

26TH JANUARY 2023

9AM-2PM

TU DELFT

FACULTY OF ARCHITECTURE AND
THE BUILT ENVIRONMENT,
BERLAGE HALL

walk in

Widening sustainable mobility networks:

Impact on Nodes

 TU Delft
BK Bouwkunde

Funded by  NWO

DESIGN FOR DEBATE & CO-CREATION

WALK -IN FINAL EVENT

26TH JANUARY 2023

9AM-2PM

TU DELFT

FACULTY OF ARCHITECTURE AND
THE BUILT ENVIRONMENT,
BERLAGE HALL

*On the relationship between
Architectural Design
Practice & Mobility*

organized by Complex Projects

How to design attractive and people centred stations as enablers of the mobility transition?

Walk-In focuses on the condition of 'transition' of suburban rail-metro stations in metropolitan areas. Which are the methods and tools to design this transition?

Debate on the Future of Design

08:45 Registration

9:00 Introduction

Manuela Triggianese, Kees Kaan &
Georg Vrachliotis (Dept. Architecture)

KEY NOTE: Paul Gerretsen
(Deltametropolis Association):

**Walk-In Co-creation
Activating Design
Design Data Literacy**

**National Policy &
Design Discussion**

9:15 Perspectives from Practice

Emile Revier (Partner)

PosadMaxwan, NL
**Creating Space for
New Mobility Systems**

Arne Lijbers (Associate Partner)

Mecanoo, NL
The Romance of the Journey

Nils Le Bot (Head of Research) &

Pervenche d'Audiffret (Head of BIM & Data)

AREP, FR

Integrated Approach of Design between High and Low Tech

10:45 Panel Discussion

11:15 Design Case: Station Rotterdam Lombardijen

Pitches by:

Joost Klimbie (City of Rotterdam) **City Vision on Mobility;**

Kris Schaasberg (City of Rotterdam) & Kjai Tjokrooesoemo (De Zwarte Hond)

Ambitions & Visions for Rotterdam Lombardijen;

Cris Mitry (Mecanoo) **A New Perspective for Rotterdam Zuid.**

Teamwork - (all participants)

13:15 Lunch & Networking

vereniging
delta
metropool

POSAD MAXWAN
strategy x design

AREP

 mecanoo



Spoorbeeld
door Bureau Spoorbouwmeester

**DZH
DZH
DZH**


Gemeente
Rotterdam

ProRail

**Future of
Design**

**Transit
Stations**

**Policy
& Design**

Co-creation

Design Data Literacy

Mobility

BIM&Data

**Infrastructure
Architecture**

**Integrated
Design**

**Low
Carbon
City**

WALK-IN FINAL EVENT

SPEAKERS

Emile Revier

Emile Revier is a founding partner at PosadMaxwan and a creative spatial designer and experienced project leader on the themes of energy, urban transformation, mobility and water management. He works on the development of new strategies in design research and planning for the built environment. He has a lot of experience in a variety of mobility or accessibility tasks such as: station areas (including Voorburg, Hoofddorp, Eindhoven, Utrecht), various TOD projects in the Netherlands and Belgium (including the North-South line, IJmeerlijn, Amstelveenlijn, HOVGooi) and mobility hubs. In addition, he led the research into the spatial effects of smart mobility and various MIRT trajectories and network studies in the Amsterdam Metropolitan Region (including MRA, Haarlemmermeer).

Arne Lijbers

Arne joined Mecanoo in 2012 and was appointed Partner in 2022. Ever since joining the company, he has been the driving force behind numerous widely acknowledged, successful projects in The Netherlands and abroad. Over the years, Arne has gained profound experience varying from furniture design in collaboration with Gispén, reimagining the Midtown Manhattan campus; renovating the New York Public Library, an urban design of the Galgenwaard stadium, the transformation of the Meneba factory in Wormerveer towards a multi-use neighbourhood, and designing train interior for NS. Within each project lies a fundamental multidisciplinary approach, in which an analytical and holistic way of thinking is emphasized for a use and experience-based design.

Pervenche d'Audiffret

Pervenche d'AUDIFFRET started her career as an architect. She then worked in an international design office on various airport projects around the world. These projects gave her the opportunity to improve her prescriptive knowledge inherent to such complex projects. Interested in new technologies and working methods, she has been a BIM Manager since 2013 and supports teams in the development of BIM projects in which she focuses on issues of collaboration, project management, data and information management related to construction projects. She has deepened her knowledge with a specialised master's degree at the ENPC school. Since 2017, she leads and manages the BIM and Data, GIS and methods activities and strategies for the AREP group projects.

Nils Le Bot

Nils Le Bot is architect and doctor in urban planning. He is also assistant professor and researcher at ENSA Paris Val-de-Seine, and Head of Research Coordination at the multidisciplinary architecture agency AREP (a subsidiary of the SNCF), which develops creative and robust solutions for resilient urbanism, low-carbon architecture and ecological design. His research focuses on transversal and multiscale approaches to metropolitan mobility, urban prospective, as well as low-tech city and discerning urbanism approaches.

PANELISTS

Paul Gerretsen

Paul Gerretsen is chief designer in the field of spatial planning, urban planning and architecture. Since 2008 he has been an agent for the Deltametropool Association, the platform and laboratory that focuses on the metropolitan development of the Netherlands. He is also regularly consulted as an advisor by foreign governments and institutions.

Kees Kaan

Kees Kaan is founder architect at KAAAN Architecten, Full professor for the Chair of Complex Projects and Head of the Department of Architecture at the Faculty of Architecture and the Built Environment, TU Delft. During the last 12 years the office has been engaged in different studies and urban projects dealing with infrastructural developments and mobility, such as Schiphol Airport.

Georg Vrachliotis

Georg Vrachliotis is a Full Professor for the Chair of Theory of Architecture and Digital Culture at the Faculty of Architecture and the Built Environment, TU Delft. Georg is also Principal Investigator of The New Open, a new flagship project of TU Delft.

Miguel Loos

Miguel Loos is an expert on transformation and heritage aspects of Dutch stations. He is educated as an architect (TU Berlin, ETSA Barcelona & Berlage Institute Amsterdam) He is senior advisor for architecture and urbanism at Bureau Spoorbouwmeester, an independent consulting bureau on design guidelines for and on behalf of the Dutch railway companies NS and ProRail.

MODERATORS & CONTRIBUTORS

Joost Klimbie, Senior Advisor on mobility for Rotterdam Zuid at City of Rotterdam

Kris Schaasberg, Project Lead on urban development for Rotterdam Lombardijen at City of Rotterdam

Cris Mityr, Project Lead Urban Designer at Mecanoo

Kjai Tjokrooesoemo, Urban Designer at De Zwarte Hond

Alankrita Sarkar, Project Leader at Deltametropolis Association

Hans de Boer, Coordinator of Deltas Infrastructure Mobility Initiative at TU Delft

Lydia Giokari, Architect at Mecanoo

Elena Bulanova, Urban Designer at PosadMaxwan strategy x design

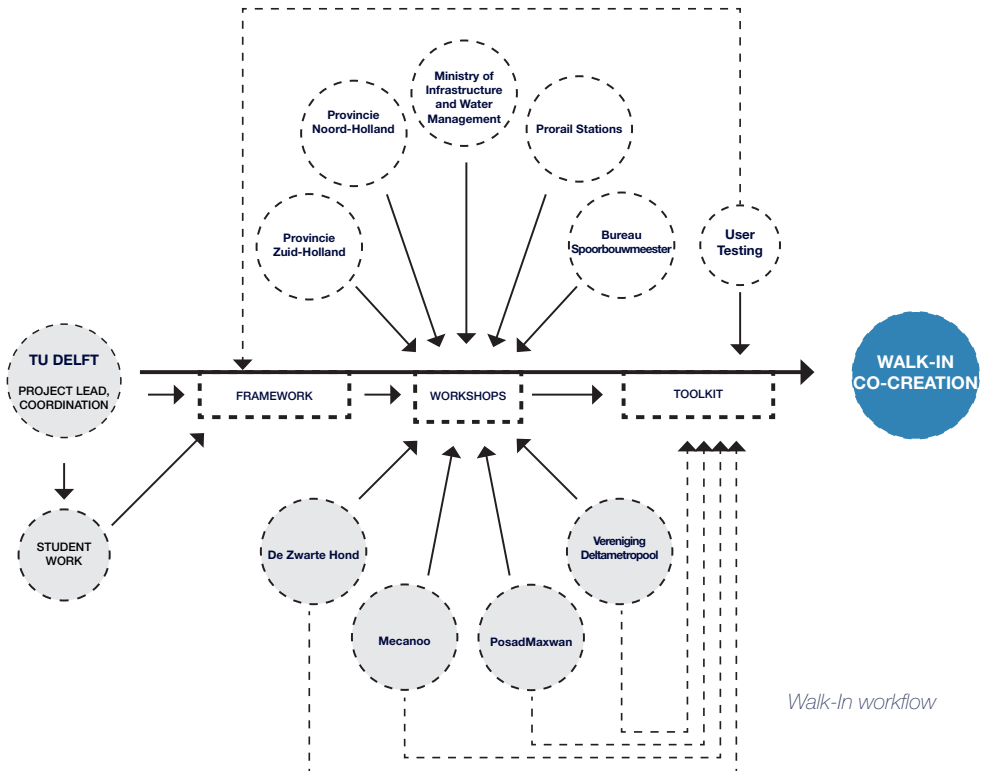
Manuela Triggianese, Assistant Professor Complex Projects at TU Delft

Yagiz Soylev, Researcher Complex Projects at TU Delft

WALK-IN PROCESS

Walk-In is a 1-year long research project that focuses on the small suburban hubs in Rotterdam becoming the gates of the low-car inner city. These hubs are important enablers of the mobility transition (promoting the transition from car to public transport or bike, in combination with shared mobility). Most hubs do not meet the new mobility requirements and face problems, such as lack of space for bicycle parking, shared modes and public space and are in need of redevelopment over the coming decades. The Walk-In project aims at understanding and analysing these peripheral stations of the city and presenting future design solutions for their improvement to enable them to act as pedestrian friendly hubs with people, node and place value. The formulation of long-term transition strategies, to integrate P&R facilities at stations, is urgently required for City of Rotterdam (CoR) to comply

with the new regulations on time. Practitioners also need new design solutions for the integration of sustainable mobility at PT nodes. The consortium partners have knowledge and skills to carry out this research, led by Delft University of Technology (TUD). They form a new network of researchers and professionals in the creative industry, experts of design of stations and public space. The network expanded throughout the project activities.



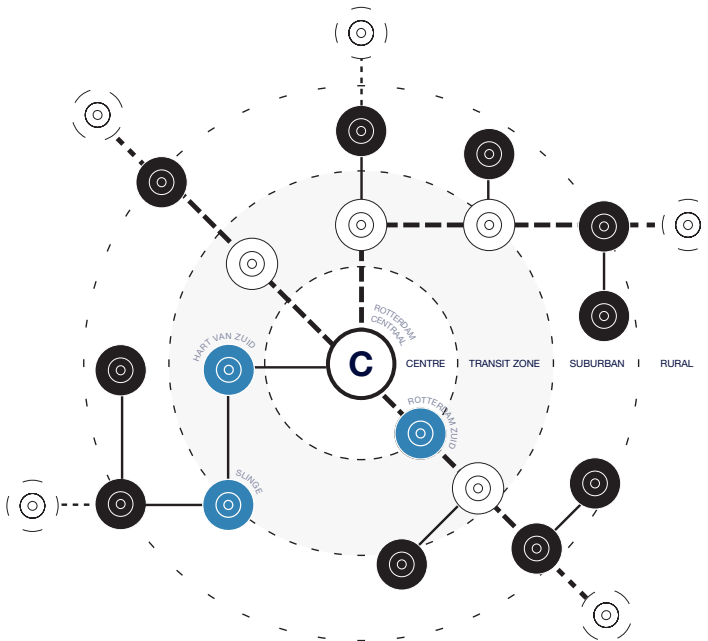
Walk-In workflow



spring in April

DESIGN CASE: ROTTERDAM

Walk-In project makes use of the Southern part of Rotterdam as a design case to uncover how we can read and understand the role and position of the stations in transition. As the city is expanding and densifying around public transport nodes (stations) we see a change in the role and position of peripheral stations in the metropolitan areas of the city and the creation of new station types. These stations end up being centres by themselves and as transition zones, or "in-between" stations, that enable for modal transitions.



In the polycentric system of nodes, stations of different sizes play an important role both as points of densification but also as gates to a low-car inner city. They offer potential to become effective hubs enabling mobility transitions while simultaneously offering place value in the transit zone.



Wilhelminaplein

Rotterdam Zuid

Rijnhaven

Maashaven

Charlois

Zuidplein

Feijenoord

Zuiderpark

Slinge

Mobility Lines

- Train
- Metro
- Tram
- Motorway

Landuse

- Building footprint
- Water
- Green

Isochrones

- 5' walking distance
- 10' walking distance
- 15' walking distance

Mobility Nodes

- Train station
- Metro station
- Gate
- Heart
- Bridge

0 750 1500m

Map by Halina Veloso e Zárata

RESEARCH CONCEPT

Walk-In introduces a framework to assess and discuss the potentials of the station to become from a **space of transit to a place for people**. This is based on an inventorization of existing methods and tools for integrated node development approaches in the Netherlands. Existing models are based on the node-place value which are focused on the profitability of the area. Walk-In is attempting to add the qualitative aspect and the people perspective, putting the user experience at centre of the new model. The 3 PS are centred around user experience and spatial quality.

- Position:** The station as a point of transit
- Place:** The station as a attractive destination
- People:** The station as an place for well-being

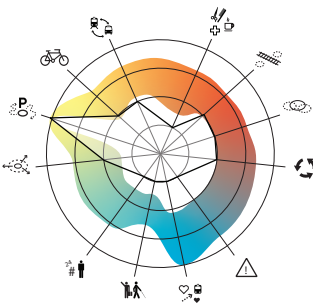
The research connects 5-design challenges to this framework for suburban transit stations -by using Slinge as a pilot for a Gate station type- to become new sub-urban centers in Rotterdam.

- Adaptive** centers (or adaptability): the capacity to be modified for a new use or purpose.
- Community** centers (or social hubs): a place where people in the neighbourhoods meet and find daily needs and activities.

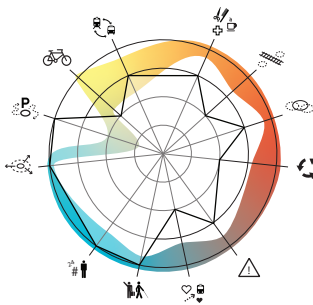
- Inclusive** centers (or inclusiveness): the capacity of providing access to opportunities and resources for different target groups.
- Attractive** centers (or attractiveness): the quality of being appealing to more users.
- Active** centers (or activation): create vibrant places by making (re)use of vacant and underutilized space.

For each challenge a matrix of indicators is created (e.g. transit potentials, use of the space, environmental quality, social safety) related to position, place and people value. Walk-In connects each matrix and design challenge to several **design principles** and solutions at three levels of scales (50mt, 200mt, 1200mt radius as station area of influence) provided by the portfolios of the design partners of Waik-In (Mecanoo, PosadMaxwan, De Zwarte Hond).

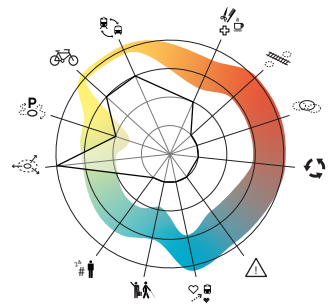
The research concept with the framework and the design toolkit is tested on a real case (Rotterdam Lombardijen) at the final event, during a game session with the project partners and the participants.



SLINGE
GATE



ZUIDPLEIN
HEART



ROTTERDAM ZUID
BRIDGE

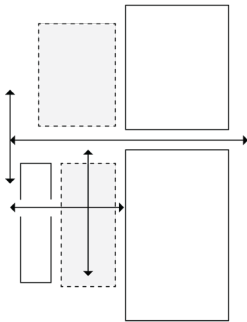


Slings Metro Station Area

RESEARCH & EDUCATION

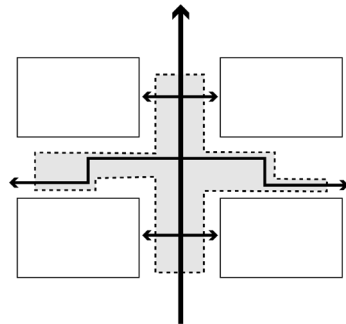
The Walk-In research project is interlinked with education and architecture master students at TU Delft through MSc2 elective course "City of Innovations" of the Complex Projects group. The course is organized around speculating and projecting future scenarios for the south of Rotterdam. Students are invited to reflect on the importance of transport networks within and extending from the city. In considering the way these networks have shaped the city through weaving the urbanities of the city centre(s) and suburban areas and how they will further shape the future urban territories, this elective position itself as a negotiation between architecture, network infrastructure, public realm, policy & governance, and the territory. In the compact city the station is no longer simply the space to access mobility networks, in this informed by their dry pragmatism, but becomes an urban place of sociality and encounter - an extended public space beyond mobility itself.

The stations of the future become hubs, where you can transfer from one mode of transport to another. Hubs are also destinations in themselves, places to meet up, to work, to exercise, to eat. The course asks questions such as how new mobility solutions can be integrated into the current transportation systems and take shape at public transport nodes, in the context of low car inner-cities (Autoluw) like in Rotterdam. Which relationships and cross-fertilizations can be significant for the design of the future urban stations in Rotterdam? How should these stations be developed in order to act as public places for collective action? The studio is organised with the method of charrette and focused on three station locations in Rotterdam Zuid area.



COMMUNITY CITY

students:
Iris van der Moolen
Sari Naito
Stephan Koeckhoven
Kristen Valdez



REACTIVATE

students:
Cameron Scott
Panayiotis Varoutsos
Katarzyna Ingielewicz
Almira Tanrikulu



PUBLICATIONS

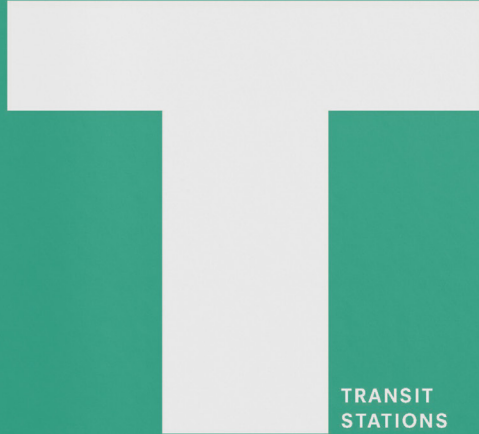
'Transit stations: sub-centres in Rotterdam Zuid' is the result of the course 'City of Innovations Project' at TU Delft Faculty of Architecture and the Built Environment, led by the group of Complex Projects at the Department of Architecture. It is connected to the research project Walk-In (acronym of Widening sustAinable mobilItY networkS: Impact on Nodes) financed by NWO and part of the KIEM GoCi program. The book contains 7-scenarios for Rotterdam Zuid area. Students presented those research and design scenarios to the project partners of Walk-In and they learned from their expertise throughout the course. Those are the City of Rotterdam, Delta Metropool Association, De Zwarte Hond, PosadMaxwan, Mecanoo, Bureau Spoorbouwmeester, I&M, ProRail with the collaboration of the University of Gustave Eiffel. By doing so, students contributed to the objective of Walk-In: to investigate the potential of suburban stations in transition in the context of the low car inner city of Rotterdam and to develop generic guidelines and spatial solutions for the integration of sustainable mobility with public space and mixed urban functions and services.

In 2022, Walk-In framework has been exhibited at the Dutch Design Week in Eindhoven, being part of the exhibition '**Collaboration for Impact**'. The interactive model was tested by the participants of the event and it has collected their input. The article 'Design for Debate and Co-creation' was published (open access) in the Collaboration for Impact magazine (Cfi). In 2023, **Walk-In Co-creation Toolkit** will be published as an open access book and it will contain the final results of the 1-year research project.



Open Access Book
<https://doi.org/10.34641/mg.51>

CITY OF INNOVATIONS PROJECT



TRANSIT
STATIONS

Sub-centers in Rotterdam Zuid

Studio Leaders:

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Yagiz Söylev
Yang Zhang
Halina Veloso e Zarate

Report Edited by:

Manuela Triggianese
Yagiz Söylev
Yang Zhang
Halina Veloso e Zarate
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Expert contributions by:

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Anastasia Sarkar (Deliametropolis Association)
Ann Bouwmeester (Pronai Stations)
Arian Smits (Deliametropolis Association)
Dorrit Dijkzeul (City of Rotterdam)
Elena Bulanova (PosadMaxwan Strategy x Design)
Hans de Boer (TU Delft)
Jane Fain (Ministry of Infrastructure, Water-Management)
Kai Tjokrokoesoemo (De Zwaarte Hond)
Lydia Gickari (Mecanoo)
Miguel Loos (Bureau Spoorbouwmeester)
Paul Chorus (Province of North Holland)

Students of the
elective studio:

AR0109
City of Innovations
Project, Spring 2022,
TU Delft

Contributions by
Walk-IN Partners



Triggianese, M, Söylev, Y, Zhang, Y & Veloso e Zarate, H (eds) 2022,
Transit Stations: Sub-centers in Rotterdam Zuid. TU Delft Open.

NOTES

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COLOPHON

Walk-In Co-creation

Event Organizers:

Manuela Triggianese, Yagiz Soylev,
Jakob Norén

Organizational support:
Estrella van de Swaluw, Andrea De-
genhardt

Organized by:

Complex Projects, section History
& Complexity of the department
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Elena Bulanova (PosadMaxwan)
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Rien van der Wall (Deltametropool)
Alankrita Sarkar (Deltametropool)
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Lydia Giokari (Mecanoo)
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Complex Projects



Delft University of Technology

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