

The new Green Belt

Oostendorp, Wouter; Kuijper, Joran

Publication date

2018

Document Version

Final published version

Published in

Stations as Nodes

Citation (APA)

Oostendorp, W., & Kuijper, J. (2018). The new Green Belt. In M. Triggianese, R. Cavallo, N. Baron, & J. Kuijper (Eds.), *Stations as Nodes: Exploring the role of stations in future metropolitan areas from a French and Dutch perspective* (pp. 204-207). TU Delft OPEN Publishing.
<https://books.bk.tudelft.nl/index.php/press/catalog/book/682>

Important note

To cite this publication, please use the final published version (if applicable).
Please check the document version above.

Copyright

Other than for strictly personal use, it is not permitted to download, forward or distribute the text or part of it, without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license such as Creative Commons.

Takedown policy

Please contact us and provide details if you believe this document breaches copyrights.
We will remove access to the work immediately and investigate your claim.

Stations as Nodes

Edited by

Manuela Triggianese

Roberto Cavallo

Nacima Baron

Joran Kuijper

Contributors

Maarten Van Acker

Marjo van Amerongen

Nacima Baron

Fabrizia Berlingieri

Hans de Boer

Roberto Cavallo

Paul Chorus

Valentina Ciccotosto

Debbie Dekkers

Albane Grandazzi

Maurice Hartevelde

Marcel Hertogh

Serge Hoogendoorn

Kees Kaan

Bachar Kaban

Yo Kaminagai

Jurgen Krabbenborg

Joran Kuijper

Tom Kuipers

Nils Le Bot

Niels van Oort

Wouter Oostendorp

Joannette Polo

Nico Schiettekatte

Arjan van Timmeren

Fatemeh Torabi Kachousangi

Manuela Triggianese



**exploring the role of stations
in future metropolitan areas
from a French and Dutch
perspective**

**Delft University of Technology,
Faculty of Architecture and the Built Environment**

Delft Deltas, Infrastructures & Mobility Initiative

Amsterdam Institute for Advanced Metropolitan Solutions

Université Paris-Est, École d'Urbanisme de Paris

This book is published by TU Delft Open,
Faculty of Architecture and the Built Environment,
Delft University of Technology

© 2018 the authors and the Faculty of Architecture
and the Built Environment, Delft University of
Technology. All rights reserved.

ISBN 978-94-6366-140-9

Editorial Board

Manuela Triggianese
Roberto Cavallo
Nacima Baron
Joran Kuijper

Editor in Chief

Manuela Triggianese

Leadership and Coordination

Chair of Complex Projects, Department of Architecture,
Faculty of Architecture and the Built Environment:
Manuela Triggianese and Joran Kuijper

Scientific Committee

dr.arch. Manuela Triggianese (TU Delft, AMS)
prof.dr. Nacima Baron (Université Paris-Est)
dr.arch. Roberto Cavallo (TU Delft, ARENA)
dr.ir. Maurice Hartevelde (TU Delft, AMS)
prof.ir. Kees Kaan (TU Delft, AMS)
prof.dr.ir. Marcel Hertogh (TU Delft, DIMI)
prof.dr.ir. Arjan van Timmeren (TU Delft, AMS)
prof.dr. Urs Hirschberg (TU Graz, ARENA)
prof.dr. Bernard Kormoss (ULiège, ARENA)

Contributors

Maarten Van Acker
Marjo van Amerongen
Nacima Baron
Fabrizia Berlingieri
Hans de Boer
Roberto Cavallo
Paul Chorus
Valentina Ciccotosto
Debbie Dekkers
Albane Grandazzi
Maurice Hartevelde
Marcel Hertogh
Serge Hoogendoorn
Kees Kaan
Bachar Kabalan
Yo Kaminagai
Jurgen Krabbenborg
Joran Kuijper
Tom Kuipers
Nils Le Bot
Niels van Oort
Wouter Oostendorp
Joannette Polo
Nico Schiettekatte
Arjan van Timmeren
Fatemeh Torabi Kachousangi
Manuela Triggianese

English editing

D'Laine Camp

Photographers

© Bart Koetsier
© Sebastian van Damme

Design

Joran Kuijper

Special thanks to

All 2018 Summer School and Stations of the Future/
Gares du Futur event participants

and to the support of the organisation

Camille Combe, Joannette Polo, Carolien van Tilburg,
Joan Mols, Esther Hogenhout, Annabelle Michon, Elise
Baeriswyl, Django Beek, Maud Kaan, Esther Hogenhout,
Yasmine Baroudi, Debby Dröge, Judith Blommaart-
Tigchelaar, Salma Ibrahim, Amber Leeuwenburgh,
Jenile Koejoe, Annelies van Rooy, Onno van het
Groenewoud, Willem van Heijningen, Charlotte Rietdijk
and Saksia van Eijk and Tessa Wijtman-Berkman

and to the moderators and lecturers

Luca Bertolini, Oscar Vos, Ton Venhoeven, Winnie
Daamen, Yo Kaminagai, Jeroen van der Heuvel,
Sebastiaan de Wilde, Ute Schneider, Daan Zandbelt,
Catherine Barbé, Julien Peyron, Gaëlle Pinson, Cécile
Maisonneuve, Marten Wassmann, Arjan Dingsté,
Pauline Marchetti and Miguel Loos

Imagery

© Louise Plantin
© Benthem Crouwel Architects
© KAAAN Architecten
© Sensual City Studio
© Atelier Novembre
© UNStudio
© authors
© Chair of Complex Projects, Department of
Architecture, Faculty of Architecture and the Built
Environment, Delft University of Technology

Cover image

Collage © Joran Kuijper based on a photo of Gare du
Nord by David Iloff used under the CC BY-SA 3.0 Licence,
and a photo of Rotterdam Central Station by Jannes
Linders, © BenthemCrouwel Architects

▼
 Scenario made by Group D
 imagery by Junquan Pan,
 Matteo Albertini, Alina
 Arnold, Gaia Calegari,
 Xue Kai, Omer Khalid,
 Dunja Krstić, Milorad
 Obradović and Yeqing
 Shang



The Green Belt

- Flora+fauna*
- Bioenergy from the Harbour*
- Future mobility*
- Smart waste management*
- Connection areas*
- Water*

Group D

The new Green Belt

Wouter Oostendorp
Joran Kuijper

group: Junquan Pan, Matteo Albertini, Alina Arnold,
Gaia Calegari, Xue Kai, Omer Khalid, Dunja Krstić,
Milorad Obradović and Yeqing Shang

Initial suspicions

Amsterdam Sloterdijk station is a well located train, metro, bus and bicycle station in between the train stations of Schiphol Airport, Amsterdam Lelylaan and Amsterdam Central Station. Its already strategically role in the transport network of today Amsterdam metropolitan region is of great importance for the upcoming years; Sloterdijk Station will become the key transfer hub of the newest urban expansion of Amsterdam: Haven-Stad. Not only this high level metropolitan urban development will benefit of Sloterdijk station – this transport hub will also be of another great importance: connecting Amsterdam to the harbor area Westpoort and the more rural Zaandam area, north west of Amsterdam city center. Therefore, the Sloterdijk Station and its surrounding area has to undergo a metamorphosis: from a mono-functional office area towards a multi-functional urban centrality as a substantial part of the City of Amsterdam.

Grown over the years from a small train station as an answer to local mobility issues in the 1980's, Sloterdijk Station became a regional massive mobility hub – an anonymous transfer machine in the mono-functional Sloterdijk area. Urban planning and transport planning developed on a very different pace over those past three decades. Sloterdijk station became an isolated entity characterized by massive infrastructures for train, car, bus, metro and tram, positioned in-between large office buildings.

Accessibility other than arriving by train or metro is problematic nowadays. Access points for the different modes of transport

are scattered all over the station area. The different bus stations (local, inter-local and international) make it hard to find the right bus platform, not to speak about train track platforms in another station building that are apparently part of the same big train station. Several large bicycle parkings are located far from the train station entries. Therefore, to get to the train station visitors have to cross several car-ways and change height levels. On top of this, the different modes of transport are located on different physical levels going in opposite directions for the same destinations.

Nevertheless, the daily amount of commuters increases drastically because of the already ongoing urban developments. Sloterdijk Station area already has transformed into a multi-functional west gate for Amsterdam, unfortunately without real success. Sloterdijk is still an unattractive complicated multi-layered transport hub with unclear transport flows stacked upon each other and going in all directions.

Project Scenario | Approach

The design project is about the connectivity and liveability of the Sloterdijk Station's neighborhood in relation to its north east hinterlands and the harbor area Westpoort in between, focusing on the quality of the current public space and its connectivity towards other areas surrounding the city.

Currently the station is an area of physical boundaries, disconnecting existing public spaces. There is a lack of clear distinctions of directions towards a (final) destination of the visitors. Way-finding is overly complicated.

The current residential developments together with the ever increasing number of tourist visiting the city of Amsterdam makes Sloterdijk area popular for hotels.

Nevertheless, Sloterdijk misses a sense of place. This means that this place must contain the physical experience of being in a multi-functional environment. This is a sense of place where local inhabitants can meet each other and interact with commuters or visitors.

In 1935, Cornelis van Eesteren presented a strategy for a ring of green neighborhoods that would foresee the growth and expansion of the city of Amsterdam: the Algemeen Uitbreidingsplan (AUP). By stacking houses into flat slaps, the newly built apartment buildings would be able to facilitate light, air and space (qualities/standards scarcely available in the inner city) in the everyday live of the new inhabitants, thus creating the modern garden city. The Van Eesteren expansion plans of 1935 are partly realized. These Westelijke Tuinsteden (Western Garden cities) could be considered as autonomous 'green islands' with an enormous development of apartment buildings.

The general approach is to use the strength of the area to design a station area that leads to a more environmental friendly scenario for the neighborhood, the city of Amsterdam, the bordering harbor area and its hinterlands, including future inhabitants, daily commuters and making this place a destination for visitors. A new audience for local initiatives, trade and entrepreneurship will arise. In this, Inclusiveness is the key word.

The main research question is: 'How can inclusiveness (on the levels of place, network and sustainability) enrich Station Sloterdijk and its area in a time when heavily densification is taking place while (re)connecting the station with the harbor area and its hinterlands?' The result is a scenario on inclusiveness to build upon.

On the level of livability (identity and place making (place)) the following questions will be asked: 'How does the new development of the Sloterdijk surrounding area relate to current and old

strategies for the residential development in Amsterdam?' and 'Could the original design character play a role in the new character of future public place surrounding the station?'

On the level of accessibility ((re)locating and (re)creating network connections (network)), the following questions will be asked: 'What modes of mobility connect the station towards the metropolitan and regional area?' 'Where are located the local networks that connect the neighborhoods surrounding the area? And 'what public spaces surround the station, and is there a direct access between them?'

On the level of sustainability (environment and area specific values (circular sustainability)) the following questions will be asked: 'What type of waste is being generated in the harbor (also waste heath)?' 'Are there facilities that could process waste into useful resources and is there space available to locate circular industries in that area?' 'Are there products and services that are specifically created in that area and what do local entrepreneurs produce?' And 'could we disperse these resources and products throughout the city?'

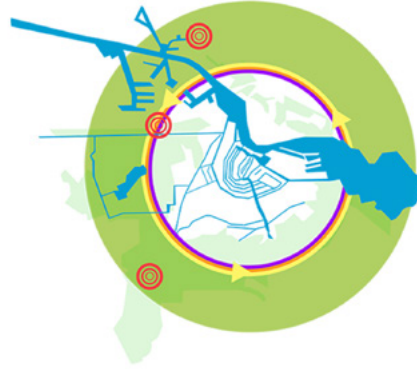
Design Proposal

The design proposes to connect these partly realized Westelijke Tuinsteden with a spatial circular strategy and pull these garden cities together as a Green Belt, that will distribute networks and provide a green identity – an identity that relates back to one of Amsterdam's original planning strategies. Using the 1935 plan as a foundation, this Green Belt would fully surround the city center, even reaching towards the Zaandam area.

Sloterdijk station area will be the main catalyst establishing connections between local (trade) networks and public spaces, reattaching access between current surrounding neighborhoods, future surrounding neighborhoods and the Westpoort harbor.



Algemeen Uitbreidingsplan 1935.



Group Vision for Amsterdam 2050-

Westpoort harbor has energy producing facilities. When combined with facilities that process waste into energy, Sloterdijk Station would become an excellent energy exchange center – a gateway that could collect and disperse people, waste, energy and other area specific values.

Sloterdijk will act as an intermediate between the ‘grand’ city of Amsterdam and its surrounding neighborhoods and will link small local networks together in one clear, green environmental gesture that ties the scattered public space together while enhancing the orientation towards public destinations. Sloterdijk will facilitate public urbanity, therefore, local initiatives can be emerging. It will collect fluxes/flows that will be dispersed through the infrastructure of the Green Belt. Local entrepreneurs, let’s say chocolatiers, could lure a new audience boosting their marketing. This would enable them to invest in the future of the belt, may be even enhancing it with chocolate transport lines that flow throughout Amsterdam.

Sloterdijk will be the initial gateway of the Green Belt, facilitating different types of automated and non automated transport. The belt will change and expand over time, starting out as a sequence of green public spaces organic growing, consisting of water, event spaces, places to reside and routing for slow traffic. Dedicated areas are characterized by a flat landscape with cross connections at the important metropolitan nodes. These manifest themselves as bridge pavilions, squares or elevated roofscapes. Later on in its life cycle, automated public transport is included creating a possible hop on-hop off public transport service around Amsterdam.

Sloterdijk will have an organic roof-scape in order to pick up the blocked local network, neighborhood squares and important street areas throughout its surrounding neighborhood that ties them together on top of the roof. The roof will function as a public square facilitating event spaces hosting local initiatives and will guide passengers flows towards their destination. The shape allows slow traffic from the belt to access the roof in order to continue its way towards their destination in the city or its hinterlands. Instead of a station for changing transport modes, Sloterdijk becomes a station for residing, a station as destination connecting and facilitating high quality urban spaces – the multimodal station as an inclusive destination.

Ambition

This station design is a scenario that includes future inhabitants, commuters and visitors – an inclusive way of living together. Its newly created connections reach towards public spaces and infrastructures that are essential for local events, surrounding neighborhoods, metropolitan activities and regional destinations.

The bigger scale gesture of the Green Belt enhances the exchange of energy flows and the collection waste, connecting Amsterdam as a whole in a green, circular way based on Amsterdam’s original planning strategies.

This bonds together a new audience undertaking new local initiatives and thus unlocking ‘area specific inclusive values’. Imagine Sloterdijk chocolate for all of Amsterdam and its surroundings, powered by renewable energy from the Westpoort harbor.