Learning Plan

M.M. de Vries #1279831

AR3AUH020 Hybrid Buildings Graduation Studio Urban Regeneration: What next?

Personal Information

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Studio

Theme The Zaanlijn, an urban artifact in the Zaanstreek

Teachers Esther Gramsbergen, Tamara Rogic

Argumentation of choice of the studio

The choice for this this studio I've made because of the combination of themes of mobility and the hybrid building as catalyst in a process of urban transformation.

My interest for mobility nodes arose during my internship at Movares, where I worked on a wide range of projects related to train stations of different scales. The integration of the train station within its context, which in case of the studio will relate to dwelling, in combination with the functional requirements of a mobility node is challenging. The focus of the studio on the Zaanstreek has an extra dimension for me because of my origin, Uitgeest, which is close by. I passed the area often when travelling to Amsterdam by train.

Title

The title for my graduation project is based on the idea for the type of intervention I want to make in the area around the station of Koog-Zaandijk.

Train station as integrated urban element in 'Koog-Zaandijk'.

Product

The research will focus on the station area of train station Koog-Zaandijk, positioned at the border of the villages Koog aan de Zaan and Zaandijk, along the crossing of the provincial road N203 (North to South, Limmen to Zaandam) and N515 (East to West, Haarlem to Beverwijk).

My field of interest is related to the train station and its role in and relation with the surroundings. In particular the change in typology of a train station in relation to the growth of the city and frequency of the train schedule. Key terms are: *train station, platform, integration, connection*.

Improving train station Koog-Zaandijk

The role of the train station and the station building in both functional and spatial terms has changed during its existence. The train has become a common way of public transport. 3000 people per day use the train station of Koog-Zaandijk. (Gemeente Zaanstad, 2011, p. 26) The two most important groups of users are commuters, primarily in the direction of

Amsterdam; and tourists, primarily for a visit of the 'Zaanse Schans'. According to (Goudappel Coffeng, 2011, p. 51) this is an advantage because the social-recreational users of the train cause more spread in the use of the train station, next to the peak moment in during rush hour.

Functional role of the train station

In the current situation the train station functions as a stopover. The train station is used to transfer between different types of transport. The only additional function on the platform is a kiosk that sells drinks and snacks. The train station lost its romance and the role for the city is mono-functional.

Commercialization of the society influenced the program of mobility nodes; this can be seen clear at nodes of a large scale. The flows of people make these nodes interesting, as they are potential customers. (Chung, Inaba, Koolhaas, & Leong, 2002) In which way a relatively small train station can function as a hybrid node, combining both mobility and a social and commercial role for the context in order to stimulate people to make use of public transport is an interesting subject with the further growth of the urban landscape.

Which functions can make use of the train more attractive? The train station can be more than an ordinary stopover. Combining program that is interesting for commuters when leaving for work and when arriving on their way to their homes, or adding program interesting for tourists can stimulate the use of the train.

Spatial role of the train station

The railway of state line K exists out of 2 tracks. The platform of train station Koog-Zaandijk is positioned in between the tracks: an island platform. The tracks isolate the platform and station building from the urban context. The provincial road, positioned East of the railway increases this isolation.

When the global position of the station was determined, at the end of 19th century, there was only built area on the east side, in between the railway and the river. The station only had to connect with this side. When the area on the west side became also an important area for living during the 20th century, the station had to serve both sides.

The current situation treats both sides equal: there is not clear front entrance. This equality is fair. In order to improve the relation with the urban context on both sides, the position of the platform, the station building and the accessibility have to be restructured. The role of the train station as a connecting element in an urban context, split up by the railway itself, can be strengthened.

ADM cocoa factory industrial site

The ADM cocoa factory dominates the site on the east side of the station. The factory settled at this location in the beginning of the 20th century and slowly grew, resulting in an occupied site of approximately 160 by 350 meters, an area of 4.4 Ha.

At first sight most of the buildings of the factory are not high quality architecture or distinctive in their appearance. Though the factory is of importance for the identity of the area. The density of industrial buildings is high at certain parts of the site. Building parts are positioned directly next or on top of each other. By decreasing this density by removing the buildings that are low in quality, the buildings of importance get more air to breath.

Research question

At the scale of the train station Koog-Zaandijk the train station is not a recognizable building anymore, but can act as an urban element.

Which design interventions are necessary to integrate the train station fluent to the urban context, serving both the local inhabitants and the visiting tourists with a supporting building program, when worthwhile partly located in the present industrial buildings?

Main research question

What are the present and missing characteristics of the Koog-Zaandijk station area that are able to create extra value to make use of the train and make the train station an integral element that creates coherence in the village?

Design assignment

The design assignment is twofold, the site of the ADM cocoa factory has to be developed in a dwelling area that relates to the local building patterns. The comb-structure, perpendicular to the Zaan river and the railway in combination with the preserved (industrial) buildings can structure the urban design. The streets at the North (Guisweg) and South (Stationsstraat) border of the site are an important issue as they connect the site to the existing urban tissue.

The layout of parts of the profile of the Guisweg has to be reconsidered when connecting the new infrastructure and buildings. The road is the major entrance to the neighborhoods Oud Zaandijk and Oud Koog aan de Zaan. The main route from the train station to the Zaanse Schans is also along the Guisweg. More distinction between the fast and slow traffic on the Guisweg can create a more pleasant route for pedestrians and bicyclists.

The station and the relation of the station with the surroundings have to be re-evaluated. At the moment the train station functions as an island in between the tracks and the provincial road. The role of the train station will change because of the introduction of the PHS, the stop service will act more like a metro. The level of the tracks in relation to the provincial road has to defer in order to create an unequal rail crossing.

To create a relation between the sides east and west of the train station different tools are explored [paragraph 4.3.9] to create this connection. The connection made by the position of the ADM powder factory building and the power station frame the direct station area. This area will be elaborated on in metal. The buildings will be reused and where necessary made suitable for 'human' program. The program for this area is more diverse: Next to dwelling, which is still the major part of the program, additional services are introduced to create extra value to make use of the train. Passengers can do their daily shopping and sports within a few steps when they're at the station. The building I'll design will improve the connection between east and west and contains the hybrid program of the train station, additional daily services like a grocery store and fitness, and dwellings.

"The train station as integrated urban element in 'Koog-Zaandijk'."

Goal

Improve the 'entrance' of Koog-Zaandijk for both inhabitants and tourists. The ADM cocoa factory will be removed from this location; certain existing buildings will be preserved and reused. The relation between the train station and context has become weak during its presence and a more fluent connection to both the East- and Westside can strengthen its position. At the ADM cocoa factory site, existing buildings have the potential to be transformed to house hybrid program and keep the (industrial) identity of the area.

Historical patterns and current street patterns are important to structure the plan and in order to re-connect Koog aan de Zaan and Oud Koog-Zaandijk.

Process

Method description

The research should result in general knowledge. In a more narrow sense the product of research can be seen as 'the description of existing reality' (Máčel, 2005, p. 25). The existing reality in this case is related on a large scale to the Zaanstreek and on a more detailed scale on the station area of Koog-Zaandijk.

Methods and techniques are not isolated ways of working, methods can have overlap and the same techniques can be used within different methods.

Map study

The map study is a method that has overlap with the major part of the methods and techniques that are used during the research. The map study exists out of collecting data and recording them in a map whereby the production of the map concerns with usage of color, legend and readability. (Moens, 2005, p. 71)

Descriptive research

The describing of the characteristics of an area of the accurate description of a building is a method to register. An important aspect of descriptive research is that in one ore another way every description is subjective. (Lans & van der Voordt, 2005, p. 54)

Historical research

The history of a place can give answers on how the current situation has been established. It gives identity to a place and causes inhabitants to have a relation with the location. As written by Cavallo '...the globalization of the market economy generate as counterforce a strong emotional desire to keep links with the past, with the essential characteristics of the historical urban fabrics'. (Cavallo, 2008, p. 9)

Typological research

A typological research on the neighborhoods surrounding the station area to understand the local used typologies. The morphological analysis is usable. Different typologies can be connected to timeframes. An overlap between historical and typological research is common.

Case study / reference study

A research on comparable design assignments. Station locations, industrial transformations and repairs of the urban tissue are main subjects. Many public transport nodes are transformed at this time, interesting are the locations where also the barrier function of the railways is tackled (Almelo Verdiept, Kap van Barendrecht, Tunnel Nijverdal, Spoorzone Delft).

Field trip

To understand and get familiar with the region it is important to visit and observe the area. Visiting, exploring, observing and understanding the area is of great importance in order to shape the design assignment. (Box, 2007, p. 72) The area will be visited at least twice, during

the first part of the research multiple locations in Zaanstad and in the second part the chosen project site to get more familiar with the specific location.

Literature and general practical preference

- Box, H. (2007). *Think like an architect*. Austin: University of Texas.
- Cavallo, R. (2008) Railways in the urban context. Delft: TU Delft
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- Cleassens, F., Engel, Ir H.J. (2007) OverHolland 5. Nijmegen: SUN
- Engel Ir. H.J., Waaijer, de, IR. D.A. (2011) 22 stationslocaties in Hollands Noorderkwartier.
- Lans, W., & van der Voordt, D. J. M. (2005). Descriptive research. In T. M. de Jong & D. J. M. van der Voordt (Eds.), *Ways to Study and Research*. Delft: DUP science.
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- Provincie Noord-Holland (2011) Kansen voor ruimtelijke ontwikkelingen rond ov-knooppunten in Noord Holland.
- Uytenhaak, R. (2009) *steden vol ruimte. kwaliteiten van dichtheid.* Rotterdam: Uitgeverij 010

Reflection

Relevance

The role of the train station and the station building in both functional and spatial terms has changed during its existence. The train has become a common way of public transport. At the scale of the train station in this project the train stations are a stopover, in Koog Zaandijk also an island in spatial terms.

The railroad is an artifact in the urban landscape and an element that is not flexible. While the course of the rail keeps the same for long periods, the train station itself has a changing identity and can react on the development of the city.

The growth of the urban landscape, where in our case Zaanstad is part of the greater metropolitan area of Amsterdam, makes it possible to let the train act as a metro (PHS). On the other hand commercialization of the society influenced the program of mobility nodes, this can be seen more at those with a large scale. In which way a relatively small train station can function as a hybrid node, combining both mobility and a social role for the context in order to stimulate people to make use of public transport is an interesting subject with the further growth of the urban landscape. In combination with the industrial character of the site on the east side of the station, a multiple architectural fields will be touched.

Time planning

Time planning for the workload of the graduation project.

Week 3.10 P1 presentation

Week 4.1	Excursion / Formal/mass studies & urban integration
Week 4.2	1:1000 Formal/mass studies & urban integration
Week 4.3	1:1000 Formal/mass studies & urban integration

Week 4.4 Week 4.5 Week 4.6 Week 4.7 Week 4.8 Week 4.9 Week 4.10	1:1000 Formal/mass studies & urban integration / no studio 1:500 Learning plan / Formal/mass studies & urban integration 1:500 Building program / formal/mass studies & urban integration 1:500 Building program / plans / sections 1:500 final P2 report / building program / plans / sections 1:500 Building program / plans / sections / Final urban design P2 presentation
Week 1.1 Week 1.2 Week 1.3 Week 1.4 Week 1.5 Week 1.6 Week 1.7 Week 1.8 Week 1.9 Week 1.10	1:200 specific building / BT / plans / facade 1:200 BT / plans / facade 1:100 BT / plans / facade 1:100 BT / plans / facade 1:100 / 1:20 Preparing P3 presentation P3 presentation Processing P3 feedback 1:100 / 1:20 Plans / facade Elevations / sections 1:20
Week 2.1 Week 2.2 Week 2.3 Week 2.4 Week 2.5 Week 2.6 Week 2.7	Elevations / sections 1:20 Details 1:5 Details 1:5 Preparing P4 presentation Preparing P4 presentation P4 presentation Processing P4 feedback / preparing P5 presentation
Week 2.8 Week 2.9 Week 2.10	Preparing P5 presentation Preparing P5 presentation Preparing P5 presentation P5 presentation