

The Workshops at Atelier Néerlandais

Triggianese, Manuela

Publication date

2018

Document Version

Final published version

Published in

Stations as Nodes

Citation (APA)

Triggianese, M. (2018). The Workshops at Atelier Néerlandais. In M. Triggianese, R. Cavallo, N. Baron, & J. K. (Eds.), *Stations as Nodes: Exploring the role of stations in future metropolitan areas from a French and Dutch perspective* (pp. 119-131). 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 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



**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

The Workshops at Atelier Néerlandais

Manuela Triggianese

Delft University of Technology
AMS Institute

During the event at the Atelier Néerlandais in Paris, and in line with the considerations on the scope of the « Grand Paris Express » and the « Randstad » in the Netherlands, all the themes mentioned in the previous articles on Stations of the Future have been addressed. A selected group of professionals, stakeholders, experts, designers and scientists from both France and the Netherlands were invited to share their experience, knowledge, and expertise. We had lectures and debates on exemplary case studies in both countries in order to understand the different roles that stations are playing and will play in these metropolitan areas. In working sessions, the participants focused on: the intermodal character of the station, as 'node' and as an 'urban place', the catalyst role it plays in the city becoming a 'destination' by itself, and last but not least the potential of the ICT technology to make stations user-centric. Several research questions and definitions were developed in these sessions on the following topics: business cases of rail-metro stations, public space and architecture, densification and programming of station areas, crowd sensing, way-finding and navigation systems, pedestrian flows management and security systems (waiting zones and retail), and the integration of data.

The workshops aimed at defining the role of the Station of the Future as being: an intermodal node (in French *gare comme nœud intermodal*), a City destination (in French *gare comme destination*) and a data center (in French *gare intelligente comme centre de données*).

A special thank goes to

- Carolien van Tilburg and Joannette Polo for hosting the participants at Atelier Néerlandais;
- Tom Kuipers, Ebru Isguzarer-Onder and Maartje Meesterberends for reporting the workshops;
- Niels van Oort, Ton Venhoeven and Winnie Daamen for moderating the workshops;
- Yo Kaminagai, Jeroen van der Hoevel, Sebastiaan de Wilde, Ute Schneider for their interventions and all attendees for their active participation to the three workshops.

Station as Intermodal Node

The development of a rail network is often associated to the most ambitious of objectives: a tool of economic development, in spatial planning, but also of social and urban innovation. The intermodal node does not only connect different modes of transport but also several scale levels (local, regional, (inter) national). Finding an optimal mix of transport modes for each situation and making it as seamless as possible for the user, are the main goals to achieve. The workshop was introduced and moderated by Niels van Oort (Assistant professor at TU Delft). "To conceive stations as intermodal nodes, we will have to focus on their spatial organization, and not just combine buildings, as is often the case in France" says Yo Kaminagai during the session, Head of the Design department at RATP. During the workshop he described Stations as Urban Places; a new places culture is needed in urban mobility planning. Stations have to be a mix between a transport-object and an urban-object. Thinking of stations this way calls for a shared governance and a better articulation between public and transport authorities. Design oriented approach links the following aspects: Aesthetics (image perception) Functionalities (uses) and Durability (feasibility, maintainability, economy). He also defines 6 dimensions of an urban hub: -transport hub -public space -working place -architectural object -urban pole -service area.

STATION AS INTERMODAL



team « SPACE OF TRANSPORT »
at RATP.

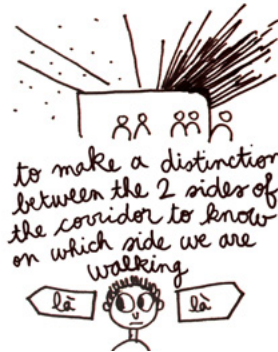


travel map
(M) (RER)

LINES & PLACES

HOW TO UNDERSTAND THE SPACE?

HOW TO EXPERIENCE THE MOMENT?



— osmose —

Research project at RATP

TOMORROW, A STATION WILL BE

- enhanced
- shared
- scalable
- expressive



cf. bus stop at Lyon railway Station

NODE

Brigitte. Blanton

TOUCHPOINTS & PAINPOINTS



WE CAN BE
ON THE SAME
PHYSICAL SPACE
BUT NOT ON THE SAME
DATA SPACE

6 dimensions of a urban hub

- Transport Hub**
- Public space**
- Working place**
- Architectural object**
- Urban pole**
- Services area**

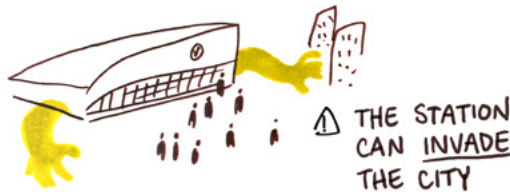
TRANSPORT
+
CITY



“Public space is the support for all urban exchanges. It becomes a central issue of development and innovation, a place of encounters and socialization, and a new environment that is much more than mere operations targeting functional or connective surfaces” says Julien Peyron responsible for the public space and intermodality for the Grand Paris Express (GPE) project at the Société du Grand Paris (SGP). Through its program in favor of intermodality, the SGP is a key stakeholder, along with its partners, in the conception of efficient intermodal nodes that also provide quality, evolutionary public spaces. Intermodal nodes should be evolutionary and flexible in their development and governance/management. Main features are Flexibility and Governance (multi layering, policy and design). How to design and govern flexibility? How to build the governances for the hubs projects and for the hubs operations? How new mobilities will be integrated into the station/hub? New challenges include providing answers to autonomous vehicles, demand responsive transport, electric vehicles, information technology, societal changes (aging population). However, we need to take into account that intermodal nodes are very situation-specific and thus choices per location should be made, while we also need to rethink the intermodal node as an urban place and look for new design solutions.

STATION AS DESTINATION

The station is a public space very well integrated with the city



WHICH IDENT
 TO ADDRESS

Maybe also

Station as City Destination

Railway stations have become much more than just a place to get on and off trains. Instead, they are places to work, do business, meet, shop and relax. Cities began seeing them as a 'Grand Projects' to boost their image, to serve as a symbol and eye-catching entrance into the city. The development of a station project can be used to promote a high level of architecture and the revitalization of city areas.¹ A basic function that a station should provide is transferring to other means of transport. But the best stations are important places as well, with attractive public spaces and a range of vibrant destinations in the station area, according to Ton Venhoeven, founder of VenhoevenCS, who introduced and moderated the session. Yet, "Stations should attract people with a program mix, next to offering transfer to other means of transport", he mentioned. **Sebastian de Wilde, Director of Station Development and Maintenance of the Dutch Railway company NS Stations, showcased the renewal plans for Station Zuid in Amsterdam, in which he focused on value models and the added value of public and**

HOW WOULD YOU DEFINE A STATION AS DESTINATION?

Village Square Warm place
 City center Microcity
 Lieu de Salon Orienté
 rassemblement vers la ville
 Identité locale Liberté



Note

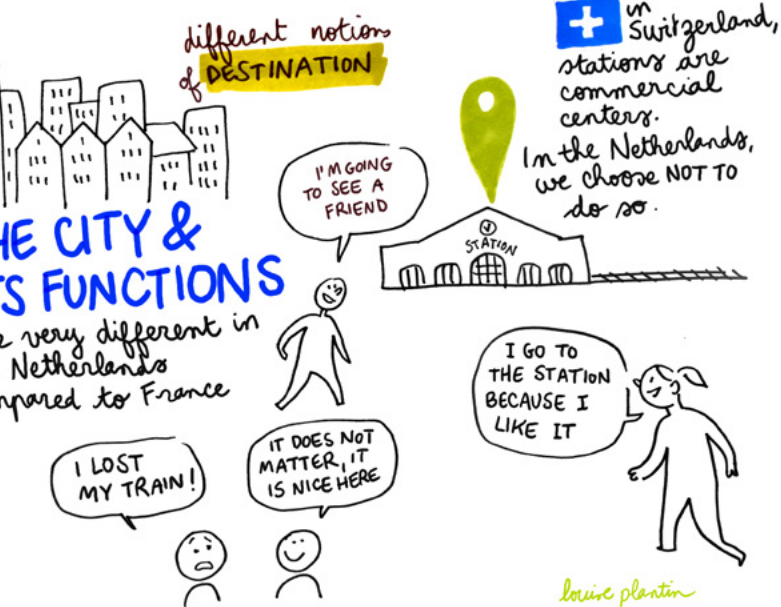
¹
 The railway station becomes as a centerpiece of urban design, see the case of Rotterdam Central Station in: Manuela Triggianese, 9 September 2015, full interview available online in RailTech: <https://www.railtech.com/all/2015/09/09/the-railway-station-as-a-centerpiece-of-urban-design/>

ON

CITY DO WE WANT
SS TO THE STATION ?

THE TECHNOLOGY
CHANGED MANY
THINGS...

the technology will change
the airports



private industry in the development of stations. Finally, Ute Schneider, architect and urban planner at KCAP, glanced through the recent phenomena of urbanization processes in relation to the question "How do networks of transport inform our cities?". She focused on public transport as an urban generator, the station is both a connector and a destination, and on transport-oriented developments including master-plans for station, harbor areas and airports like Europaallee in Zürich and the area around the future Gare TGV Montpellier. During an interactive session that followed, the participants discussed, among other topics, on their perspectives about stations being destinations, and on which financial mechanisms work best for a station as destination. Impressions from the audience included terms like "People place, meeting place, desti-station." Statements included "The station can invade the city", "The station is a public space well-integrated", "Which identity do we want to give to the station?", "There are different notions of stations", "The importance of urban planning", and "Healthy city".

Station as Data Center

The use of information and communication technology (ICT) has revolutionized the travel process for those using not just the train but also other means of transport. Technology is contributing to enhancing the experience of station users, but also is creating new demands from passengers using the rail network, and the managing new services need to be provided. The topic of ICT technology and the use of data, was introduced during the plenary session by Gaëlle Pinson, responsible for the valorization of data for the Grand Paris Express (GPE) project at Société du Grand Paris (SGP). She defines stations as 'datacenters' at the heart of the smart-city concept. The SGP is installing digital infrastructures in the civil engineering infrastructure of the GPE metro capable of enhancing the digital offer for the Greater Paris territories and bringing new revenue to the SGP. Among these infrastructures, the datacenters, installed along the Grand Paris Express and interconnected by optical fiber, will be a key resource. Small captures and well distributed in the heart of the urban fabric, they will be an essential link in the data processing of smart-city and edge computing. During the working session, participants from SNCF (French Railway Company) defined the concept of station as a 'data center' as follow: it is about understating behavior, changing flows and being able to forecast. The data is used to support the design and decision-making process.

STATION AS DATA CENTER



ER

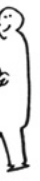
TECHNOLOGY

ING

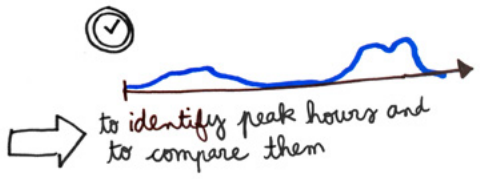
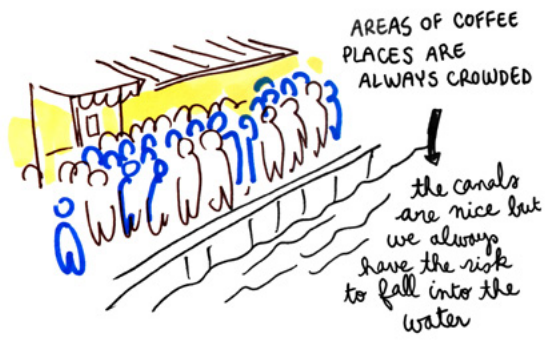
INTERACTION

R

to recognize the users and the anonymous



louise plantin



we qualify the individuals thanks to the data of the social networks

Winnie Daamen (Associate professor at TU Delft) and Jeroen van den Heuvel (Station Development at NS Stations) introduced in the working session how and which kinds of data has been collected at Dutch stations on crowds and pedestrian flows: real-time crowd-monitoring through counting camera's, Wifi and Bluetooth-tracking and public transport chip card data; and measuring sentiments through the use of social media data and surveys. According to the participants, data can mainly be used to understand crowds and pedestrian flows and to forecast future situations in relation to safety, but also to understand customer satisfaction and comfort, in order to improve the design of stations. NS Stations collects data from pedestrian flows in stations from three data sources: 1-Sensors (human shape is detected by sensors, Bluetooth and Wifi sensors at 6 stations in the Netherlands), 2-OV-chipcard (creating a flow data out of OV-chipcard data by linking check-ins to train schedule then an algorithm matches the swipes with trains), 3-Survey (every three months a survey on satisfaction among passengers is held at 50 large stations, two per year in smaller stations). All participants agreed that challenges lie in the integration and cross-fertilization of data from different operators of the different modalities that come together in a station (an ecosystem approach would be preferable) and in integrating stations in their surroundings, creating new and optimal user experience and designs based on data, better understanding causality within the data and researching privacy issues related to the data.