Amersfoort train station
-- as an entrance to landscape theater
Entrance to the landscape theater
Reshape the railway station area in Amersfoort
preference:

Within the framework of the graduation track of the Technical University Delft, Faculty of Architecture, department of Urbanism in MSc 3 and MSc 4, a Master thesis will be written. This document is final thesis report for the graduation project. It will be used as a final report to representing of all the works I have done in the graduation year.

This graduation project is belong to the Landscape Metropolis Graduation lab and guided by the first mentor: Frank van der Hoeven, the second mentor: Rene van der Velde and the third mentor: Maurits de Hoog.

This report is including two parts. One part is mainly about the theory research and the other part is mainly about the design project.

In the first part I will explain why I choose this research domain and the relationship between the theory research and the design project. Also the planning of how to tackle this one-year period graduation project will be introduced. In this part, I will also make clear of the theory system, the main research question and the design task of the graduation project.

The second part is main about how to using the theory research approach to achieve the design goal. Also the design methodology and the design control tools will be produced. The evaluation of this design project will be used as feedback to the theory system.

This report is representing the work of a Master students; Ning Kang.

20th June 2010
Report for graduation project - Introduction

presference

table of contents

Part 1 Research

1. Context
theory background
problem statement

2. Theory & Graduation Project

3. Research Question
main research question
sub-research questions

4. Related Fields
urban design
landscape architecture
infrastructure technic

5. Ways to tackle
phasing

6. Contribution to Scientific and Societal relevance
Scientific relevance
Societal relevance

7. Design project
Location choose
first concept

8. Booklets, presentations and subproducts

9. What and when

10. Chairs involved within Urbanism

11. Literature

literature reading
case study
park analysis
Report for graduation project -

Part 2 Project

1. Case study
   identity & integration
   diversity route

2. Design solution
   vision
   strategy
   design controlling tools

3. Planning proposal
   problematic
   context & urban networks
   planning proposal

4. Design proposal
   theory research
   urban design
   linkage & key projects
   master plans & detail

5. Literature
1. Context

Theory background:
The theory of Landscape urbanism is emerged in the recent decades. In this period, landscape has emerged as a model for contemporary urbanism, one uniquely capable of describing the condition for radically decentralized urbanization, especially in the context of complex natural environments. According to the formal city models, the view of describe the city by individual elements as urban, landscape and infrastructure is not suitable to make an integral city system in the post industrial period.

In 1995 Clemens Steenbergen, Wouter Reh en Peter de Zeeuw laid down a tentative theory in order to describe new urban territories in abstract terms, reducing contemporary urbanisation patterns to points, lines and planes. This resulted in three basic forms: the flow landscape, the plantation and the landscape theatre (Clemens Steenbergen, Wouter Reh, Peter de Zeeuw, Landschapstransformaties (Delft: Delft University Press, 1995), pp. 64-73).

The interplay between the basic forms can breach the scales defining the landscape and endow the metropolis with architectural form.

Flow scape: Kinetic perception, the metropolitan dweller’s movements by car, tram, train or airplane, and the perception of the urban landscape as it flashes by in visual episodes determine the basic landscape form of metropolitan infrastructure.

Plantation: If the programme of the urban colonisation grid is staged in landscape-architectural terms, and the interaction between grid and the existing natural and cultural landscape is expressed in the design, we can call this second basic form of spatial landscape a plantation.

Landscape Theatre: Within the metropolis, topographic ‘lesions’ in the metropolitan fabric, the viewer temporarily withdraws out of the spatial confines of the city and views that selfsame city as landscape – using the spatial and visual ‘devices’ of landscape to perceive the city. When the composition of a void necessitates recognition of its existence and then potential, we can speak of the existence of a third basic landscape form –the landscape theatre. (Velde & Wit, 2010)
Paper review about the theory:

1. Theory system:

Waldheim (2003, p.37-51) concludes that, the theory of Landscape urbanism is emerged in the resent decades. In this period, landscape has emerged as a model for contemporary urbanism, one uniquely capable of describing the condition for radically decentralized urbanization, especially in the context of complex natural environments. The way of thinking behind this new urbanism model, is much different from the traditional one which has being generally recognized over decades. Before the new urbanism model come out, the European urbanisation has gone through two stages. At the first stage, the urban area is strictly enclosed by its boundary. That is closely related with the productivity and the mobility style. At the second stage, the city is broaden their its range outside the boundary and build more connection to each other. That is because the Neolithic agrarian revolution produced compact cities around the world and the modern, industrial revolution that allowed cities to break beyond their former bounds. Recently, at the post industrial period, based on the fast growing of the number of car and mobile phone owners, the connectivity between the cities are more obvious and the boundary of the city are more ambiguity. That calls for a new model to describe the contemporary city form. At this period, a lot of argument of the new city model has been born. The historians Kostof (1991), in his books the The City Shaped and The City Assembled followed cues offered by Lynch (1984) in Good City Form, to develop an argument for a third city form, one that Lynch called “organic,” moving beyond his teacher Wright and the car-base, agrarian-industrial model of Broadacre City from the mid-1930s.

At 1990s, a lot of cities goes on a process of sprawling, and the blooming of residential communities, mega-mails, and theme parks. Under that situation, the formal city models are hardly use and the view of describe the city by individual element as urban, landscape and infrastructure is not suitable to make an integral city system. Before the theory of landscape urbanism come out, it is already emerged design practices which incarnate the new idea of landscape urbanism.


Several suburban areas become highly valuable for the settlements which is separate from the existing city system but need a access to global system. (Landau, 1968). In this context, “landscape urbanism” has recently emerged as a new urbanism model to describe the design strategies which can’t be solved by the traditional urban forms. In the organization of a March 1997 conference and exhibition titled Landscape, Waldheim further articulated this ecological understanding. Urbanism Waldheim use “landscape urbanism” to describe the practice works of many designers for whom landscape had become the primary medium of city making. This
understanding of decentralized post-industrial urban form highlighted the leftover void spaces of the city as potential commons.

In recent years, more research has been done based on this landscape urbanism model. The theory is not just only focus on the post-industrial problem, but more systematic and more applicable on urban design aspect.

In 1995, Steenbergen, Reh and Zeeuw laid down a tentative theory in order to describe new urban territories in abstract terms, reducing contemporary urbanisation patterns to points, lines and planes. This resulted in three basic forms: the flow landscape, the plantation and the landscape theatre (Steenbergen & Reh & Zeeuw, 1995). The interplay between the basic forms can breach the scales defining the landscape and endow the metropolis with architectural form.

In the view of landscape metropolis, we have a new standard to evaluate a city form. The change from a city in the landscape to the city as a landscape of fragments is generally considered a contemporary development. When viewed as a collection of landscape-architectonic transformations however, the metropolis may be considered as a city that has gradually opened up to the landscape, on all scales and in different forms over a much longer period of time.

2. reluctant site

Reviewing the contemporary cities according to this new criteria, we can got a lot of urgent work to do to refine the city environment.

A good city environment emphasizes on continuity. The preservation of the continuity of the built fabric and the programmatic heterogeneity of the boulevards make possible a fluid and diverse experience of the city. During the process of the city development, the continuity are always been cut by some different scaled settlements. These settlement always disintegrate with its surrounding urban settlements and cased the border between them desolate and unattractive. These sites are not belong to either settles and hard to be reshaped in the local scaled interventions. So this kind of area are long considered as reluctant site. The railway station and railway yard area in Amersfoort is one of these kind of sites (fig 2).
3. play with scale

“From the lens of landscape urbanism, each site is to engage and focus on these environmental terms in a way that exceeds the oppositional system that continues to contain them.” So each site represents a hybrid framework that crosses between architecture, landscape architecture, and urban design, to engage the complexity of contemporary urban landscape. (Pollak, p128-139). According to this theory, one site can be engaged in different frameworks which can belong to different scales as well as different fields. In another aspect, when we look at the problem in one site, we can find opportunities in other different scaled frameworks. Then more potential development opportunities can be found. In my research field, that means that isolation problem in the neighbourhoods can be solved by making use of the regional scaled interventions.

History of Dutch cities

1. Layers of Dutch cities

By making general view the Atlas of several Dutch cities. We can generally describe the process of city development in four stages. The first stage is some original settlements along the water or reclaiming lands, Most of these cities are very small centralized settlements. During this stage, the landscape is reshaped in a gentle way. The second stage is collective settlements of industrial and residential area. In that period, water way is the most important regional infrastructure. The third stage is booming development of several cities. At that time the railway equipment are settled. And the fourth stage is the contemporary separate exploiture.

That kind of developing process suggest that the city has a closely relationship of the landscape character. And the morphology of the city is always present a integration image in the natural environment. Also, the form of the landscape played a important role in the layout of the urban area.

In the third stage, the railway track goes through or at the edge of the city, it violently erased the formal urban or landscape layer surrounding. Sometimes the railway yard area is dramatically serious. Also the following business settlements near the train station area are not integrated with the existing surrounding neighborhoods in functional as well as spatial aspects. It broke the continuity of the urban landscape.

In the following fourth stage of urban development or even in the future, the railway settlements become a barrier or gap in the city. It harms the continuity of the future urban development as well as the relationship between the city and the nature.
Analysis Tools system:

In the graduation studio, we have practiced with park analysis. My analysis is more focus on the flowscape. It’s mainly about the infrastructure and accessibility. These analysis tools we have learned are the basic tool systems I would use in my graduation project.

The mapping of infrastructure system in 15km radius with park Monza (fig1) shows the regional accessibility to this park. The good regional accessibility is the main important condition for a metropolitan park. By this analysis and comparing with other same analysis for different places, we can have conclusion that whether there is a good regional accessibility of the target place.

The steps analysis from the edge of the park (fig2) can reveal that whether there is a good local integration of the park. The longer and more dense of the steps lines are, the better local integration the park is.

The combining analysis of the steps map, the infrastructure map and the spatial form map can show us (fig3) what kind of impact of the regional main infrastructure caused on to the park.
The impact of train station on the urban diversity

The landscape urbanism theory suggests that the problem site can be engaged in different scaled urban or landscape framework. That means the discontinuity of the urban framework on the neighbourhoods scale can be solved by the interventions on the regional scaled framework. As the train station is an important element of the regional framework, the isolation problem between the neighbourhoods caused by the train station can be solved by using the develop opportunities owned by train station itself.

According to research have done by Louw, the train station has great impacts on the urban dynamic. He sorted the development approaches of train station in four types (Louw, 2008). This classification is based on considering the dual character of train stations that they are nodes in transportation networks as well as places in the city.

According to the article written by Peek and Louw, we can primarily divided the approaches of train stations by their different identities as note or place. When we look at the train station as a note, it is more emphasis on its function as a transportation element which connect the regional infrastructure system and as well as a interchange point to local transportation system. When we look at the train station as a place, it is more emphasis on its role in real estate discipline. Because of its good location which contain dense of different scaled infrastructure, it has good opportunity for a centralization of settlements program including commercial, business and recreation extra.

Then we can secondarily divides the different approaches by their positions in different view in the context of network city. When we put the station into the view of city network, it can be a separate location in the local and global network system. When we emphasis on the view from the infrastructure and urban context, it can be a important location in the urban context.

With the primary and secondary focuses in mind, four approaches can be distinguished as connector, transportation node, meeting place and urban centre (fig 2).

<table>
<thead>
<tr>
<th>Primary focus</th>
<th>Secondary focus</th>
<th>Location</th>
<th>Network</th>
</tr>
</thead>
<tbody>
<tr>
<td>Node</td>
<td>Connector</td>
<td>Transportation node</td>
<td></td>
</tr>
<tr>
<td>Place</td>
<td>Meeting place</td>
<td>Urban centre</td>
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</tbody>
</table>

Fig 2: four idea types of railway station approach
Source: Peek, GJ. & Louw, E. (2008), The impact of railway development on urban dynamics, p. 127

The first type is connector which combines the focuses of primarily, the node and secondarily, the location. That means we judge a station as a transportation interchange place in the built urban context. It will provide a safe, reliable, fast, hassle-free, comfortable, and pleasant transferring environment.

The second type is transportation node which combines the focuses of primarily, the node and secondarily, the network. That means we judge the train station as a node in transportation system. It is an element of the railway system as well as an interchange point to local infrastructure. The station can be separately seen as a transportation node which provide an interchange place for the citizens.

The third type is meeting place which combines the focuses of primarily, the place and secondarily, the location. That means we judge a station as place in the urban context. It is a place with a centralization of different programs in both private and public, both long term settlement and short term settlement, both local scale and regional scale. That will attract different users.

The forth type is urban centre which combines the focuses of primarily, the place and secondarily, the network. That means we judge a station as a place in the city which has a good location in the connecting point of
infrastructure. That will bring in the economic blooming as an urban centre with higher densities and diverse activities.

After this divisions, Peek and Louw (2000) conclude the synergies between those four idea types (fig 3).

<table>
<thead>
<tr>
<th>Focus</th>
<th>Location</th>
<th>Synergy</th>
<th>Network</th>
</tr>
</thead>
<tbody>
<tr>
<td>Node</td>
<td>Connector</td>
<td>Transfer quality</td>
<td>Transportation node</td>
</tr>
<tr>
<td>Synergy</td>
<td>Intensity</td>
<td>Centrality</td>
<td></td>
</tr>
<tr>
<td>Place</td>
<td>Meeting place</td>
<td>Spatial quality</td>
<td>Urban centre</td>
</tr>
</tbody>
</table>

Source: Peek, GJ. & Louw, E. (2008), The impact of railway development on urban dynamics, p.131

This research result suggests that the train stations have different kinds of impacts on the urban development and urban dynamic, some are active and some are negative. All of the impacts from the train station is following some basic rules to give on the local context. Make clear how those effects work is very important my graduation project. Because in this project, I should find out the active effect played by the train station on the urban landscape stitching concept.
Entrance to Landscape theater:

My graduation project is about the entrance to landscape theater. For this theme, each of the three basic elements is emphasized at different scale.

To solve the urban/landscape problems caused by the railway settlement by using the opportunities produced by train station, a new landscape typology - entrance to landscape theater is introduced. This landscape typology is also closely related with the three basic elements in different scale.

The landscape theatre aspect is emphasized in the metropolitan scale. In this scale, the diversity and quality of the large scaled landscape is required. Also the landscape theatre calls for attractive surroundings and convenient regional/national/international accessibility.

To study on the entrance of landscape theatre, the flow landscape is emphasized at the lower scale of the defined landscape theater area. The entrance of landscape theatre cares about its regional accessibility, its diversity of accessing mode. Also the visual and functional quality of the routes leading to the landscape theater.

In order to shape a good entrance to the landscape theatre, in the plantation aspect, the functional diversity and different scaled urban integration is cared about. In this project, the neighborhood integration is very important. It requires a good mixed use of the large scaled landscape as well as the regional recreation programs.
There will be high economic growth and urban development in Amsterdam and Almere. And the impact will go through Huiversum and work on Utrecht and Amersfoort.

Enhance:
The recreational function in Het Gooi.
The inner city green recreation and natural living in Utrecht and Amersfoort.
City character and identity.

Green structure:
A robust green-blue structure of the southwestern Delta up to IJsselmeer – the “green-blue delta”. The protected landscape area “Het Gooi” form part of this.

Urban structure:
A global network of large urban and economic centers. In this economic network system, Den haague, Rotterdam and Utrecht work as powerful cities, and Amsterdam works as internationally oriented business center.

Vision Randstad 2040: powerful city

Vision Randstad 2040: green-blue structure
Study of the Randstad Holland vision on 2040:

The Randstad Holland vision on 2040 is a new vision which is different from the old one made in 1985 and saw the Randstad as a collection of city regions, kept firmly apart by green zones (buffer zones) and by a large central open area (the Green Heart). This is illustrated by an urban ring around a green centre, or heart. The old vision is base on the philosophy after the World War 2, they believe in very large cities - ‘metropolises’.

Now, they take more attention on the natural environment and agricultural areas. And under the new philosophy of Landscape Metropolis, they decided to make a new vision which including a urban and business robust structure as well as a strong green-blue environment structure.

For the urban and business robust structure, There should be a network of large urban and economic centres, which serve as junctions in international connections (road, water, air, rail, internet), with Amsterdam as international gateway. The focus will shift towards the power of the cities. Further intensification of spatial expansion. The new image is that of a number of powerful cities (Rotterdam, The Hague, Utrecht) with a specific national/international character and Amsterdam as a type of internationally oriented central business district in various fields, with a robust and large-scale green-blue structure of IJsselmeer to Delta and from Coast to the Heuvelrug and a number of attractive metropolitan parks.

For the strong green-blue environment structure, the robust green-blue structure of the south-western Delta up to IJsselmeer - the ‘green-blue delta’ should be realized. National landscapes such as the Green Heart and Waterland form part of this. Sustainable water management is possible here, the area is protected from rising sea levels, recreational activities of note are offered and green living environments are offered on selected locations.

Under that vision, we can see that the landscape area Het Gooi is form part of the strong green-blue environment structure. And it is also have good location in the urban and business robust structure. It located between the power city Utrecht and the international gate way Amsterdam. It also combined with the important business infrastructure A1 and A27. So it’s a proper area for providing tourism attraction and metropolitan parks. Also, because of the strengthen of urban powers will cause a highly development of city Amsterdam and Almere, this business and urban power with give impact through Hilversum to Utrecht and Amersfoort. This calls for a better protection and materialization of the nature area as well as the inner city green recreation area.
## Context - Problem statement

**Urban structure:**
- urban area

**Landscape:**
- forest
- mash land
- lake / pool / canal

**Infrastructure:**
- (inter)national high way
- railway
- train station
- important train station (> 70000)
- important train station (20000~70000)

### Plantation and Theater
- The layout of the cities around Het Gooi
- The good connectivity between those cities.

### Entrance to Het Gooi
- Biggest city Amersfoort in this area
- Direct Railway link to Utrecht
- Important railway station in Netherlands
- Located at the edge of the natural area - Het Gooi.

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### Train station in Netherland passengers per day

<table>
<thead>
<tr>
<th>Train station in Netherland</th>
<th>passengers per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amsterdam Sloterdijk</td>
<td>39555</td>
</tr>
<tr>
<td>Amsterdam centre</td>
<td>156452</td>
</tr>
<tr>
<td>Utrecht Centraal</td>
<td>151228</td>
</tr>
<tr>
<td>Rotterdam Centraal</td>
<td>93169</td>
</tr>
<tr>
<td>Den Haag Centre</td>
<td>76286</td>
</tr>
<tr>
<td>Schiphol</td>
<td>36665</td>
</tr>
<tr>
<td>Eindhoven</td>
<td>50047</td>
</tr>
<tr>
<td>‘s Hertogenbosch</td>
<td>40142</td>
</tr>
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<td>Arnhem</td>
<td>40110</td>
</tr>
<tr>
<td>Amsterdam Sloterdijk</td>
<td>39555</td>
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<tr>
<td>Den Haag HS</td>
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</tr>
</tbody>
</table>
Landscape theater:

The Het Gooi area have a good potential for landscape theater. Firstly, there are diversity typologies of landscape in this area including forest, hilly, peat land extra. It also have a lot of culture and historic attractions. Secondly, this area has a good location which is between large popular landscape “Green Heart” and “Veluwe”. Thirdly, there is a good regional/international accessibility to this area. The regional High way A1 and A27 goes through this area. Also several important train station and harbor next to this area.

Accessibility of the entrance:

Amersfoort train station is located at the edge of Het Gooi. It’s one of the biggest train station in Netherlands. It’s a very important transportation node between Randstad and the northeast part of the Holland. There are about 34575 passengers flew per day. It is also directly connected to Utrecht and Amsterdam. So it can conveniently bring in the tourists from all over Netherlands.

Quality of the entrance:

City Amersfoort is located at the east edge of Randstad which is also the country’s economic powerhouse and home to 3.000.000 jobs as well as 6.000.000 inhabitants. Amersfoort is also the second biggest city in Utrecht Province. The Utrecht Province is located in the center of Netherlands and plays a key role in the economy Netherlands.

Amersfoort has a history of more than 1000 years and has a beautiful historic city center and a historic townscape area. This historic and culture attractions can be one part of Het Gooi tourism attractions. As now the fast economic growth of Amersfoort make this city become a biggest and with most integrate functions and service facilities in Het Gooi region. So this city has a good potential to be an urban anchor for the tourism of Het Gooi.

From Amersfoort train station to the zoo (a famous tourism attraction in Het Gooi), there is a walkable distance. So it is proper to provide a high quality entrance route to the forest area,
2. History of Amersfoort

The history of Amersfoort is very typical in this research domain.

Before the city has been settled, there are three types of landscapes at the intersection of the Amersfoort which are the ridge Utrecht (woodland), the Gelderland Valley (required landscape) and the Eempolder (open country). These three landscapes are important for the history of the city and also have identified as areas with a different character.

(1) In the first urbanism stage, Amersfoort has a special historic center. The city was created as small settlement on an intersection of trade routes by a ford place (a ‘voirde’) on the river Eem (formerly Amer called). In the inner 2 rings of canals have been identified.

(2) Then, the town is no longer the geographical heart of the city. Southern districts Striking in the urban structure of Amersfoort is that no ring early 20th century buildings around the city lies.

The very old quarter is characterized by detached homes on large lots and is designated as a protected townscape.

(3) After that, the districts Kruiskamp, Randenbroek, Schuilenburg, Liendert, Torque and Schothorst South after World War II developed by the petal design around the center grouped.

(4) After that the railway track, the train station and the railway yard and the following business settlements are emergent.

(5) Then the south part of the city is developed later.

(6) Amersfoort Noord and Vathorst are separate. These areas are linked with the appointment by the kingdom in 1980 as a growth town of Amersfoort.
The large void area in the city is caused by the train station settlement as well as the historic development process. The train station and the parking yard settlement caused a scratch of forest landscape in that area. The different urbanization process of each side on the station caused no urban functional link between each other. Soesterkwartier and Bergkwartier are totally separated from each other.
Infrastructure morphology:

No good link from train station to the zoo (entrance to the nature).
Few local roads through the construct site.

Urban morphology:

Void parking yard area without any program.
Sudden change of building typology shows no integration between both sides.
Theory & Graduation project:

This research question is quite design based. It comes from the practical use of the new urban model in the urban design. The aim of this research is to use a the now thinking mode to solve the contemporary urban problem which is quite difficult be sovled in the original way.

The thoery approach will be tested by used in the design practice to test. This design task is also a challege. From the view of design practice, this design task related with different scales. This design task should establish proper identity and integration in each scale. In the view of the subject domain, this design task related with both urban design and landscape architecture. So the design tools and theories from both aspects are needed. From the view of design controlling tools, there are no existing design controlling tools which we can use directly. That is because this design task is dealing with both landscape and urban but each of them stressed on different scale. So new design controlling tools should be introduced for design practice.

This research question is mainly dealing with “HOW”. That means this theory research and the design practice are goes parallel. The main research question is based on the problems appeared in the design process.
Main research question:
The main research question is how to make use of the synergies between train station and the urban diversity to rebuild the urban, landscape identity and integration in the landscape entrance station area.

sub research questions:
(1) What is a landscape entrance station area.
(2) What kind of urban identity should be at the landscape entrance station area.
(3) What kind of landscape identity should be at the landscape entrance station area.
(4) What kind of urban integration should be at the landscape entrance station area.
(5) What kind of landscape integration should be at the landscape entrance station area.
Related fields:

Urban design:
In this research, the most important problem should be solve is the urban integration. The diversity program at the station area, the proper density and mixed function are required. Also the neighborhood integration of the green area should be provide. All those problems are belong to urban design domain.

Landscape architecture:
This research question is come from the theory of landscape urbanism which is about an urban model based on landscape architonic components. Also the landscape entrance is a landscape typology. At the design process, the reshapping of the landscape identity is belong to the subject of landscape architecture domain.

Infrastructure technic:
The project is at the railway station area. There involves with the projects related with the railway tracks, railway station buildings as well as the train parking yard. So in the design process, the technical knowledge about the railway are required.
Thinking model:
fig X shows the thinking mode of dealing with this design task. We have to make analysis to find the opportunities in different scales such as local, city as well as regional scales. Also, the metropolitan system is a complex and integration system, we should consider the problem integration with economic, ecology, spatial, social, culture and also aesthetic aspects.

Design process:
According to the theory of landscape metropolis, the urban approach is different from the traditional urban design. So, this design project should have its own design process as fig3 shows. Firstly, the research and problem definition should come from different scale, and then, comes to the spatial proposal. To realize the spatial proposals, new typologies should be produced based on urban morphology, building typology and landscape typology. Certainly the design products should also be the interventions to these different scales and also include the constructions of urban, landscape, architecture fields.
Report for graduation project - Ways to tackle paralleled design & research

- Basic tools:
  - Park analysis tools + other tools

- Research:
  - Adaptability
  - Identity
  - Safety
  - Vitality

- Literature reading 
- Tools system setting 
- Site analysis 

- Proposal 
  - Evaluation

- Territory 
  - Design site

- Construction feasibility

- Design:
  - Design task
    - Building
    - Landscape
    - Public space
    - Hybrid type
    - New typology proposal

- Case study
In the research aspect, four aspects are involved, they are mentioned as adaptability, identity, safety and vatality. At the beginning, I will do research separately in each aspect which including 7 steps.

1. Literature reading: to find what is the real problem is and how it can be solved related in the spatial aspect.
2. Research tools system setting: chose several spatial research tools that I know to form a research tools system for each aspect.
3. Testing on design site: using these research tools to make research on the site to the problem
4. Proposal solution for design site: give some solution proposal according to the problems
5. Evaluation: a brief evaluation on how this method works in the practice

In the design aspect, there are 4 steps included:

1. Site analysis: to see where can be built and how much can be built on this site
2. Problem statement: comparing the site analysis result and the proposals from the research and the, there will be several design problems.
3. Typology choosing: find typologies involving with building and landscape to fit this site
4. Typology testing: using this typologies to make a design on this site.
5. Typology setting: provided new typologies for future urban development
6. Evaluation: a brief evaluation on how this method works in the practice
park analysis & workshop

The analysis of Park 21 which organized by the studio. This analysis courses introduce us several research tools to testing the site. These tools will be a basis for my research tool system in my research phase.

We also have workshops for redesigning of Park21 to practicing the design tools we have learned in the graduation lab. Those design tools are the basic tools in the design phase of my graduation project,
Case study:

Case studies are made for helping setting the evaluation standard for the design task. This train station should be an attractive urban recreation center as well as landscape entrance. So a high centralized urban identity should be provided like other big train station in Holland. But it should be different from other train stations because it is a landscape entrance. So more natural identity should be showed here. Considering the context of the city Amersfoort, the integration aspect should also be very important. The identity of the train station should not offend the surrounding historic townscape.

To visualize the evaluation standard for the design task, I choose four new Dutch train station which are Station Arnhem, Station s’Hertergenbosch, Station Utrecht and Station Breda to describe these rules.

TGV Lill station different context

Too global scaled identity for Amersfoort
Scientific relevance:

Based on the existing theory frame of Landscape metropolis, and also theory and practise of metropolitan park and hybrid landscape, this graduation project will make a further step on the theory system of metropolitan metropolis, as well as the research – design methodology for the design practices.

Societal relevance:

In many Dutch cities especially in Amersfoort, they are in face of a fast development in the coming decades. The train station area will become more and more important area in the city, the reshaping of the train station area is an urgency in the city developing process. The development of this area need a cooperation of different scaled institutions and stakeholders as well as experts in fields of spacial planning, urban design, landscape architecture, architecture, civil engineer and real estate. My research on this graduation project will most focus on urban design and landscape aspect, it will give an suggestion to the cities who have these similar development task.
Project location:

My project is located at Amersfoort Station area. Amersfoort is located in the Randstad in Netherlands. Randstad is mainly composed by the power city structure (including city Amsterdam, Den Haag, Utrecht, Almere) and other smaller cities around Green Heart. City Amersfoort is belong to the Province Utrecht and have close relationship with the economic power city Utrecht. There will be a huge development potential for the city Amersfoort as well as the train station.
Site checking:

As mentioned before that this train station could be used as an entrance to the landscape theater area. According to this concept, we check the site. Then, we found that there is not proper quality of this train station to work as an entrance to the landscape theater.

For the landscape identity aspect, near the train station, there is a railway parking yard. This area shows a desolation, unattractive and unsafe scene to the travelers and passer by. It can hardly give people any sense and imagination of the large open landscape area.

For the urban center identity aspect: The train station now is improper on its size and quality for its new character. Now the station plays a more and more important character in the regional transportation system, the identity of this station is far from attractive one. Also, if this station area are intend to become a regional recreation center in the future, this station area should show a proper identity.

For the entrance route aspect, the exiting main route which plays as an entrance route to the forest area is the Utrecht Province bicycle route. But this route is detoured in the surrounding neighborhoods, and always has low visual quality. Along this route, there is no enough service facilities and attractive public spaces. it can hardly be any attractive route.

Based on this situation, a new landscape identity, urban center identity and an attractive entrance route should be provided at this area.
- void and desolate image of the parking yard area.

- Improper identity of the train station

- Low quality routes
A train station with a great landscape as well as lively urban center identity
An entrance route to landscape area with diverse urban functions.
Design Methodology:

The design task is to provide proper urban & landscape identity at the station area, provide a diversity entrance route to the landscape theater area.

This design and research task should be dealt with related with different scales. The main design issue is to find opportunities and problems belong to urban networks in different scales.

<table>
<thead>
<tr>
<th>target group</th>
<th>program</th>
<th>infrastructure</th>
<th>urban scape</th>
<th>opportunities</th>
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<td>Landport region</td>
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<td>○</td>
<td>○</td>
<td>●</td>
<td>dense of neighborhoods neighborhoods</td>
</tr>
</tbody>
</table>

methodology for tackling the design problem
Booklets, presentations and subproducts

In this chapter the final and sub-products of the entire graduation project are described. Every product is coupled to a time planning and phase in the process of the graduation. The products are also linked to the different research questions and the possible used techniques & methodology. Despite the linear outline of the end products in this chapter the graduation project has a cyclic character.

Thesis plan (P1 preliminary and P2 final Thesis plan)

- motivation
- problem statement
- research questions
- aims of the project
- methodology and techniques
- scientific and social relevance
- final products
- time-schedule
- project choose
- design concept
- literature

project research booklet (P2)

- research booklet
  - Context
  - Adaptability
  - Identity
  - Safety
  - Vatality
- problem statement
  - Program
  - infrastructure
  - green structure
  - image
- spatial proposal
  - Program structure
  - infrastructure
  - green structure
  - image
- site analysis
  - territory zoning

perspective & strategy (P2-P3)

- case study
- scenario
strategy
. design task
. transformation mater plans

Theoretical framework, review paper
. paper 1: typology proposal
  . New typology of urban landscape - the contribution to the existing landscape metropolitan system theories,

. paper 2: research-design method
  . a research-design method for reshape the railway station area
Report for graduation project - What and when

timetable for the graduation project
Theoretical framework, review paper

. paper 1: typology proposal
  . New typology of urban landscape - the contribution to the existing landscape metropolitan system theories,

. paper 2: research-design method
  . a research-design method for reshape the railway station area
Case study (site visiting):

Station Arnhem, Station s’Hertergenbosch, Station Utrecht, Station Breda.

These cites have the similar scale or context as Amersfoort.

Evaluation of six aspect:

(1) Urban center identity of the train station
(2) Landscape identity as an entrance to natural area
(3) Local integration of urban function
(4) Local integration of green space
(5) Heavy infrastructure flow
(6) Green integration of infrastructure.

Global:

the scale is too much focus on regional identity but lacking of local integration

Local:

the scale have a good local integration but lacking of regional identity.

<table>
<thead>
<tr>
<th>Local</th>
<th>Arnhem</th>
<th>s’Hertergenbosch</th>
<th>Utrecht</th>
<th>Breda</th>
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<tbody>
<tr>
<td>Urban center identity</td>
<td>++</td>
<td>-</td>
<td>+</td>
<td>0</td>
</tr>
<tr>
<td>Landscape identity</td>
<td>0</td>
<td>-</td>
<td>--</td>
<td>-</td>
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<tr>
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<td>+</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>++</td>
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</tr>
<tr>
<td>Green infrastructure</td>
<td>++</td>
<td>-</td>
<td>0</td>
<td>+</td>
</tr>
</tbody>
</table>
Case study:

As mentioned before, the design task of this graduation project is to provide a proper urban/landscape identity for this train station as an entrance to the landscape theater, to provide a diversity route leading to the tourism area.

For the urban/landscape identity aspect, four new Dutch train station are chosen for the visualize the design and evaluation criterial.

For the diversity route aspect, the tourism route is always prosperous in some specifical time, such as seasons, festivals. But a good entrance route which is especially at the inner city area should be active all the time. The high quality tourism facilities and landscape space should be mixed with diversity urban functions. So this route can be safe and attractive every day in a year and any time in a day.

As a route goes through a train station, there are a lot of potentials to build the diversity. For finding out what kind of opportunities the train station can provide to build a diversity route, those four Dutch train stations can give some good suggeations.
Case study (mapping) - landscape identity:
From the site view, Station Arnhem can be used good reference as having a proper landscape identity. There is an open view of large green area near the station square. Also, at the other side, there is a wide boulevard leading to the natural area.

By the comparing mapping, we can see that the location of Station Arnhem has some common things with Station Amersfoort. Both of them are located very near the natural landscape area. In the case of Arnhem, wide green belt and big parks are used as green connections connect the train station to the nature area.
From the site view and planning reading, Station Breda can be used good reference as having several green public spaces for business and tourism but also can be well mixed used by the surrounding residents. These green public spaces have good functionally as well as visually link to the surrounding neighborhoods.

By the comparing mapping, we can see that surrounding the train station, there are high density housing and mix-used neighborhoods but still some interspaces for green area and public space.
Case study (mapping) - landscape integration:

From the site view, Station ’s-Hertogenbosch can be used good reference as having a proper landscape integration. Each green space are made sense by the neighborhoods. They are well used.

By the comparing mapping, we can see that the green space are fine integrate with the neighborhoods. All of them are defined and well shaped by the neighborhoods.
Case study (mapping) - infrastructure:

From the site view, Station Breda can be used good reference as having a proper traffic flow. The heavy infrastructure will cause a boundary and big noise. If the pedestrian friendly route and the green public space intended to work well, they should be kept away from it.

By the comparing mapping, we can see that there are some common context between Station Breda and Station Amersfoort. Both of them will have a city main road on each side of the train station.
Case study (mapping) - green infrastructure:

From the site view, Station Utrecht can be used good reference as having a proper green infrastructure. Each route has a good green quality.

By the comparing mapping, we can see that the green space are well combined with the infrastructure in different scales, such as the regional road, city main road, neighborhood main road and pedestrians extra.
Connections:

For the urban functional connection aspect, I check each case to find what kind of opportunities the train station can provide, and what kind of urban space structure they used to build a good connection from the train station to other parts of the city.

For the station Arnhem, there is a good link between the train station to the natural landscape area. This link is built basically by a wide green belt. This green belt containing the motor infrastructure, the pedestrians and the commercial street as well as recreational facilities.

For the Station Utrecht, the connections between rain station to the city center and the surrounding neighborhoods area built by two paralleled routes. One route is for the business and commercial, and the other is for green recreation. Both of them are pedestrian friendly route. The route for the business and commercial is an extension of commercials in the city center. It composed by commercial facilities, recreation service facilities and public spaces. The green recreation route is based on the green-blue structure to provide park series to connect the train station to the surrounding neighborhoods. The two routes are parallel. Thus several public space and green space can be shared as conjunction nodes.

The Station ’s-Hertogenbosch also has a good connection between the train station and the city center as well as its surrounding neighborhoods. Those elements are well connected by a commercial street and mixed used neighborhoods. The commercial street with service facilities and public spaces can provide a good link between the train station to the existing diverse city center. Beside the train station and the commercial street, the mixed used neighborhoods are provided to hold up the noise caused by the heavy infrastructure, also to make an integration of the business and commercial settlements with the local neighborhoods.

The Station Breda has a good connection between the train station and the surrounding neighborhoods. This connection is benefit from the linear layout of the business area. In these business blocks, a park series are provided for the passengers as well as local residents. This park series provide a good functional as well as visual link between the train station and the surrounding neighborhoods.
Station Arnhem: concentrated infrastructure + green connection

Station Utrecht: parallel connections: green recreation + business commercial

Station ’s-Hertogenbosch: commercial street + mixed used neighborhoods

Station ’s-Breda: linear layout of business blocks + inner park series

Opportunities for good linkage from train station:

1. Commercial and service facilities concentration
2. Good green / public space quality
3. Neighborhood mixed use
Landscape entrance - Amersfoort train station - Design Solution

The situation on the site:

A landscape scratched area at the train station and the railway parking yard area.
The regional tourism bicycle route detoured in the neighborhoods and not easily recognizable as an entrance route to the landscape theater.
Vision:

Reshape the train station and the railway yard area for extension and integration of landscape.
Provide a more proper urban centre identity at the train station area.
Provide an entrance route to Het Gooi with diversity urban functions.
green connection at different scales:

(1) Landscape reclaiming: The extension of the zoo, the low density housing, offices and park series compose a large scaled green connection between the natural area and the built urban area.

(2) Landscape identity: The finger shaped natural landscape and park series give landscape identity to the train station, and also compose an inter-media scaled green connection between the natural area and the neighborhoods.

(3) Landscape integration & urban diversity: The series of green public spaces compose green connections between the large scaled green area and the neighborhoods.
**Design Methodology:**

The design goal which is to provide urban center and landscape identity as well as a diverse entrance route to this area, is very complex. The design task covers both urban domain as well as landscape domain. Also, elements in different scales are involved. In the urban aspect, the program, the urban functions are the basic design tools. But in landscape aspect, the spatial, visual form are the basic design tools. That makes the design should take a balance between this two aspect. Also, the small area with local settlements are easier to be realized and need short term development, and the large development area with regional scaled program are need long term development and hard to be realized. So it requires a efficient control tools of this large area in the design.

**Strategy:**

For the landscape design, three aspects should be included, which are landscape reclaiming, landscape identity and landscape integration & urban diversity.

Landscape reclaiming: Filling the railway parking yard area to reshape the edge of the city. In this aspect, a nature and urban integration should be provide at the edge of the city. The formal landscape scratch caused by the railway settlement should be remedied.

Landscape identity: Parks and large open view of landscape should be provided at the inner city area near the train station. That means to bring the sense of the green quality of the natural landscape area into the city. It can also provide landscape identity to the train station.

Landscape integration & urban diversity: Between these parks, large landscape areas and the neighborhoods, the fine integrate green space should be provided and combined with public spaces. That means to make an integration of the large landscape with the local neighborhoods and also an inspiration on the urban diversity.
Three design task:

- Reshape the train station and the railway yard area for extension and integration of landscape
- Provide a more proper urban centre identity at the train station area
- Provide a entrance route to Het Gooi with diversity urban functions
Control tools:

According to the main design goal, three main design tasks can be concluded.

The first one is reshaping the train station and the railway yard area for extension and integration of landscape. The second one is providing a more proper urban centre identity at the train station area. The third one is providing an entrance route to Het Gooi with diversity urban functions.

Each of these design tasks need two types of control tools for the development assignment.

One is for the long term development and should be flexible. The other one is for the short development assignment or should be specific defined development assignment. Sometimes, the design tasks in each of the two aspects are restricted by each other in some degree in the design process. To make a clear description and balance between them, I established some control tools for this design practice.

For the first design task, the urban extension are covering a large area and need long term development. In this aspect, more flexibility should be given to the future architectural design. So I only give the restriction on the building size to make sure it can be easily integrate with the natural landscape and the historic townscape. The main infrastructure and the green infrastructure should be specific designed for the good connection to the existing urban area as well as the landscape structure.

For the second design task, the new urban program are uncertainty, so it should be given a flexible consideration in the design solution. To provide a landscape identity at this area, the landscape typology is important and should be specific designed. And also it can be realized in short term development. But the landscape typology is highly dependent on the new urban programs and urban networks.

For the third design task, the realize of urban networks needs long term development and confront with uncertainty. But some key projects can be and should be realized in a short term.

To make a balance between the uncertainty of the urban network and the required definition of landscape typology, a landscape plan and a flexible spatial model will be provided. Under this landscape plan and a flexible spatial model, the most feasible and shortest time needed urban network should be realized at the first phase. The key projects for these urban network should be specific designed and realize as soon as possible.
Infrastructure morphology:

No good link from train station to the zoo (entrance to the nature).
Few local roads through the construct site.

Urban morphology:

Void parking yard area without any program.
Sudden change of building typology shows no integration between both sides.
The large void area in the city is caused by the train station settlement as well as the historic development process. The train station and the parking yard settlement caused a scratch of forest landscape in that area. The different urbanization process of each side on the station caused no urban functional link between each other. Soesterkwartier and Bergkwartier are totally separated from each other.
Before the city has been settled, there are three types of landscapes at the intersection of the Amersfoort which are the ridge Utrecht (woodland), the Gelderland Valley (required landscape) and the Eempolder (open country). These three landscapes are important for the history of the city and also have identified as areas with a different character.

(1) In the first urbanism stage, Amersfoort has a special historic center. The city was created as small settlement on an intersection of trade routes by a ford place (a 'voirde') on the river Eem (formerly Amer called). In the inner 2 rings of canals have been identified.

(2) Then, the town is no longer the geographical heart of the city. Southern districts Striking in the urban structure of Amersfoort is that no ring early 20th century buildings around the city lies.

The very old quarter is characterized by detached homes on large lots and is designated as a protected townscape.

(3) After that, the districts Kruiskamp, Randenbroek, Schuilenburg, Liendert, Torque and Schothorst South after World War II developed by the petal design around the center grouped.

(4) After that the railway track, the train station and the railway yard and the following business settlements are emergent.

(5) Then the south part of the city is developed later.

(6) Amersfoort Noord and Vathorst are separate. These areas are linked with the appointment by the kingdom in 1980 as a growth town of Amersfoort.
technical problems:

(1) The height distance cause an inconvenience of accessibility and difficulties of settlement.

(2) The railway parking yard always cause safety problems which makes it had to build on

(3) The noise made by train make it is hard for residential settlements.

technical solutions:

(1) Displace the railway parking yard

(2) Reuse of the abundant railway tracks to provide some history and artificial value for the landscape.

(3) Make landscape cover at some place to provide more accessibility and public spaces as well as block off the noise.

(4) Build rows of business buildings to protect the residential area from the noise.
Context:

The Amersfoort train station area can play different important characters in different scales.

In the Het Gooi tourism area, city Amersfoort is the biggest city with the most integrate urban functions. Amersfoort train station is one of the most busiest train station in this area. The city have a good potential to be an anchor city for these tourism area and provide one of the most important entrances.

In the Province Utrecht, there are more the 6000 commuters flew to Utrecht per day. It’s a dramatically close business connections even in the Randstad system. So it have a great opportunities to enhance and develop these business system.

In the city Amersfoort area including its surrounding towns, city Amersfoort has the biggest and most attractive historic center with integrate recreation facilities. Under now the fast economic growth at Amersfoort, there a great opportunity to build a bigger and more attractive recreation center at the station area for whole city as well as the surrounding towns.
HISTORICAL HARBOUR TOWNS

CASTLES, VILLAS

HISTORICAL TOWNS

FORTS OF NEW DUTCH WATER LINE

Great resources for tourism development in Het Gooi
- Tourism & commuter:
  tourism flow from all over Netherlands
  commuter flow mainly to Utrecht
Most integrate city centre among the surrounding towns and cities.
- recreation center of the city and surrounding towns
- commuter system between Amersfoort and Utrecht
- tourism in Het Gooi
Landscape entrance - Amersfoort train station - Context

development potential:

- low density housing
- mixed used housing and business
- inner city green space
- recreation
Planning

- extending one city main road to the natural area
- extending several neighborhood main roads cross the railway tracks overage or underneath
- new infrastructure system at the railyard area for future urbanization
urban extension and landscape integration

(1) extend the form of urban grid at the edge of the city
(2) a small extension of zoo to the east which is nearer to the inner city
(3) low density housing or offices reclaims to the west to meet the natural area
(4) make a figal shaped park series as a landscape connections into the urban area
Planning for large scaled green connection

- make a restriction on the building scales for the future development at this area
Building typology

S

- Villa house
- Low rise raw house
- Small office syntheses
- Detached small office building
- Multi-store mixed office building
- Multi-store mixed raw house

M

- Low rise office building
- Low-rise raw house

L

- Recreation facility (cinema)
- Reused industry building
- High - rise business building
Building typology

XL

commercial syntheses

high-rise business syntheses
Landscape entrance - Amersfoort train station - Planning

Frame - Pattern - Circuit

Plantation - Flow Landscape - Landscape Theater

Stitching the void urban area (10ha-50ha scale)

Research questions:

How to make an integrate urbanization of urban void area in the city.

Theory of “Pattern – Frame – circuit” system:

(1) Make use of the destinations surrounding and routes through to define the void area.
(2) Facilities will be gradually settled on the routes.
(3) More routes will be provided.
(4) More destinations and routes will be provided.
Rebuilt the urban functional links "route - destination system":

As mentioned before, there is a large urban void area between the neighborhoods on each side of the train station. Also there is no urban functional link between each side, it is very hard to build a diversity entrance route between the train station and the large open landscape area. So the theory on how to make use of the impact caused by train station to build an urban link on the large void area is required.

To solve this question, two aspects is involved. The first aspect is how to rebuild an urban link on this large void area. The second aspect is how to make use of the impact caused by train station on the urban diversity.

On the first aspect, we can make use of the theory of “FPC” system (Peter Peter de Bois, 2003)
This theory describe how the urban connections really works in human’s life. It can providing insight in the process of formation, perception and the actual use of urban structure.
(1) “Frame”, building plan and apertures
(2) “Pattern”, landmarks and anchor points
(3) “Circuit”, resulting routing scheme
Generally speaking, the physical links can be built first, including the infrastructure link, functionally related places. And then the route can be physically enhanced, shaped and formulated. When people notice it and become used to using it, the urban functional links are realized.

Then I can have the idea of the “route – destination” system. We can make use the existing destinations which have strong links to each other. Strengthen and qualify this route for mixed use. Then several spots can be chosen from this route for facilitated nodes. These nodes can be mixed by other facilities. These facilities can have links to its surrounding neighborhoods. Gradually, more routes are created. Then, the new routes also can be used for providing facilitated nodes as new destinations. Continuing this, the new urban functional links will be built at this large urban void area.
Train station impact

<table>
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<th>Primary focus\Secondary focus</th>
<th>Location</th>
<th>Network</th>
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<tr>
<td>Node</td>
<td>Connector</td>
<td>Transportation node</td>
</tr>
<tr>
<td>Place</td>
<td>Meeting place</td>
<td>Urban centre</td>
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Research done by Erik Louw: He sorted the development approaches of train station in four types based on considering the dual character of train stations that they are nodes in transportation networks as well as places in the city.

<table>
<thead>
<tr>
<th>role of train station</th>
<th>place</th>
<th>synergy</th>
<th>note</th>
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<tr>
<td>circuit in the city</td>
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<td>hub</td>
<td>regional users</td>
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<tr>
<td>destinations</td>
<td>diversity of destinations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>synergy</td>
<td>facilitated routes (city scale)</td>
<td></td>
<td>facilitated routes (region scale)</td>
</tr>
<tr>
<td>routes</td>
<td>several important links to the inner city area</td>
<td>mixed used public place at the junction</td>
<td>strong link to regional settlements</td>
</tr>
</tbody>
</table>

Make use of synergies to define the void area:

In general, in one aspect, the train station can work as a regional destination. Combined with other regional facilities, it can provide several routes to define the void area in between. In another aspect, the train station will cause urban centralization. That will bring in a diverse programs. These diverse programs will provide diverse destinations and routes. Those routes also will help to define the void area.
The impact of train station to the route - destination system:

To take the train station as an important element in the route and destination systems, we firstly divided the approaches of train stations in two types. It is according to the research which have been done by Louw (2008). In this research, for analyzing great impacts that the train station give on the urban dynamic, he divided the approaches of train stations by their different identities as note or place.

When we look at the train station as a note, it is more emphasis on its function as a transportation element which connect the regional infrastructure system and as well as a interchange point to local transportation system. When we look at the train station as a place, it is more emphasis on its role in real estate discipline. Because of its good location which contain dense of different scaled infrastructure, it has good opportunity for a centralization of settlements program including commercial, business and recreation extra.

Then I use this definition of the two type approaches of train station, to combine with the route and destination systems to find out what can be provide to benefit the routes and destinations.

As a node in the metropolitan transportation system, the train station can bring in people from other cities. Most of the commuters, recreationers, tourists from other cities may get to the train station first and then go to the destinations. So the train station can become a diverse regional scaled destination. It also can provide routes to the regional destinations (such as metropolitan parks, offices)

As a place in the city, because of its good location which contain dense of different scaled infrastructure and also its diversity of urban programs, the train station can provide diversity destinations for the citizens. Also, this diverse programs and the different scaled infrastructure system can provide different types of routes to other parts of the city.
This intended developed area is in a walkable distance between the zoo and the train station. It's a good opportunity to provide recreation facilities on the walking routes between the zoo and the train station.
Destination system:

Main routes & mixed used service nodes:

The strategy of how to rebuild the urban network in this area is based on the theory of “route & destination system”. By using the existing regional destinations which are the train station and the zoo, the tourism route can be built at this area. Along this route, the tourism service facilities can be provided. Then, several nodes can be realized and mixed with other facilities. Also, based on the new offices and housing settlements, the business and commuters’ routes can be built. The service facilities and the nodes can be combine or connected to each other. Those nodes should also provide service facilities for the surrounding neighborhoods which can be well connected to the local context.
Regional tourism & recreation route:
(1) historic center --------- park & zoo
(2) train station ----------- park & zoo

facilities:
(1) entertainment: museums, cinemas, theater, theme park
(2) service: hotels, restaurants, coffee, bars
(3) commercial: shopping mall, shops

Commuter route:
(1) train station --------- housing
(2) train station ----------- business area

facilities:
(1) entertainment: restaurants, coffee, bars, gymnasiaums.
(1) service: living & working service facilities
(2) commercial: supermarket, shops, groceries

Neighborhood scaled public spaces:
(1) Surrounding train station: regional scale & city scale & local scale
(2) Along regional routes: regional scale & local scale

facilities:
(1) entertainment: restaurants, coffee, bars, gymnasiaums.
(2) service: schools, church, neighborhood parks
(3) commercial: supermarket, shops, groceries
### Urban Network & Spatial Model:

1. Several small business and living service centers surrounding the large green area. The small tourism service centers are located in the middle of the large landscape area. They are well connected to each other and surrounding neighborhoods.

2. One large business service center near the train station. One large tourism service center is located at the north edge of the large landscape area. They are also well connected to the neighborhood center.

3. One highly concentrated recreation center near the train station. A tourism service tower building is located at the center of the large landscape area.

### Evaluation:

<table>
<thead>
<tr>
<th></th>
<th>form 1</th>
<th>form 2</th>
<th>form 3</th>
<th>conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>urban center identity</td>
<td>-2</td>
<td>-1</td>
<td>0</td>
<td>In form 3, the extra large building shows a great urban centralized identity. But the high centralized urban programs and green space will be closed by itself to its surrounding neighborhoods.</td>
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<tr>
<td>landscape identity</td>
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<td>In the form 1, buildings and green space are almost the same size as their context. It’s very easy to integrate with its surroundings.</td>
</tr>
<tr>
<td>urban integration</td>
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<td>infrastructure</td>
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<tr>
<td>green infrastructure</td>
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</table>

### Decision:

- Basicly using the second spatial form
- Adding big box at the station for future extra large entertainment program
- Adding more flexible area for the future offices or mixed use
- Two landmarks: two service centers with tourism, business, entertainment facilities
- An integration connector: a mixed used neighborhood
**Flexible solution:**
- Adding big box at the station for future extra large entertainment program
- Adding more flexible area for the future offices or mixed use

**Landscape identity:**
- Two landmarks: two service centers with tourism, business, entertainment facilities to define the large landscape area.

**Tourism route:**
- Park series to define the tourism route form train station to the zoo and the landscape theater Het Gooi

**Integration:**
- An integration connector: a mixed used neighborhood
Section1: station square at level

Section2: green dike with building at level

Section3: green dike with road under through

**Technical solutions: two deck covers:**

- deck cover for the train station square
- green office dyke for the small office buildings and the linear park between neighborhoods.
Landscape entrance - Amersfoort train station - Urban design

- Landscape area
- Designed route/public space
- Tourism main route
- Water
- Bicycle route
- Park route

Train station square
Tourism service centre
Office dyke
Urban networks & key project:

Under this spatial model, there are three routes being provided at this area. They are the most feasible urban network at this area and should be realized first. The first route is tourism route. It’s park series which connect the train station and the zoo. This route is well connected to the formal commercial route between the train station and the city center. In this route, a new tourism facility center is provided.

The second route is business & commercial route. This route connect the train station and the new business settlements. It is an extension of the formal commercial route between the train station and the city center. In this route, a new shopping street based on pedestrian is provided. This shopping street is combined with the business service center near the train station.

The third route is neighborhood route. In this route is the main recreation route goes from the train station to the new residential settlements. It also plays as the main recreation route from the existing neighborhoods at the north side of the train station. In this route, a neighborhood service center combine with public spaces and semi-public garden series are provide.

The three routes are converged at one neighborhood. This neighborhood works as an integration connector. It gives a balance of the separation and penetration between the space on those different routes. Also it make an integration of the large scaled landscape with the local neighborhoods.
Landscape entrance - Amersfoort train station - Linkage & key project

- lively place defined by neighborhood service facilities
- public transport transit square
- entrance square defined by public buildings
- square
- commercial street
- recreation route
- commuters' route
- neighborhood route
Tourism route:

(1) A square under through the railway track make a connection between the city centre and the station square.
(2) The station square, the tourism service centre and the entrance of the zoo are connected by park series.
Business & commercial route:

(1) A square under the railway track makes a connection between the city centre and the station square.
(2) The station square, the tourism service centre are connected by a commercial street.
(3) A linear park on the green office dyke connects the tourism service centre and the offices on the dyke.
Business & commercial route:

(1) A square under through the railway track make a connection between the city centre and the station square.
(2) The station square, the bus transit with commercials and the neighborhood centre are connected by a series of semi-public parks.
(3) A neighborhood through path connect this neighborhood to the supper market.
(3) A linear park on the green office dyke connect the neighborhoods on each side.
Landscape entrance - Amersfoort train station - Master plans & details

- Living, work shops and stores
- Shops, groceries and bars
- Offices
- Cultural, educational and religious facilities
- Welfare facilities
- Municipalities and community active
- Commercial entertainment
- Leisure / Hotel
- Public transport terminal
- Function flexible

Small scale
Extra large scale
Extra large envelope with flexible functions in it

Small buildings with front doors on the street

Large scale

Linkage & key project
Integration connector:

(1) Front Line: A series of office towers in front of this neighborhood are confronted with the large landscape area. They are also preventing the noise from the heavy infrastructure as well as the train.

(2) Middle Line: The commercial street behind the office towers are combined with the neighborhood centre.

(3) Integration Line: A series of semi-public parks are combined with neighborhood service facilities.
Stadium and all kinds of entrance

- athlete & service route
  entrance to the stadium

- audience route
  entrance to the stadium

- tourism route
  entrance from the train station

- local recreation route
railway / underground parking
stadium activity space
service rooms in stadium (changeable function)
annular glass hall for tourism
Important entrances

- A: from the north station square to the stadium/parks/commercial
- B: entrance to the neighborhood semi-public parks
- C: entrance through the glass hall
- D: entrance to the commercial street
- E: entrance to the stadium