

In the Netherlands, almost every location, building and landscape is designed by men. The reuse of buildings, urban structures or landscape architectural plans will be important in new design strategies in the 21<sup>st</sup> century in the Netherlands. In this time of growing globalisation, greater movement of people, urban planners and architects seem to make more and more the same sort of plans, not taking in the specifics of the community, city or landscape they were made for. This can be seen in the objects of building itself, but also in the way a design is placed in its surroundings. The specifics of the *surrounding*, the context of architectural, urban or landscape architectural designs, is not always taken into account. This leads to uniformity of new plans and loss of identity, but also to designs not being anchored to the context they were made for. Especially for existing buildings and monument, this leads to unwanted situations. A building or structure is not a stand-alone element, but it is anchored to other buildings, structures or to the underlying landscape, which forms the context of the design. To add new developments to existing designs, the specific characteristics and the context should be examined. These specific characteristics determine the identity of the area- *the genius loci*. But how can we define the genius loci?

## 2 CONTENT OF THE ARTICLE

The importance of anchoring designs to the *surrounding* will be shown in some examples of historical villas like Hofwijck and Duivenvoorde. These villas were built just outside cities, but with strong links to the city, waterways and the underlying landscape. The form and structure (like the polder landscape) of the underlying landscape can be found in the form and shape of the gardens en houses of the villas, anchoring it to the landscape by vistas and other design elements, etc. The location in which these villas, like the polders (dried lakes- droogmakerijen) or the slightly higher dunes was examined, used and sometimes manipulated for these villas. The genius loci was examined and used and therefore the anchoring to the

landscape was secured. Therefore, these groups of villas were built are a part of the Grand Design of the Netherlands, being a part of the identity of our land and our landscape.

Nowadays, rapid urbanization is swallowing the surrounding of these villas. Understanding the context or the spirit of the place and the way the design was anchored to the location of these villas will help to maintain or give a direction to reuse it, without harming the original design and giving room to new developments. Based on design schemes of these examples, conclusion on the importance of the anchoring to the context will be drawn.

#### 3 THE GENIUS LOCI

The term genius loci was used in the ancient world to underline the idea that every place has its own character. In Roman mythology, every place had a 'genius loci', a protective spirit of the place. It was often depicted as a snake or a small supernatural being like a fairy or elf. Over time, these genius loci turned into personal guardian spirits, granting intellect and bravery. Later, in the 17<sup>th</sup> century, Alexander Pope (1688-1744) wrote in his Epistle IV to Richard of Boyle about a design theory on the Genius of the Place 'To build, to plant, whatever you intend, To rear the Column, or the Arch to bend, In all, let Nature never be forgot. Consult the genius of the place in all.' (1) With his letter, Pope stressed again the importance of the specific character of a location, which led to the new way of designing and to the end of formal designed gardens. Nowadays, many landscape architects base their work to this line. Although new designs in landscape or urban plans are necessary, the spirit of the place should be respected.

In 1980 the term Genius loci was used again in the book of the Norwegian architect Christian Norberg-Schulz, where he stated that 'every place is a space wit hits own character'. (2) Nordberg-Schulz stressed that this line is still valid for many new designs. By respecting the 'local spirit' a counter movement could be set in to the unheimich feeling Modernistic architecture can give. But what elements are we talking about in the genius loci?

## 4 SPIRIT OF THE PLACE

What elements are important to understand and use the context? 'Every design, if it's an architectural, urban of landscape architectural design is made for a specific place, with its own characteristics, which forms the context of the spatial plan', writes Inge Bobbink in her book Land inZicht (3). But what's her definition of the characteristics of the location? 'These characteristics can be defined as topography, surrounding buildings, plants, reliëf and existing functional connections'. But also geology, orientation to the sun, wind, rain and sight play an important role. With this definition, Bobbink is only referring to topographical characteristics. Can the context be defined only as the situational characteristics, like the landscape elements or the urban patterns, like Bobbink wrote? How are landscape architectural structures, urban elements and structures, cultural and cultural historical elements and architecture adapted in this definition? What's the position of history, the form of buildings, the use of material, colour, social coherence of the inhabitants and so forth on the context and the anchoring to the context? How can you read the context and use it for maintenance or transformation of a specific design? History and historical structures or landscapes play important role in the characteristics of the context. The influence of history and culture to the context has changed after the relief of the Nota Belvedere in 1999. All these elements determine the *genius loci*, or the spirit of the place.

But to use the genius loci, its also important that a plan is anchored to the location. Prof ir E. Luiten defined the term anchoring as 'to putt in or make use of the relation to a building to the wide surroundings with the use of architectural, urban of landscape architectural elements'.(4) This anchoring can be in different kind of scales, from the level of the landscape to the level of the garden or abstractions, like, no topographical qualities, landscape structures, urban structures, material, style and colour. (5)

## 5 THE GENIUS LOCI OF THE DUTCH POLDER LANDSCAPE

'A journey through the Netherlands is like a journey trough the first books of Euclides', wrote Aldous Huxley after a trip in 1920 in the Netherlands (6). And with this line, he referred to the long lines of the Dutch polder landscape. The landscape of the Western part of the Netherlands was formed by the sea and

several large rivers ending here in the sea. In this delta landscape the struggle for land started long ago, giving the landscape step by step the character we see nowadays. The first waterworks were found in the period which was called the 'Vlaardingencultuur'. Ditches were made in this fertile peat landscape, dikes were built and the bog landscape, changed into a landscape of elongated narrow parcels, which is very typical for the Netherlands. Topographical maps of the Netherlands show beautiful patterns of waterways of the peat landscape of the west of the Netherlands. Villages were built along the dikes, forming long necklaces of the houses next to the dikes with in the middle a little church.

#### 6 POLDERS AS AN ARCHITECTURAL DESIGN

In this watery bog landscape, lakes were formed by wind and small rivers, like the Beemster, Schermer, Purmer and other lakes. In the south of Holland, parts of this peat landscape were excavated to use the peat for heating and industry. These large lakes grew by weak shores, forming growing problems for the people living in the surrounding of these lakes and later one even to the big cities like Amsterdam and Rotterdam. With the invention of the windmill, these lakes were dried into polders (dried polders-droogmakerijen). These polders, designed and made within a couple of years, were designed with the design tools of the Renaissance, like an architectural design or an urban design. The square or rectangular form played an important part in the design of these polders.

# 7 HISTORY OF VILLAS, ESTATES AND CASTLES

In the 16th century, with the rise of modern society, a new form of residence arose; the ownership and maintenance of a country house. A villa consists of a country house possibly with out housing in a designed garden with garden objects, and situated in the cultural landscape. An estate had a similar composition, but it was centered more to agraric production. Villas and estates were not only situated in the cultural landscape, but also interrelated with the landscape and together they formed a new type of landscape. Also farmsteads were converted but maintained their economical foundation and were inhabited mostly during the whole year. Often they were larger than villas that were designed garden of delight and contained garden elements such as coppices, orchards, high stem fruit trees, fields for cows, etc. Country houses were also built in the new land reclamations, being an investment for the owners.

The formation of villas and estates in the Netherlands was inspired by the Italian influences of the Villa Urbana, the city villa and the Villa Rustica, the rural villa. In the Netherlands this style and type of living was introduced in the palaces of the Orange stadholders Maurits and Frederik Hendrik, such as the houses Te Nieuwburch in Rijkswijk and Honselersdijk in Naaldwijk. In the second part of the 17th century the middle-class villa culture emerged and rich civilians owned villas and estates, built in the surrounding area of the major cities with money they had earned through the trade in the Golden Century. As in the preceding period primarily the farmers and the nobility lived outside of the city walls. On the countryside the counts had a castle belonging to the family that was surrounded by tenant farms. The fortified houses, enclosed by a castle moat with a (lift) bridge were considered as a source of wealth and were status symbol. But with the rising of the modern society and the flourishing of the trade (e.g. the VOC) a group of civilians became very prosperous. And these new, rich civilians longed for the status of the old nobility and therefore had built their own 'castles', i.e. their own villas. A villa was a luxurious country house, in a beautifully laid out (formal) garden with outhouses, fountains, water gardens, ponds, buxus hedgerows, statues of classical gods, all as proof their knowledge of the classics.

#### 8 RETREAT INTO NATURE

These 'new wealthy people' moved outside the city during the summer times. They took their complete contents of their house and servants, to avoid the commotion and filthiness of the city, by means of a ship over the barge canals, in that time the way of transportation, or by road transport. A villa was representing the contrast of the otium, the active life, and the negotium, the retreat into nature to, as we call it today, recreate. This retreat into nature was not only a way to escape, but also to get closer to Gods Creation and thereby it had a religious character. Also the old nobiliary castles, close to which the new pleasure

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gardens were laid out, were provided with similar gardens and the so the fortified house was changed into a living house.(8)

## 9 LANDSCAPE ARCHITECTURAL ANALYSIS

How one can use the context and embed a design in it, three villas will be explained. These are Hofwijck and Duivenvoorde. But to understand the connection to the underlying landscape, I want to discern three layers in the landscape (9). The lowest level, i.e. the underlying landscape is the *natural landscape*, in the course of time shaped by nature's forces like sun and wind. Mankind worked the landscape to be able to live there. Ditches were dug, rivers were dammed, mills were built and sometimes complete areas were impoldered. To go short, the landscape was cultivated and in the typical wet landscapes of the lower Netherlands draining was the main motivation. Hence, the second layer is called the *cultural landscape* or cultural layer. Finally, architectural and urban works found place, such as the construction of roads, villages, churches, but also villas and estates. Hence, the third layer is the *urban layer* and the *architectural adaptation* of the first two layers.

#### 10 DUIVENVOORDE NEAR VOORSCHOTEN

The castle Duivenvoorde is firmly connected with the underlying natural and cultural landscape, as can be seen in figure 1 and 2. The name Duvenvoirt turned up for the first time in writings in 1226 and refers to the wade able place in the peat river Duve or Dobbe, which names have to be related etymologically. Originally, the castle consisted of a living tower, but in the late Middle Ages was extended with two wings and this way it got a more open character. In 1631 the house and garden were adapted to the latest fashion, which can be seen on the map of C. Elandts from 1667.

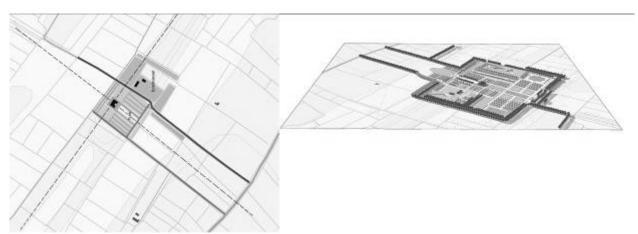


Figure 1 and 2 Analysis drawings of Duivenvoorde in the Duivenvoordse polder at Voorschoten. (M. Schravesande, DUT, 2008)

Sometimes around 1717, during the next phase of modernisation, the garden was extended to all sides, so that the form became more rectangular and fitted in well with the rectangular subdivision of the cultural landscape. The garden was laid out in a baroque way, based on a strong middle axis. Several water- (garden) elements were laid out in the garden that, with the exception of the castle moat from an earlier phase, was all situated in the peat meadow area. After 1830 Steenhuizen had the garden being modernised once more into an English landscape garden and also the house was adapted to its present state.(10)



Figure 3 Castle Duivenvoorde was built on the sandy ridges (M. Schravesande, DUT 2008)

The natural landscape and the cultural landscape can be seen in the form of the garden and house of castle Duivenvoorde. The natural landscape in this area is dominated by the sandy ridges (almost parallel on the North Sea shores) and the peat landscape in between the sandy ridges. This can be seen in figure 1 and 2, where the natural landscape (sandy ridges) are drawn in the same picture as the cultural landscape as well as the design of the first garden. Castles Duivenvoorde and the nearby castle Ter Horst were built on one of these higher sandy ridges, as have the farms and principal roads in the area. Duivenvoordes drive way, that extended in the peat meadow area connected the sandy ridges and connected the villa with the city.

The land in between the sandy ridges, peat landscape, was dewatered by ditches (cultural landscape). Because this land was not as wet as other peat landscapes, the space between the ditches were slightly bigger, giving a more rectangular/ square form. This more square form can be seen in the map of the first garden of Duivenvoorde. Infrastructure (roads and waterways) and various vistas to the village and a field of vision give room for a (visual) connection to the surrounding of the castle. This is enhanced because the castle is built slightly higher than the surrounding landscape. This analysis shows that the connection and the shape of the natural cultural landscape en the architectural urban landscape are strongly interrelated.

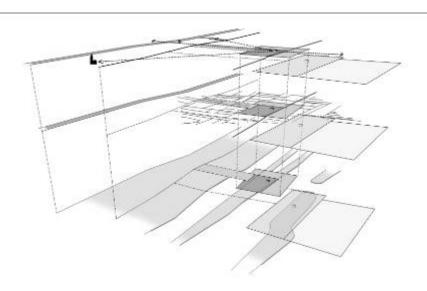


Figure 4 Analysis of the three layers above each other; natural, cultural and urban layer. This show the anchoring of the design of garden and house to the other layers and to the surrounding landscape (M. Schravesande, DUT 2008)

# 12 HOFWIJCK NEAR THE HAGUE (VOORBURG)

Between 1640 and 1643 Constantijn Huygens, secretary of stadholder Frederik Hendrik had a small villa being built just outside Voorburg upon the Vliet and at the main road to Rijswijk. He called it Hofwijck, 'the Give way to the court' ('wijken van het Hof'). The measurements are presumably based on the human proportions according to the theory of Vitruvius (11), as can be seen in figure 5 and 6

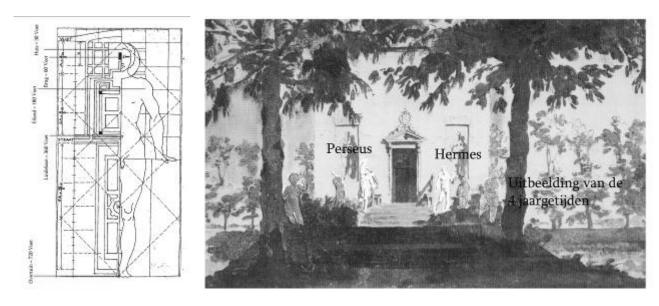


Figure 5 and 6 Analysis drawings of Hofwijck. Left; measurements based on the human body, Right: statues depicting the connection to the house of Orange (C. van Sas, DUT, 2008)

But not only the sizing was based on a Modulus that related to the human proportions, but also the shape of the house and the shape of the garden had strong similarities with the human shape, like the long avenues bearing resemblance to the human arms and legs. Also the use of statues was not purely ecstatic, but supported the story of Huygens' villa. The statue of Perseus referred to the Olympic half-god, with which the Orange princes were identified. They also battled, although in case with the Spanish oppression. Ten years after laying out his garden Huygens wrote a long poem about his villa, through which we find out how and why a villa was built. (12)



Figure 7 Hofwijck in the polderlandscape of Voorburg (M. Schravesande, DUT 2008)

A landscape architectural analysis of the villa Hofwijck shows that the shape of the garden was based on the narrow and elongated character of the strip landscape of the peat polders of Voorburg, the reclamation unit of the Dutch lowlands.

But also the coastal landscape of the sandy ridge, here present as natural landscape can be found in the design. The narrow and elongated character was enhanced by the road situated on the axis of the garden and which goes from the garden far into the landscape until the Haagse Bos and (once more) connected the sandy ridges. From a viewing point on a mount in the garden, but also from the single window above the entrance of the house, the long sightlines from this typical landscape could be reinforced and used in the design. It is notable that the salon of the house has no view of the garden, but of the boat canal and the polder landscape on the opposite side of the water. This was enhanced even more by the lawn of trees surrounding the edges of the garden. Vistas connect the garden, house and surrounding landscape to each other.

# 13 TOOLS FOR ANCHORING

#### 13.1 scale villa

Anchoring is not only on the scale of the villa itself, but also on a larger scale. For a more fully understanding of the spatial characteristics of a villa, research is required on several scales and levels. The first and smallest scale of research will be focused on the villa itself and to the villa and their surroundings. Villas are anchored to the location by vistas, high points in the landscape (and tree lawns to them), by using morphology (like Duivenvoorde) and high points for a view over the area, being connected to the waterways, by roads and entrance gates, etc.

## 13.2 scale villalandscape

But villas were no isolated elements in the landscape. They were often built in the vicinity of other villas, estates or castles and formed together a villa landscape. The owners of these properties had an unobstructed view of their own land, the surrounding landscape and maybe even the spire of the church in the city or of the neighbour's house. The villas often lay on the main roads between cities and next to a river, canal or lake, for example the Vecht river, the Amstel river, or a barge canal system such as the Vliet near The Hague and the no longer existing Wijkermeer (a drained lake). In this manner, in the largely open landscape of that time, a varied landscape of open and enclosed areas, resembling a theatre and its wings, developed as a 'landscape theatre'. Sometimes, a villa landscape formed a community in itself with its own system of justice. There were many villas, pleasure gardens and a Pall Mall court in the Watergraafsmeer land reclamation near Amsterdam. The game of Pall Mall was very popular in those days and thus a source of leisure. Neighbouring villas formed a new landscape: a villa landscape. Elements like, vistas to other villas, waterways, roads, geomorphology, vistas and recreational elements like a Pall Mall combine the villa landscapes to each other.

# 13.3 scale Arcadian landscape

As such several villa landscapes have been developed around the cities, each having a unique relationship with the city and the urban elements and thereby extended the urban territory limits. This way an Arcadian landscape was formed (not made) like a shell enclosing the cities. Various villa landscapes were created. They were concentrated around the large cities and each had its own form and history. They did have in common that they all had a relationship with the city and the elements of the city. These country house landscapes were a part of the city, that is to say they represented the city's territory in the cultural landscape. Surrounding Amsterdam were the country house landscapes at Watergraafsmeer, Beemster, 's Gravenland, along the rivers Vecht and Amstel, on the sand ridges of Haarlem and in the Kennemerland along the shores of the Wijkermeer and other lakes. Although only a relatively small group of wealthy people built country houses around the cities, the less well-off created pleasure gardens where they could go to drink tea. And so an Arcadian landscape developed, which was connected to the city.(13) Elements like the connection (visible or literality by building or else), morphology, recreational elements in the neighbourhood of the villas and so one.

# 14 PRESERVING THE LANDSCAPE

In the Netherlands, the reuse of buildings, urban structures or landscape architectural plans will be important in new design strategies in the 21<sup>st</sup> century, as stated before. The question is how you can preserve the existing structures, without blocking all new developments? This method of research- further worked out- can help understand the relationship between a plan, de context and the tools which are important for embedding. This can help to formulate which elements are absolutely necessary for a plan and which elements can fade away. These elements can be defined in de *biotope* of a building or – in this case- a villa with its garden.

#### **REFERENCES**

- [1] Lefaivre, L., A. Tzonis, 'De oorsprong van de moderne architectuur, een geschiedenis in documenten', Nijmegen, SUN, 1984-1990, p 257-258
- [2] Norberg-Schulz, C. 'Genius Loci: Towards a Phenomenology of Architecture', London, Academy 1980
- [3] Bobbink, I., 'Land inZicht, een landschapsarchitectonische verkenning van de plek', Nijmegen, SUN, 2003, p 8
- [4] Luiten, Prof. Ir E., 'Openingscollege ontwerpproject BSC 1', 1 september 2009, auditorium, aula congrescentrum, TU Delft
- [5] Luiten, E., G. Verschuure- Stuip, 'Verankering', (p 37-40) in: 'Projectboek Huis en Verankering BSC 1 2009 BK 1000', D. van Gameren, E. Luiten, P. Kuitenbrouwer, C. Calis, G. Verschuure, B. Peters, Delft, 2009
- [6] Reh, W. C. Steenbergen, D. Aten, 'Zee van Land. De droogmakerij als atlas van de Hollandse landschapsarchitectuur', Wormerveer, Stichting Uitgeverij Noord Holland, 2005, p 299
- [7] These country house landscapes can occasionally be recognised in the names of picture books of country houses from the period, such as the 'Zegenpralende Vecht' or the 'Zegenpralende Watergraafsmeer'.
- [8] Ströver, J., e.a., 2000, 'Kastelen en buitenplaatsen in Zuid Holland', Zutphen, Walburg pers p 202
- [9] Architectuur en Landschap, p 381 e.v...
- [10] Ströver, J., e.a., 2000, 'Kastelen en buitenplaatsen in Zuid Holland', Zutphen, Walburg pers, p 202-208
- [11] Van Pelt, R.J., 1994
- [12] Strien, T. van, K. van der Leer, 'Hofwijck, het gedicht en de buitenplaats van Constantijn Huygens', Zutphen, Walburg pers, 2000, p 79.
- [13] Glaudemans, M., 'Amsterdams Arcadia, de ontdekking van het achterland', Nijmegen, SUN, 2000, p 47 e.f.