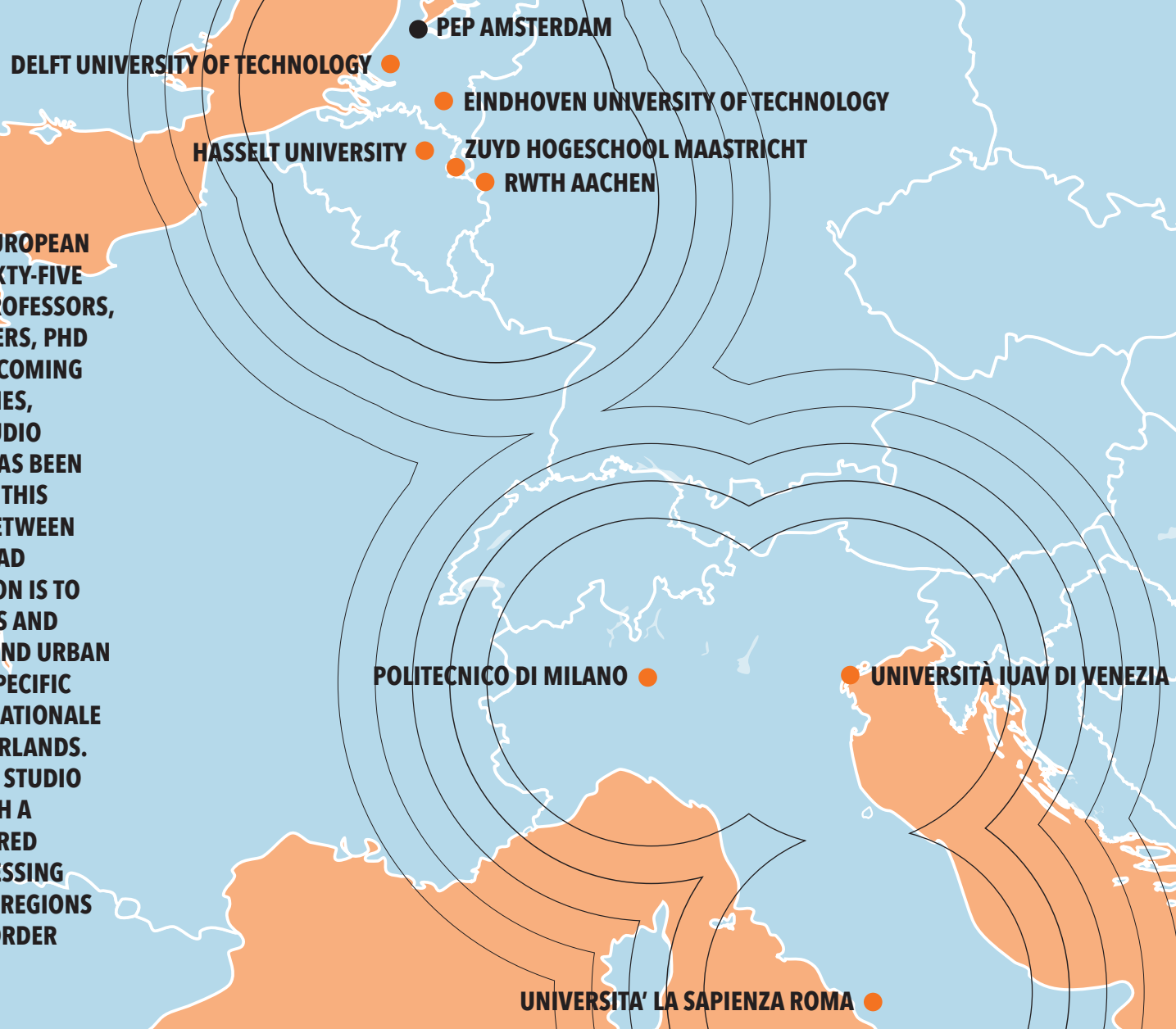




# DESIGN STRATEGIES FOR TRANSFORMING CROSS-BORDER REGIONS

BY INTERNATIONAL STUDIO



FOR TWENTY-ONE DAYS EIGHT EUROPEAN ACADEMIES AND MORE THAN SIXTY-FIVE PERSONS - AMONG IBA STAFF, PROFESSORS, EXPERTS, TEACHERS, RESEARCHERS, PHD STUDENTS, MASTER STUDENTS - COMING FROM FOUR DIFFERENT COUNTRIES, JOINED THE INTERNATIONAL STUDIO 2016 IN DELFT AND VENICE. IT HAS BEEN AN INCREDIBLE FIRST STEP THAT THIS EXPERIMENTAL PARTNERSHIP BETWEEN EU ACADEMIES AND IBA PARKSTAD ACHIEVED TOGETHER. THE REASON IS TO PROMOTE INNOVATIVE METHODS AND TOOLS FOR SPATIAL PLANNING AND URBAN DESIGN, ACCORDING TO SOME SPECIFIC ISSUES OF THE ONGOING INTERNATIONALE BAUAUSSTELLUNG IN THE NETHERLANDS. THE AIM OF THE INTERNATIONAL STUDIO WAS, AND WILL BE, TO ESTABLISH A COMMON DIALOGUE AND A SHARED PLATFORM OF KNOWLEDGE STRESSING THE MEANING AND THE ROLE OF REGIONS AND URBAN AREAS IN CROSS-BORDER EUROPEAN TERRITORIES.



# A METHOD FOR EUROPEAN REGIONS

Jo COENEN

**NOWADAYS EUROPE IS FACING THE CONCRETE EFFECTS OF ITS POLITICAL UNIFICATION, THE FREEDOM IN EXCHANGE OF GOODS AND PEOPLE, THE OPENNESS OF LABOUR MARKET, THE INCREASING COMPETITIVENESS OF METROPOLITAN URBAN AREAS, THE IMPROVING OF NEW FLOWS OF MIGRATION BETWEEN NATIONAL BORDERS AND THEIR PROGRESSIVE IMPAIRMENT. AN ANALOGY COULD BE DONE TO WHAT, IN HISTORY, EUROPE WAS EFFECTIVELY REPRESENTING, AN ALWAYS CHANGING BORDER AREA, A COMMON GROUND FOR SHARING AND MIXING DIFFERENT IDENTITIES.**

But how these everyday life phenomenons are impacting the governance and the policies for our living environment? There is an ongoing attempt on the European level, with the subscription of the Pact of Amsterdam, to give stage to these contemporary urban changes fostering a more sustainable spatial and territorial asset for Europe. There is, indeed, a common awareness to rethink regional identity beyond administrative borders and achieve a more complex and successful cooperation between countries. Bringing the cross-border issue into the public debate on a

European level might mark the starting point for a reflection on the means to overcome physical, economical, administrative, or bureaucratic barriers and obsolete practices.

The initiative of the International Studio is inscribed both in IBA Process and in the necessity for cooperation that the several academies involved demonstrate through excellent achievements in research. For example the studies conducted on Milano peripheral areas by Ilaria Valente (PoliMI), the experimental researches in education by Thijs Asselbergs (TU Delft) on energy supply for living environment, the careful observation of historical layers of the city in IUAV research, the attempt to give new impetus to difficult social conditions in Rome Housing Lab, are evident links that this partnership wants to enlighten as a fundamental resource and method for European regions.

In complex and rapidly changing environments, and in time of crisis, this kind of experimentation, such as the International Studio, with the encounter between social and economical needs and the

excellence in innovative research could provide tools for activating positive transformations on territories.

The 2016 International Studio in Venice re-discussed these issues within the exceptional frame of IBA, a potent tool to transform regions both in physical and in mental spaces. The experience of IBA Parkstad, in specific, addresses a cross-border lens of observation of its territory, part of the transnational Euregio Meuse-Rhine area linking Belgium, Germany and The Netherlands. Not just as case study, but as widely applicable working method to face urban problems at large, by setting up smart territorial schemes and processes. IBA Parkstad can be seen and used as an example of the way international European cooperations contribute to a better understanding of urban potential in realizing a new vital economy and a socially ecologically and spatially sustainable development.



# A RESEARCH FRAMEWORK BEYOND THE INTERNATIONAL STUDIO

Fabrizia BERLINGIERI

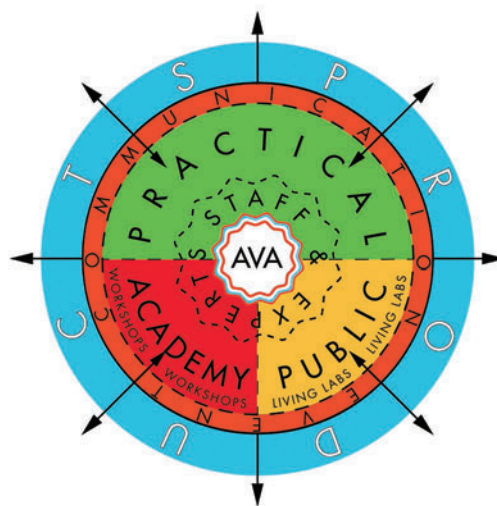
**THE INTERNATIONAL STUDIO IS MORE THAN A WORKSHOP. IT AIMS TO FORM ALLIANCES IN EXCELLENCE OF RESEARCH, BY CONSTITUTING AN INTERNATIONAL PANEL OF ACADEMIES THAT COULD SUPPORT CURRENT AND FUTURE PROCESSES OF TRANSFORMATIONS RELATED TO CROSS-BORDERS REGIONS AND URBAN AREAS, INTERACTING AS EXEMPLAR INITIATIVE WITHIN THE EUROPEAN CONTEXT, I.E. THE EUROPEAN COMMITTEE FOR CITIES AND REGION.**

This research framework is promoted by IBA Parkstad and supported by eight Universities in cooperation with European Experts. Specific expertise fields constitute the strengthen of this Alliance that involves the Universities of Technology of Delft and of Eindhoven, the Maastricht Academy of Architecture in the Netherlands; the Hasselt University in Belgium; the RWTH Aachen University in Germany; the Politecnico of Milano, the IUAV and La Sapienza in Italy.

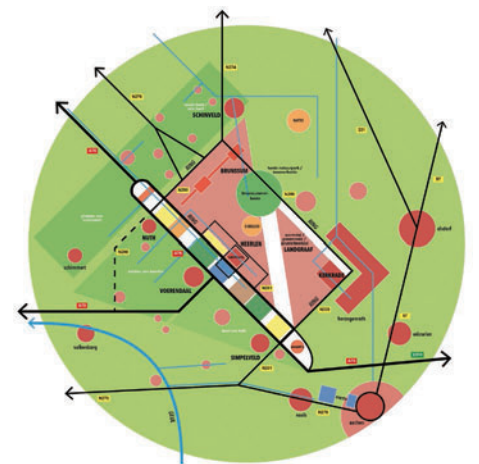
As pilot research project for the International Studio, Parkstad area is an exemplary opportunity for the development of an operational method to address a specific focus on cross-border regional problems and to disclose new economic growth potentials.

For Parkstad the objective is to enlighten a new narrative for its territory made by re-composition of the fragmented urban landscape, reconciling over impressed and layered territorial frames into a revitalized meaningful unity. Moreover Parkstad is now facing a crucial moment for transformation within IBA Context. This is a unique occasion to contribute in a complex and integrated process, such as IBA Parkstad is, that is based on a threefold approach: **PRACTICAL** that relates to design processes lead by the involved municipalities and stakeholders through candidate projects, **PUBLIC** that engages social participation as active component in decision-making processes, **ACADEMY** that focus on research approaches and methods to foster results on the higher possible level. In that sense the International Studio is also part of the IBA Parkstad Academy activities.

Following the idea of an integrated approach, as grounding method, the International Studio aims to develop innovative forms of interaction between theory, project development and civic participation. It is a *multilevel process*, unrolling education and research activities in different temporal terms:



Organisation scheme of IBA Parkstad



Parkstad diagram

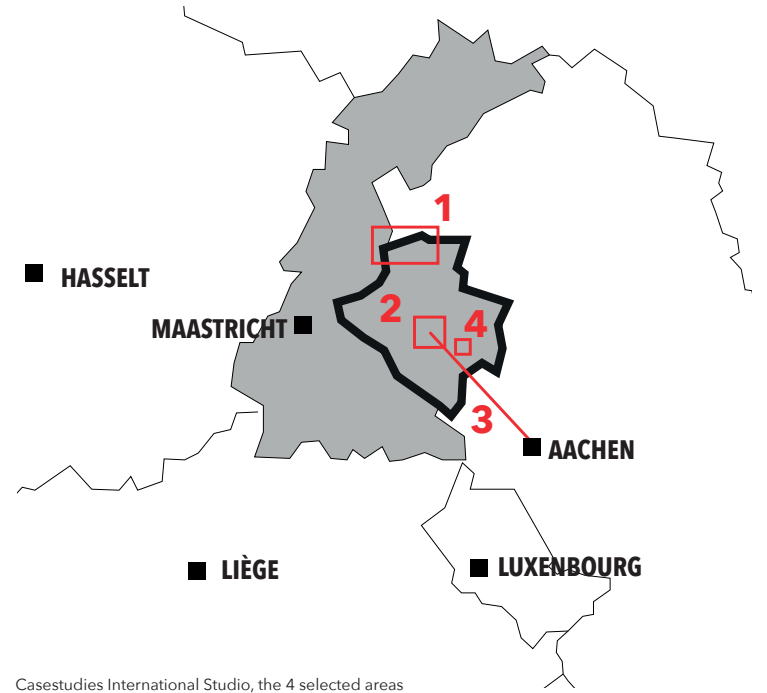


TU Delft, Faculty of Architecture and IUAV in Venice were the places where the International Studio took place from 5 to 22 of September.



On the next page the students working during the first week of the workshop.





Casestudies International Studio, the 4 selected areas

a **short term (2016)**, i.e. the International Studio Venice 2016;  
 a **mid term (2016/2017)**, in which each university pursues research and education on Parkstad in their specific academic programs;  
 a **long term (2020)**, presenting results for the final exhibition of IBA Parkstad.

The short term (Venice 2016) consisted in the kickstart of the International Studio, hosted at TU Delft and at IUAV in Venice. The three weeks workshop had the objective to set the common ground for sharing research topics on Cross Border Regions, thanks to the specific expertise of each academy and the cooperation opportunity given by IBA Parkstad. Five general topics related to IBA Parkstad issues, as in the *Propellor* scheme, have been common guidelines for developing innovative design strategies and policies on four selected areas:

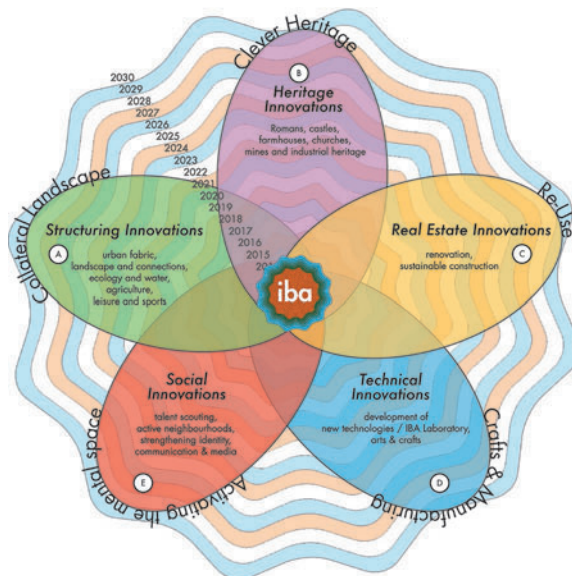
1. The **North gateway of Schinveld Airport** on the German border, related to the *necessity of implementing transnational relations in infrastructural accessibility*, approached by the research group of Politecnico di Milano;

2. The **Roman Quarter** in Heerlen city center, in which becomes evident the *necessity of a dialogue with the physical and mental traces of a transnational shared territorial Roman history*, approached by two students groups of IUAV Venice and Hasselt University;
3. The **North/South axis** between Aachen and Heerlen, *retracing common identities and landscape unity beyond national borders*, approached by the students group of RWTH Aachen University;
4. The **Bekkerveld District** in Heerlen South, seen as *innovative educational hub looking for revitalizing actions and models for contemporary urban areas*, approached by the research group of University La Sapienza of Rome.

The selected case studies are part of the ongoing candidate or attention projects for IBA Parkstad, that will be developed and presented as some of the pilot interventions for the final exhibition in 2020. The task, for each university group, was to address not only specific design strategy, but also possible processes and/or policies for transformation.

At the end, all the research groups approached the case studies, even from different perspectives, on a larger scale strategically engaged within a more general framework. In this vision was also important that the groups envisioned the possible actions that could be taken in order to revitalize the region by means of reconciling its fragmented land-cityscape. A revitalization for Parkstad area that could enlighten its potential by disclosing the richness and complexity of its territorial palimpsest, physically such as mentally.

By engaging a larger public - citizens, institutions, lobbies - it is possible to foster the future of this area while enforcing its spatial values. After these three weeks of knowledge and research methods' exchange, a solid network was set up. Each academy showed, in the final results of the Venice experience, a clear approach and a specific lens of observation about Parkstad urban area as a borderless region. An important moment to support the IBA Parkstad process and a promising start for forthcoming cooperation.



Topic propeller for Parkstad

**SCIENTIFIC COMMITTEE & STUDIO COORDINATION**  
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 FABRIZIA BERLINGIERI, ASSISTANT CURATOR

**EUROPEAN EXPERTS**  
 YVETTE MASSON ZANUSSI  
 MARCO STATHOPOULOS

**IBA ACADEMY**  
 ROB DOCTER  
 ANTOINETTE STÖCKER

**INTERNATIONAL ACADEMIES-RESEARCH UNIT RESPONSIBLES:**  
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 JOS BOSMAN (TU EINDHOVEN)  
 PETER BONGAERTS; NICK CEULEMANS (UNIVERSITY OF HASSELT)  
 WIM VAN DEN BERGH;  
 CAROLIN STAPENHORST (RWTH);  
 ILARIA VALENTE, MARCO BOVATI (POLIMI)  
 ALBERTO FERLENGA; ENRICO FONTANARI;  
 ARMANDO DAL FABBRO; MAURO MARZO (IUAV)  
 DOMIZIA MANDOLESI, ALESSANDRA DE CESARIS (LA SAPIENZA)

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 MANON VAN DER LINDEN

**PARTECIPANT ACADEMIES**  
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 DEPARTMENT OF ARCHITECTURE AND ENGINEERING + TECHNOLOGY  
 THIJS ASSELBERGS, ANNEBREGJE SNIJDERS  
 DEPARTMENT OF HERITAGE & ARCHITECTURE  
 LIDY MEIJERS  
 DEPARTMENT OF ARCHITECTURE  
 ROBERTO CAVALLO

TU EINDHOVEN TECHNICAL UNIVERSITY  
 DEPARTMENT OF THE BUILT ENVIRONMENT  
 JOS BOSMAN

ZUYD HOGESCHOOL  
 MAASTRICHT ACADEMY OF ARCHITECTURE  
 JOS BOSMAN; MANON DEJKERS

UNIVERSITÀ IUAV DI VENEZIA  
 DIPARTIMENTO DI CULTURE DEL PROGETTO  
 MAURO MARZO; CLAUDIA PIRINA  
 DIPARTIMENTO DI PROGETTAZIONE E PIANIFICAZIONE IN AMBIENTI COMPLESSI  
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 DIPARTIMENTO DI ARCHITETTURA PER IL NUOVO E L'ANTICO  
 ARMANDO DAL FABBRO

POLIMI POLITECNICO DI MILANO  
 DIPARTIMENTO DI ARCHITETTURA E STUDI URBANI  
 ILARIA VALENTE; MARCO BOVATI;  
 EMILIA CORRADI

UNIVERSITA' LA SAPIENZA ROMA  
 DIPARTIMENTO DI ARCHITETTURA E PROGETTO/ HOUSING LAB  
 DOMIZIA MANDOLESI; ALESSANDRA DE CESARIS; LUIGI PAGLIALUNGA

RWTH AACHEN  
 DEPARTMENT OF HOUSING AND DESIGN  
 WIM VAN DEN BERGH; CAROLIN STAPENHORST

HASSELT UNIVERSITY  
 ARCHITECTUUR EN KUNST  
 PETER BONGAERTS, NICK CEULEMANS; MARIJN VAN DE WEIJER





# CROSS-BORDER FRAMEWORK

THE NORTH AREA OF SCHINVELD AND THE RENEWAL OF THE GLIDING AIRPORT

**Ilaria VALENTE** scientific coordinator  
**Marco BOVATI; Emilia CORRADI** teaching staff

**Francesca BERNI, Giorgia COLOMBO, Lara FRACCADORI,**  
**Sandra MAGLIO, Mauro MARINELLI, Elena SCATTOLINI, Giulia**  
**SETTI, Alisia TOGNON** participant PhD students and researchers



Collateral Landscape / Crafts & Manufacturing



POLITECNICO  
DI MILANO

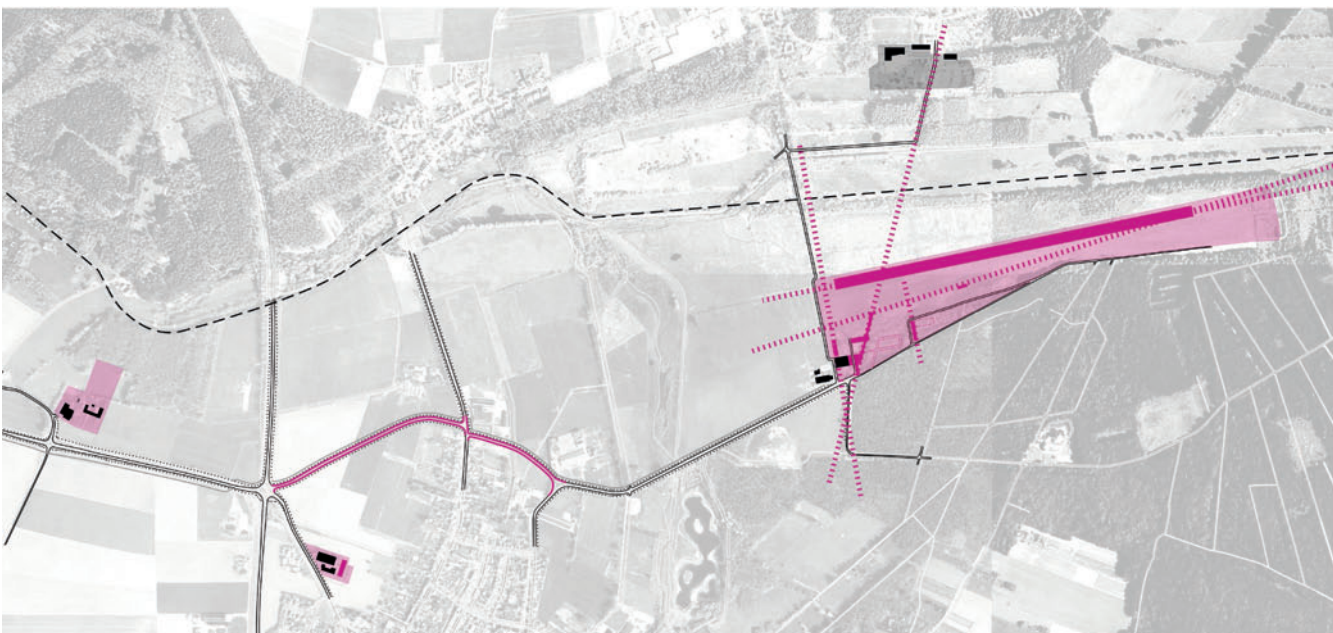
DIPARTIMENTO DI  
ARCHITETTURA E STUDI URBANI

The Team focuses on reforming a strategic role of design within transformation processes of inhabited space. The aim is to renew the practice of architectural and urban design affirming the ethical contents as strong point, and at the same time revealing the opportunities offered by "fragile" relationships that constitute distinctive features of contemporary contexts. The research group, as part of ARS lab, holds consolidated relationships with several European academies, such as TU Delft, Arc Usi Ch Mendrisio, ENSA Paris Belleville, Paris Val de Seine, Marseille, TU Berlin among others. Also takes part of the National Research PRIN Recycle Italy and is member of the international PhD seminar Villard de Honnencourt.

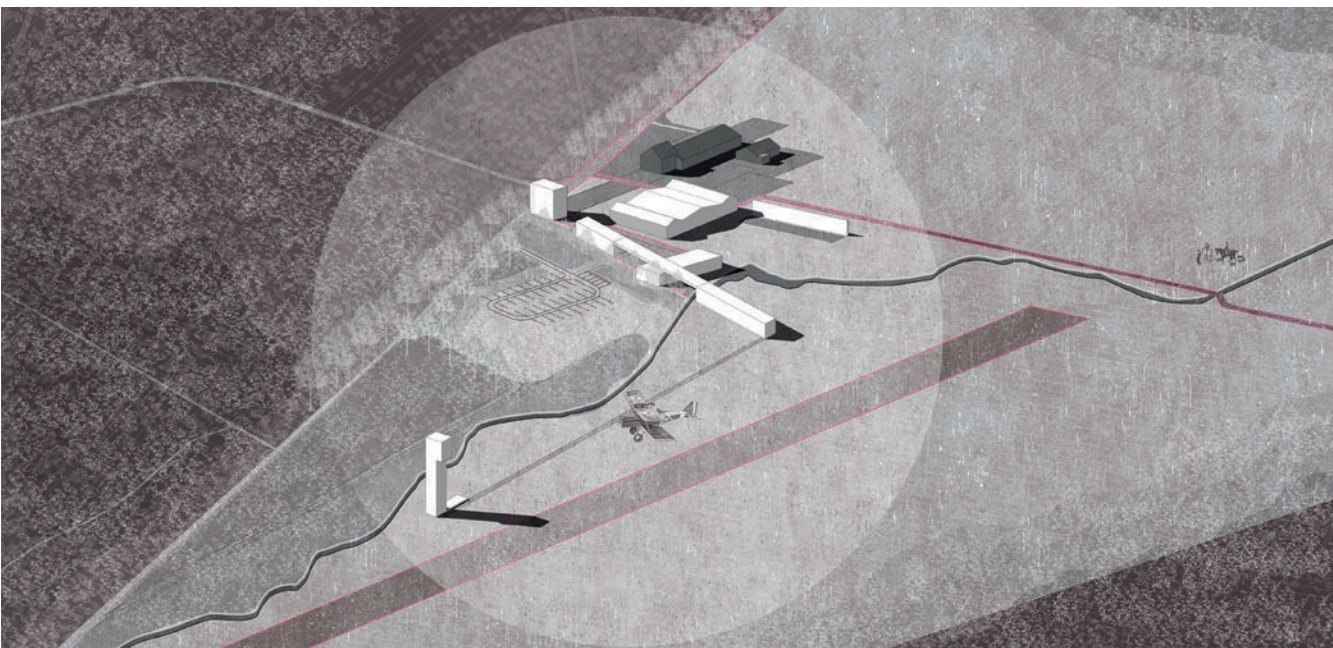
Keywords: Research Workshop - ARS Lab - Architecture Resources Strategies



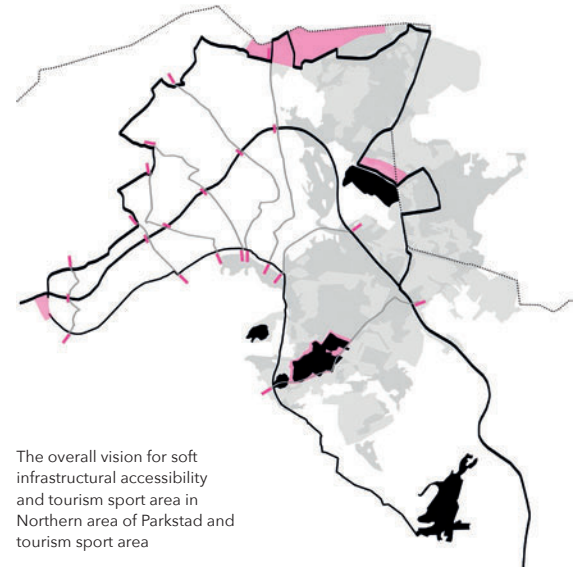
Observations for the North area of Parkstad:  
Infrastructural gateway, urban fabric, natural elements



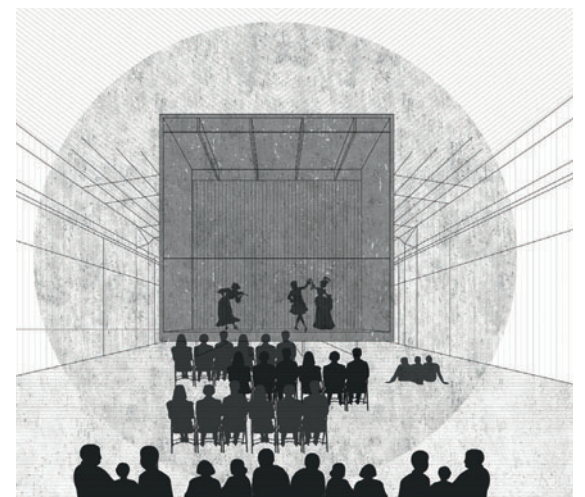
Plan proposal for the Gliding Airport and the Steel Construction building



The Airport implementation, Portal of Onderbanken



The overall vision for soft  
infrastructural accessibility  
and tourism sport area in  
Northern area of Parkstad and  
tourism sport area



The Renewal of the Steel Construction building

**PREFACE.** As part of the IBA Parkstad, this proposal aims to identify an interscalar strategy in which the overall goal is to define a framework for a series of coherent and complementary design actions that are taking in consideration the **peculiar geographic position of the place as a cross border area.**

**READINGS.** The study area is defined by the airport site on the north (Portal of Onderbanken), by the quarries in the south area and by the western gate, embodied by the Nuth railway station site, south to Schinnen. The whole area is characterized by high-quality landscape elements, close to those there are both abandoned infrastructures, such as the railway system, and active lines, like the motorway ring under construction.

**STRATEGY.** The conceptual strategy is based on the accessibility implementation addressed by two paths, one more natural (rural ring) and one more urban/artificial (urban ring). By this, it is possible to define an infrastructural framework, where provide interventions for the reuse and recycle of areas and existing buildings.

**PROJECT AREAS.** The design approach leads to a series of important cross border insights. Connections and nodes become the real cross-connecting elements between the pedestrian ring and the urban path. The system identifies thematic design actions as a series of urban micro-projects linking the two systems due to issues related to local traditions.

**ENERGY.** The **model of energy production** and distribution is quickly changing from a mono directional grid based on big plants for energy production to a more complex one, in which energy flows are multidirectional, due to both the diffusion of renewable energies and liberalization of the energy market. In this new system energy is locally produced, used and managed in new subsystems called microgrids.

**DESIGN PROPOSALS.** The design proposal starts with the development of the north gate area, which is called Portal of Onderbanken. The requalification and development of the glider site (the small airport) **defines a system of trans-boundary connection** linking the new project to the

existing activities in Germany. According to the strategy, the glider sites is no more an isolated place but becomes a connection element between different places, different landscapes and different countries. The other design proposal focuses the attention on transformation and development of the existing steel construction along the linear connection system: the existing warehouses represent one of the other crucial points along the 'rural ring' that required an architectural intervention.

**DEVELOPMENT PROGRAM.** In according to the existing European Agenda, the proposal is consciousness that the European Union is one of the most urbanized areas in the

world and the urban areas play a key role in pursuing the EU. **This area can be considered as metropolitan area crossed over different countries,** like Germany, Belgium and Netherlands. Starting from this, the development financial program identifies a general strategy ruled by a consortium of universities, local stakeholders, both public and private. This consortium establishes priority program and specific financial channels, but also the way is working on different scale of intervention through state funds, association of municipalities and local funds. Part of these can be addressed in several strategic axes of **INTERREG Program.**

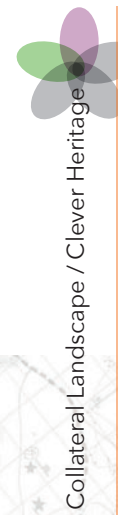


# ROMAN TRACES FOR CROSS-BORDER IDENTIFICATION

THE NORTH SOUTH AXIS BETWEEN AACHEN AND HEERLEN

Wim VAN DEN BERGH scientific coordinator  
Carolin STAPENHORST teaching staff

Simon GOLIASCHE, Christian KÜHNLE,  
Jonas LÄUFER, Jana RING, Nicola SCHMALT  
partecipant students



RWTHAACHEN  
UNIVERSITY

DEPARTMENT OF HOUSING  
AND DESIGN

The research group focuses on the characteristics in the land and cityscapes of the Drielanden-zone, which contribute to generate common identities, as well as on those features that trigger differences and specificities of the adjacent countries that enrich the perception of the zone. In this research, the instruments of cartography and land survey system serve to detect and localize the fragmented appearance of relevant historic elements. These analytic procedures help to develop strategies for infrastructures and processes that gradually initiate local forms of cross-border tourism. The architectural research displays how top-down and bottom-up interventions can be combined in order to guarantee a sustainable use and development of the considered area.

Keywords: Infrastructures, Land Survey and Measurement Systems, Cartography, Archeology, Building Culture



On left side\_ The composition and overlapping of three strategic plans for South Axis Heerlen-Aachen: a top-down approach; reaction and reappropriation; a bottom up process of implementation. Below\_ some example of "soft" and artistic interventions in the landscape.



**AS FOUND.** Starting from Aachen, we visited the zone by bicycle. We found a loose net of bigger straight roads and smaller rural paths to travel on. We saw and perceived certain aspects very clearly like the wind, the agricultural use of the soil, the low stratus of clouds, the light, and the wind turbines. We searched for the Roman traces and found only textual indications.

**FRAGMENTS AND STRATIFICATIONS.** We analyzed and thought about the zone with a cartographic approach. That meant to identify the historical successions that transformed the **landscape**. The stratification of uses and events was used to create a system of thematic layers - the Romans, the medieval, the mining, the

borders, possible leisure points, the "as found". **The fragmentary and seemingly casual composition of different remains became evident. The difficulty of recognizing and understanding is caused by a lack of contextualization of the fragments.**

**THE VALUE OF THE USUAL.** The landscape consists of almost invisible fragments filled with historical significance and very usual and visible traces of the area's actual use - agriculture and wind energy. Only together, these two parts - the meaningful and the usual - form a **cultural landscape**.

**A SYSTEM OF SIGNIFICANT POINTS.** The overlapping of the different thematic layers allows the

**identification of intersections and interrelations between fragments.** These form what we call the "System of Significant Points".

**LEVELS OF CONSCIOUSNESS.** The aim of our project is to create a new level of consciousness. We think that people should be able to understand the history of the places they are moving and/or living in. A better understanding helps to find, recognize and read the fragmentary hints of history. This new level of consciousness could trigger a series of new events and activities - initiated by the local inhabitants.

**FROM IMMATERIAL TO MATERIAL.** Many of the "Significant Points" are invisible right now. They only exist on a mental map. In order to

transform them from immaterial into material we introduce a new layer. This new layer consists of a grid of micro-interventions at those points, which we identified and localized within the System of Significant Points.

**CROSSING BORDERS.** The project works on different types of themes or layers: those crossing the borders and creating common stories and identities of the whole Drielanden-area like the Roman or the mining layer, and those incorporating the differences between the neighbours. We think that both the common and the specific characteristics enrich the area.

**ACUPUNCTURE.** The system of interventions is based on the precise localization of

meaningful points. **It intervenes with the existing and not overwrite it.** In the first stage, our instruments to create a new level of consciousness consist in an immaterial one - a thematic map to hand out to people - and material interventions that should be micro. **To do the micro-interventions we adopt strategies from land-art. We call this Acupuncture.**

**FROM DAILY USE TO GRADUAL TRANSFORMATION.** The project aims to trigger a gradual transformation of the area. We think that the deeper knowledge of the areas will initiate a series of actions and events leading to gradual transformation, which - in the future - could lead to more intense forms of tourism.



# INNOVATION IN PARKSTAD REGION



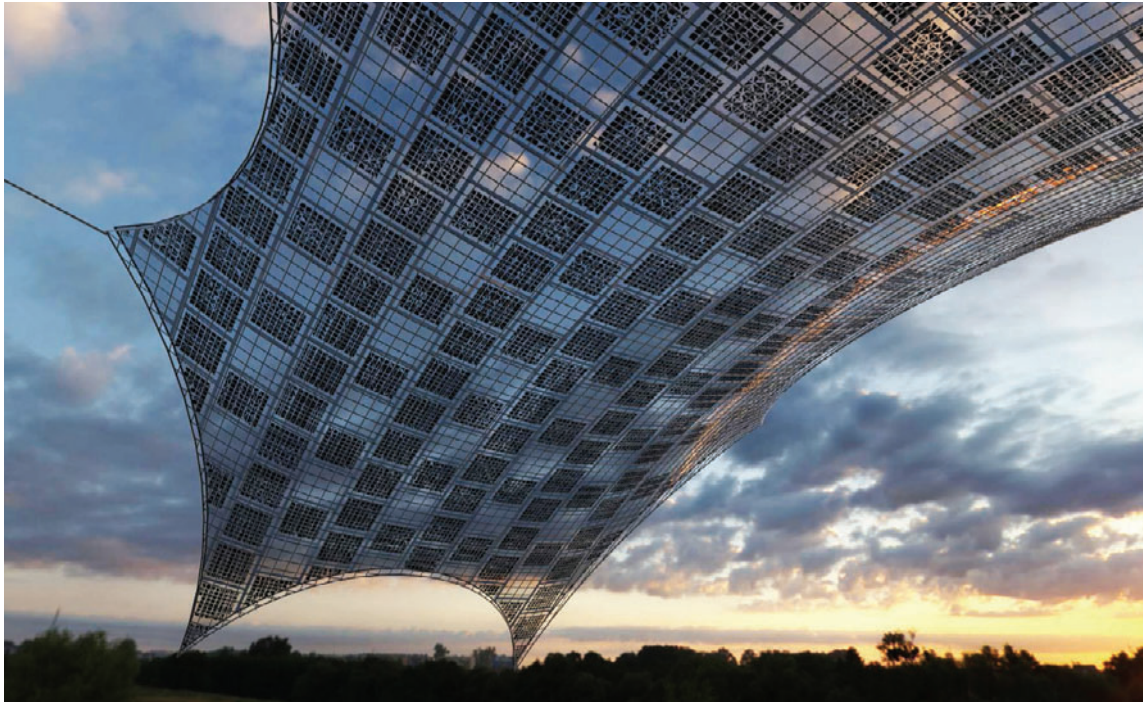
**TU Delft**  
Delft University of Technology

**Roberto CAVALLO** director of education  
**Thijs ASSELBERGS** scientific coordinator  
**Lidy MEIJERS; Annebregje SNIJDERS** teaching advisors

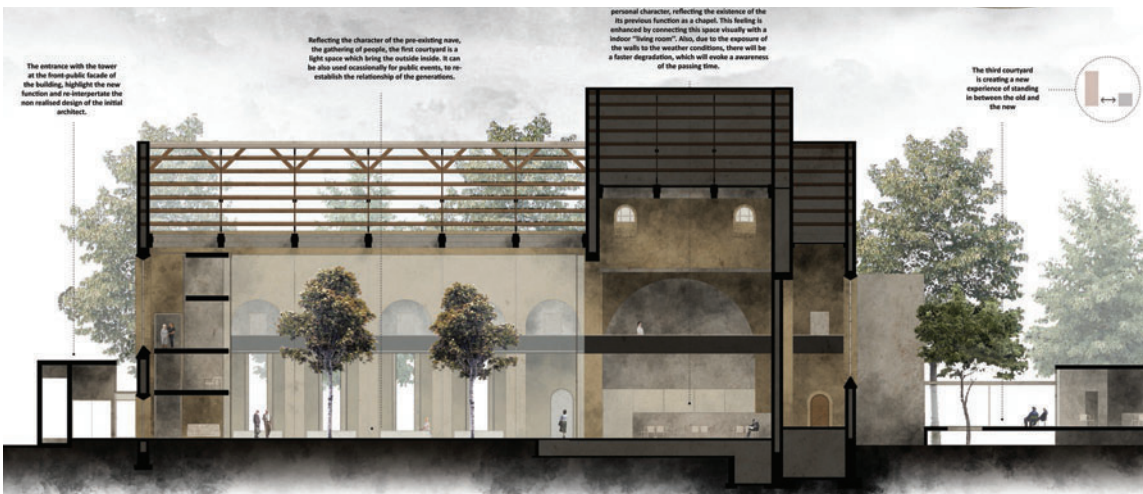
DEPARTMENT OF ARCHITECTURE AND ENGINEERING+TECHNOLOGY; HERITAGE & ARCHITECTURE; ARCHITECTURE

The shared research topics can be summarized in **typology, morphology and energy related challenges in the built environment, including transformations of urban fabric, landscape and infrastructures on different scale levels.** Today's societal demands require an **integral approach in research and design, particularly when dealing for example with sustainability, climate, energy efficiency, transformation, reuse or health.** Issues and assignments arising from these subject areas are **complex and the research group is therefore experimenting through approaches in which fundamental as well as applied research and design are intimately linked.**

Keywords: Urban agglomeration and metropolitan area; New forms of Energy; Heritage; Infrastructural renewal



New forms of Energy & Landscape, Intecture Studio



Master Studio on Renewal of vacant Churches in Parkstad, Heritage & Architecture



**THE FACULTY OF ARCHITECTURE & THE BUILT ENVIRONMENT OF THE DELFT UNIVERSITY OF TECHNOLOGY HOLDS A LEADING POSITION IN ITS FIELD ON BOTH NATIONAL AND INTERNATIONAL LEVEL. ITS INTERDISCIPLINARY RESEARCH GROUP PART OF THE IBA PARKSTAD ACADEMY INVOLVES THREE DEPARTMENTS THAT HAVE CONSOLIDATED WORLDWIDE RELATIONSHIPS, PLAYING A PIVOTAL ROLE IN SEVERAL ONGOING NATIONAL AND INTERNATIONAL RESEARCH INITIATIVES AND PROJECTS.**

**AMBITION.** As a key member of the IBA Parkstad academic body, the Faculty of Architecture & the Built Environment main objective for IBA Parkstad 2020 is strengthening the relationship with the involved academic institutions, working together towards the creation of concrete encounters for research and design in academia as well as in practice. In addition,

the exchange of knowledge and experiences will actively contribute in sharing awareness about the challenges and opportunities present in the area, fundamental condition for the consolidation of the common future agenda in the Parkstad region.

**PROJECTS.** The context of Parkstad urban agglomeration shows challenges, problems and opportunities that match very well with our programs of architectural design and research. **IBA Parkstad concentrates on three main issues: energy city, recycle city and flexible city.** These topics include not only the physical and tangible aspects, but also the mental and intangible ones. The relation with the educational activities at the Faculty of Architecture & the Built Environment lays at the **techno-innovation**, experimental development, landscape or cityscape, **cultural society**

**and heritage.** At this moment two specializations of the architecture program tackle with themes and questions of IBA Parkstad in the master program: Architectural Engineering and Heritage & Architecture.

**ARCHITECTURAL ENGINEERING\_ STUDIO INTECTURE.** How can we optimize our living environment whilst dealing with those challenges? How can we integrate innovative technical solutions in our architectural designs? The field of architecture is facing new challenges: vacancy, changing comfort needs of existing buildings; and, in addition to that, our new buildings have to deal with changing requirements. Changing requirements that are often motivated by a lack of space: we need to find solutions for building at unconventional places. **But we also need to find answers for integrating other aspects in our built**

**environment, such as mobility, energy and food production, water treatment.**

INTECTURE brings spatial, functional, social design and technical possibilities and developments together. Subjects like product design, material research, building physics, structural mechanics, computation and model and production techniques all play a major role in architecture. INTECTURE is about the integration of all technological aspects in architecture and in the built environment.

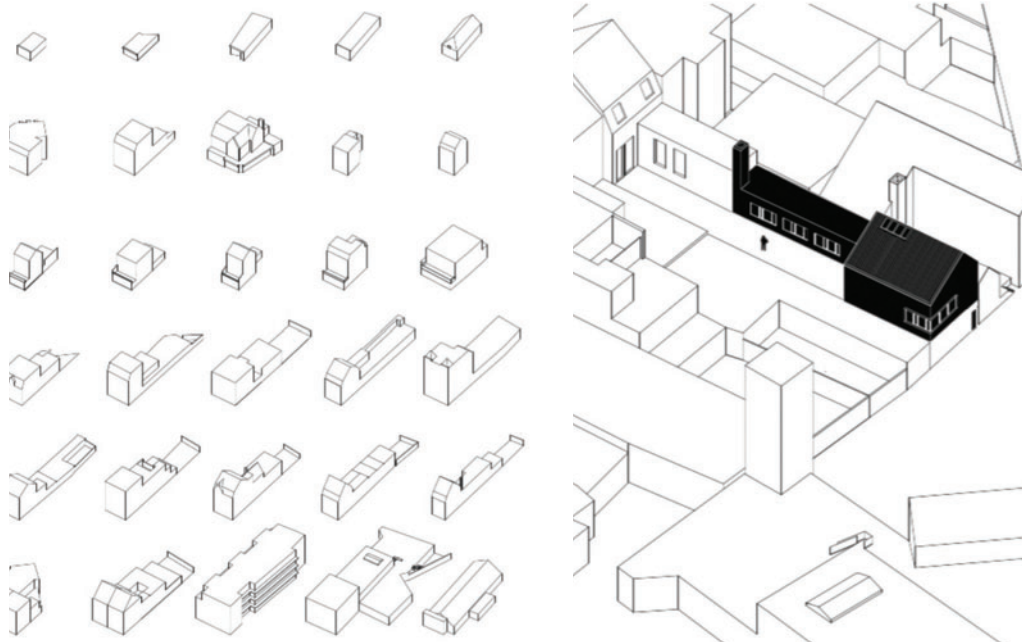
**HERITAGE & ARCHITECTURE\_ STUDIOS AND SPECIFIC WORKSHOPS.** **Considering a changing society and its social, economic and historical problems,** the main question is how can **cultural heritage** be preserved and develop in neighbourhoods? The aim is to indicate the values and to reveal the possibilities of transformation in a certain

spatial structure by discovering it in research by design. These structures or ensembles could be vacant shopping centres, religious or cultural buildings. The transformation of cities and buildings is one of the main urgent themes in contemporary architecture. Finding an appropriate balance between old and new is therefore of fundamental interest. **Heritage & Architecture is concerned with preservation and renewal in existing architecture.** The research by design conducted in this studio focuses on the architectural and technical aspects involved in the conservation and transformation of buildings, particularly including those of cultural significance.



# POETRY OF SHRINKING CITIES

Jos BOSMAN scientific coordinator  
Manon DEJKERS teaching staff



Activating the mental space / Clever Heritage

**TU/e** Technische Universiteit  
Eindhoven  
University of Technology,

DEPARTMENT OF THE BUILT  
ENVIRONMENT

**Zuyd** **ZU**  
**Hogeschool** **YD**

DEPARTMENT OF ARCHITECTURE

This research team works in Eindhoven as well in Maastricht. The department of the Built Environment at TU/e minds primarily the technology of the building and solutions that contribute to the cultural dimension of the built environment. Research and design are scientific in nature and form the foundation of the education. Education at the Maastricht Academy of Architecture is internationally oriented, project-based, flexible, structured and tailored to the individual student. This is the advantage of a relatively small institute located in an international region.

Keywords: Building construction; Art & Architecture;



Master Studio on Reuse and Renovation urban fabric in Parkstad, TU Eindhoven



Ongoing art social research on Parkstad figures for new tourism branding: the Gyrafte

**AMBITION.** Tu Eindhoven, Department of Built Environment and Maastricht Academy of Architecture are working closely together both as part of IBA Academy and for education activities regarding the topics addressed by IBA Parkstad. **Moreover a strong experimentation character is present in all its products that have a great variety.**

**PROJECTS.** The main feature of these common experiments is based on the necessity to address a new branding figure for Parkstad able to foster the image for a suitable tourism cross-border region in Europe. The post-industrial perspective

for dealing with this particular shape is the discovery of a geoglyph that it contains: a giraffe. Attention for the giraffe may speak to imagination of a large public, and its place in Parkstad is literally situated next to GaiaZOO, the well-known zoo of Parkstad. The reason for this particular shape is the combined effect of the trajectory of the train tracks and the first high way for automobiles, the N281. The idea to take the giraffe geoglyph as a potential tourist attraction factor for IBA Parkstad is that its body is where most of the visitors by train and cars arrive in the city. They will be invited here to transfer to the use of electric bikes (IBA 2020 bikes), exploring

the Leisure Lane, as 'green line' through Parkstad, with lots of attractions for relaxation and exploitation of **the character of a post-industrial landscape.**

The TU Eindhoven dedicated a series of graduation projects to IBA Parkstad. Starting from the shrinking condition of Parkstad urban area, suffering the flow migration of people near borders, the design project tries to transform this negative condition in a potential future asset **transforming the empty built environment thanks to innovation in architectural typologies** for housings and tourism facilities. Some examples are given by master

students on Heerlen cityscape, arising the higher level of design with the nomination of Archiprix Holland. Also the slow mobility pattern could be seen as an important component of revitalization for landscape accessibility, improving the quality of the entire natural areas of the region. One of these proposals became an IBA attention project of the 2014 Open call. The 'bicycle highway plus' study is about the bicycle road that in the near future will connect the centre of Parkstad with Aachen, strictly related to the case study presented for the International Studio Venice 2016. The project proposes to add **tourist use value** by means

of information pavilions that make especially bicycle tourists more aware of the architectural culture that Parkstad and Aachen share, looking most carefully at two architectural master pieces: a church by Rudolf Schwarz in Aachen and the warehouse Schunck in Heerlen. In steps the pavilions along the road tell the story that connects the two buildings. The trajectory of the 'bicycle highway plus' is so to speak one 'leg of the giraffe'. The Maastricht Academy of Architecture dedicated a study on another 'leg of the giraffe', the N281. The result of the study suggests to also reshape the N281 as activity road for bicycles and a variety of cultural activities.



# SHARING HERITAGE

THE ROMAN QUARTER IN HEERLEN

Armando DAL FABBRO, Mauro MARZO,  
Ruben BAIOTTO, Claudia PIRINA, Pietro  
FERRARA teaching staff

Federica BARRACO, Agostino BERNARDI, Emanuele  
BISCARO, Nicolò CALANDRINI, Michele COZZI, Camilla DALLA  
CIA, Carolina FANELLI, Micol GALEOTTI, Rossella NATALE  
partecipant students



Activating the mental space / Clever Heritage

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Università Iuav  
di Venezia

DIPARTIMENTI DI CULTURE DEL  
PROGETTO; ARCHITETTURA PER IL  
NUOVO E L'ANTICO; PROGETTAZIONE  
E PIANIFICAZIONE IN AMBIENTI  
COMPLESSI

The team is representative of three of the universities departments 'architectural design', 'planning and policies' as well as 'urban and landscape design'. A shared common ground was provided by the focus on the modern city and its transformation and on urban and architectural regeneration for abandoned areas. More specific expertise by architectural heritage and landscape was needed because of the presence of history, archeology and tourism. All team members were participants in national and international PhD programs and involved in research networks with several European and American Academies.

Keywords: Urban regeneration; Heritage and History; Architecture for the City; Marginal areas.



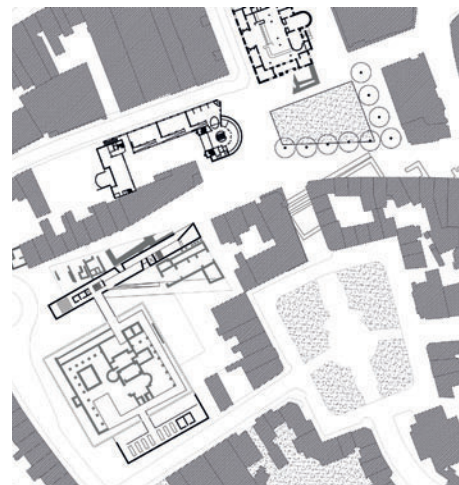
Overlapping of the old city's layer and the new city's layer.



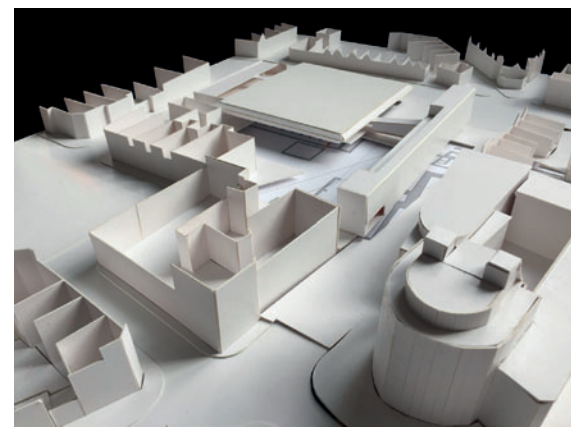
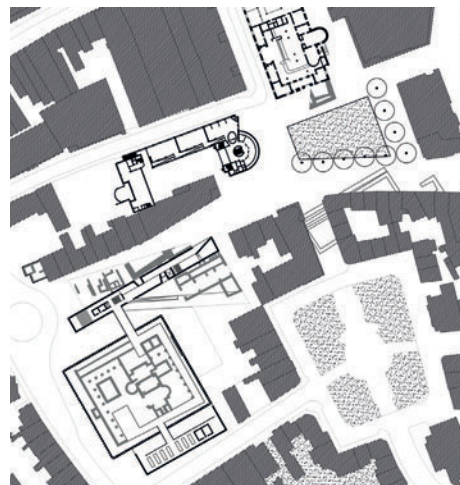
Vacancies and public space in Heerlen center



Masterplan of New Archeological Park for Roman Quarter



Plan Sections



Photos of the model realized by the students during the workshop

## WHAT IS THE MEANING OF DEALING WITH ROMAN RUINS IN THIS SPECIFIC SITE?

How to place them in a re-evaluation process that takes into account their specific conditions? These are the questions on which the design proposal is founded. Heerlen is situated along one of the old communication routes, which was represented also in the Peutingerian board connecting the different provinces of the Roman Empire. This specific location allows us to broaden our design strategy, which not only concentrates on the road that connects Heerlen with Aachen, but also involves possible relations between Heerlen and the cities that arise along the Via Belgica.

A TRANSNATIONAL ARCHEOLOGICAL ROUTE AROUND THE VIA BELGICA. The **archeological itinerary** starts from Heerlen city center and spreads along the **antique Roman route**. Along it, a series of didactic points and accommodating facilities arise, often reusing existing structures or inducing the pop up of new designs on the ruins. Since it is not always possible to see the remaining, the design proposal involves multimedia instruments. These could also be implemented in time, according to excavation's plans, but also become a service and support for guides during their tours.

A NEW ARCHEOLOGICAL PARK. The arrangement of specific cycling paths and archeological itineraries, makes the

Thermenmuseum an attractor point. It becomes not only the starting point of a **landscape itinerary, which tells the archeological history of the place**, but also makes it a crucial point of interpretation of the surrounding territory. The design proposal faces the presence of later layers that have built the city and, that overlap according to different logics. These logics have changed in time and have differently interpreted the relief condition of the place. The reconfiguration of the public spaces at the current level of the city is combined with the necessity of connection between the Thermenmuseum and the library building, which will become the museum extension. These two design requirements find an answer in the realization

of a **new archeological park**, which is the foundation element of the design proposal. The realization of new archeological excavations allows, on one hand, to make visible the presence of these two realities within the city and the extent of their difference.

DEVELOPMENT PROGRAM. **Tourism and identity are the cores around which the design is structured.** The presence of archeological evidence tells the history of the place and build its identity. If, on one side, tourism incentivize the use and development of a territory, on the other, it promotes the reading of the **landscape** and the acknowledgment of its own **identity**. The exceptional character of the

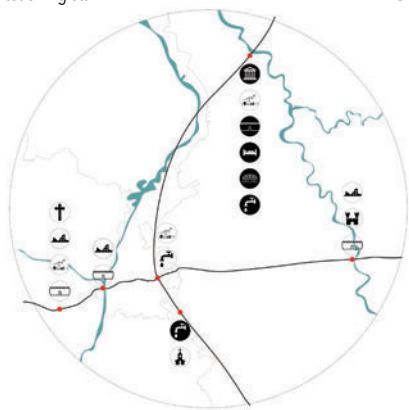
proposal themes makes the **participation** of the public administration essential. It is, although, important to stimulate the interest and encourage the **involvement** of other institutions such as universities and schools, tourist boards, neighborhood councils. The planning of touristic itineraries ought to stimulate also the interest of housing facilities and hotels along the path. With the support of specialized regional marketing operators it is possible to build new business networks for tourism and research.



# (RE)DEFINING THE ROMAN QUARTER OF HEERLEN

Peter BONGAERTS scientific coordinator  
Nick CEULEMANS; Marijn VAN DE WEIJER  
teaching staff

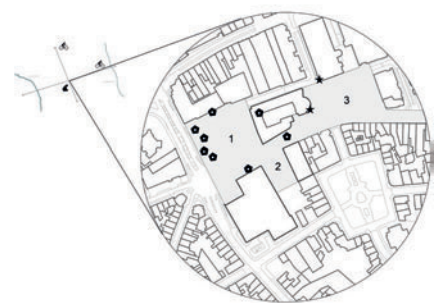
Floris AKKERMANS, Andi BELULAJ (Tu Delft), Nina CLAUS (Tu Eindhoven), Yves DUPONT, Ianthe LINDELAUF, Niels MATHOUL, John SILVERTAND, Steffi THIJS, Cente VAN HOUT participant students



The Via Belgica archeological context



Observations on the Roman Quarter in relation to its contemporary role in Heerlen



Activating the mental space / Re-Use

universiteit  
hasselt

ARCHITECTUUR EN KUNST

Within the larger academic context and framework of Hasselt University and the ARK faculty the research group focuses on architecture in its relation with fundamental/applied research and community services.

The interplays between practice and reflection, between métier and creativity, and between research and education are at the core of this ambition, an ambition that is driven by a process that is both contextualised and goal oriented.

Although design and artistic creation remain central, both in education and research, interdisciplinary connections with the humanities and engineering are actively sought out.

Main topics of the group, within the Ark, centre around four clusters, all of which involve a combination of the three factors of Process, Product and Performance: Adaptive reuse; Capacity building (collaborative design processes); Designing for More (user-space interaction); Sustainability (in design product and process). Consolidated relationships are engaged with US and European Academies.

Keywords: Collaborative design processes; Reuse; Community



Strategy one: reAction City;



Strategy 2: relginition City;



Strategy 3: reLiving City

**AMBITION.** The contribution to the International studio 'Revitalization by Reconciliation' from students at the Faculty of Architecture and Arts at Hasselt University investigates the spatial redefining of a 'Roman Quarter' in the heart of both the Parkstad urban district, and the wider Meuse-Rhine Euregion. This district-to-be-defined is a part of Heerlen's city core, centred around the archaeological site Roman Baths. Moving from Delft to Venice, the students' research process took shape as a trajectory which, primarily, made spatial opportunities and challenges explicit; and secondly, explored strategies for planning interventions addressing these spatial opportunities and challenges. While covering a broad range, all strategies discussed here, share the goal to transform Heerlen into an attractive city and combat the negative effects of a shrinking population. What is the main identity of

the Roman Quarter today? This was the main research question formulated in Delft. At this point, the students observed that in fact the Roman Quarter is built up from a number of diverse patterns, determined by relics of the formative epochs that have determined the urban development of Heerlen - the Roman, Medieval, Mining and Modern eras. **The opportunity is hence to stitch these patterns together in order to establish a more recognizable identity for the district-to-be-defined.** Perceived challenges are the lack of green spaces in the urban quarter, and the presence of road infrastructure, which might function as a barrier to pedestrians.

**PROJECT.** The response to these observations took the shape of a 'Strategy Matrix'. The strategies included 'Greening' - inserting green spots or ribbons in the city - 'Airing' - transforming enclosed space into open space by cutting through or removing

building blocks - and 'Stratifying' - joining together key urban artefacts by connector spaces either lifted up into the air or sunken under the surface level. Primary explorations of these concepts provided deeper insights into the opportunities and challenges of the Roman Quarter, which led to further exploration in follow-up of the workshop. In Venice, the research question was formulated even more ambitious by asking: What is Heerlen today? Their upscaling of the enquiry led students to take into account spatial conditions on the level of the region, as Heerlen lies at the location of an ancient Roman crossroads, joining the trajectories between Tongeren (Belgium) to Cologne (Germany) and between the German settlements of Aachen and Xanten. The problem definition was extended with analyses of the relatively affordable housing stock, the significant amount of vacant buildings, and the limited quality of public open space.

This led to the perspective that concrete architectural programmes, like a new protective structure over the archaeological site and the migration of the related roman museum and city archives to the vacated public library building, should attain a higher level of impact, by including a search for connectivity and useable public space. The strategies of the earlier matrix were translated into three conceptual stories which were imaginatively projected onto the urban tissue of the Roman Quarter. The first story, '(re)Action City', translates the ancient Roman DNA of the location into the layout of a Euroregional cycling route, conceptually coinciding with the Roman crossroads. The second story, '(re)Ignition City', equally proposes a new connection, but one which is condensed into a single building. This building, an accessible urban-scale roof structure, joins archaeological protection, pedestrian circulation and eventful urban

space into one architectural statement. Lastly, '(re)Living City' aims to diversify the urban housing stock with novel housing types, hence addressing both the residential quality and the problem of vacancy. The public sites of interest, like the Roman Baths, are enveloped with novel residential blocks. The public inner spaces of these blocks are made accessible with underground passages, which take shape as enriching public spaces, such as open-air theatres. Rather than achieving a final stage, these stories unlock a joint research programme for further exploration in the follow-up design studio, which is currently being organised at Hasselt University under supervision of Jo Coenen and Nick Ceulemans. The exploratory designs demonstrate the range of imaginative yet feasible approaches to enrich the planning & development process conducted in the overarching IBA Parkstad Project.



# REGENERATING BEKKERVELD DISTRICT

Domizia MANDOLESI scientific coordinator  
Luigi PAGLIALUNGA teaching staff

Chiara ROMA, Alessia GUERRIERI, Teodora M. M. PICCINNO, Mickeal MILOCCO, Massimiliano MODENA participant PhD students and researchers

Activating the mental space / Re-Use

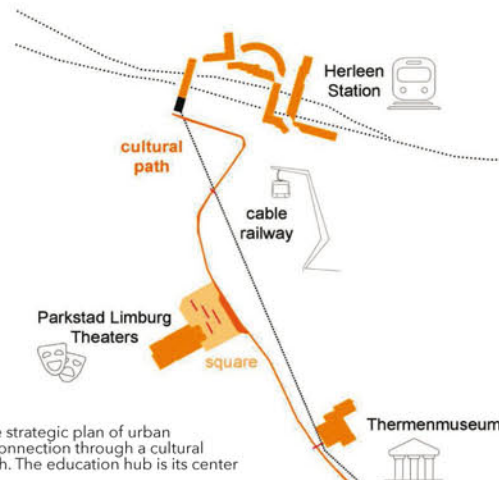


SAPIENZA  
UNIVERSITÀ DI ROMA

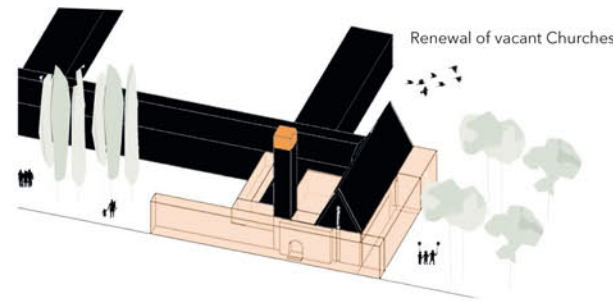
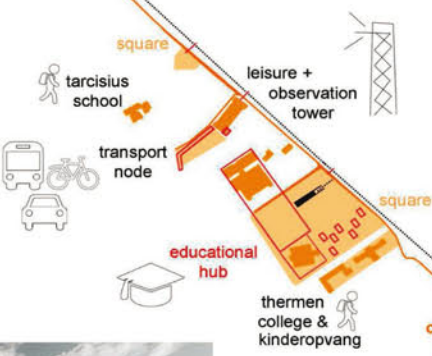
HOUSING LAB/ DIPARTIMENTO DI  
ARCHITETTURA E PROGETTO

The research group is part of HousingLab, a vivid research hub of DIAP- La Sapienza that focuses on urban transformations related to social and habitat in contemporary deep changes. In particular, it addresses the issues of urban regeneration, housing and typological innovation, focusing both on Rome and international areas. Main research themes are the transformation and urban regeneration, with focus on strategies for the peripheral areas and social housing neighborhoods; experimental architectural typologies for sustainable housing; new models of collective housing; solutions for housing in crisis areas. HousingLab provides services for public institutions, business people, designers, academic and students. The research group also takes part of the National Research PRIN Recycle Italy as unit research of Rome.

Keywords: Urban regeneration strategies; rehabilitation of public housing neighborhoods; integration between residential building, transport systems and service networks; co-housing.



Small public service nodes for public transport



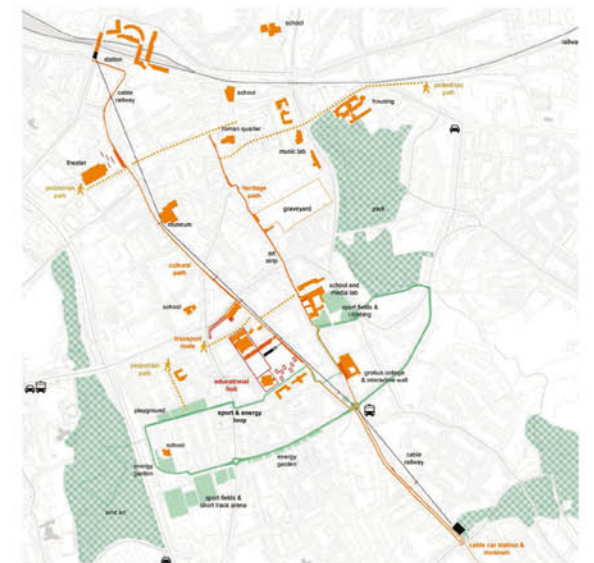
Renewal of vacant Churches



Substituting private delimitations (fences) in dynamic system of informations



Cable line as a new path for sustainable mobility



The overall vision to reconnect the Bekkerveld District to the city, tematizing existent paths

**ISSUES AND NEW POTENTIALITY.** The Bekkerveld district's current state highlights how the area lacks a defined urban **identity**, both in relation to the city of Heerlen, and to the wider context of Parkstad. This situation is connected to the following issues: a single-function, undifferentiated urban texture, mostly consisting of single-family residences and schools; a lack of proximity due to extensive roads and empty spaces and a lack of elements of architectonic identity that might **bring together the community**.

**THE RENEWAL PROPOSAL.** Taking into account the strategic position of the Parkstad region, and particularly of the city of Heerlen, between Belgium and Germany, the proposal

aims to strengthen the already existing education poles and develop them in a systemic way, connecting them to other points of urban interest and creating a new relevant centre. The **activation** of this process will be possible thanks to the enhancement of some urban axes; ideally this will happen through succeeding stages and with the **citizens' involvement**. These axes will re-establish a connection between the different urban sectors; they will **give new meaning to the structure of public space**, and to the relationship between the two different dimensions of private housing and public neighbourhood.

Specifically, the proposal suggests to build a HUB in

Bekkerveld district, a centre for learning and for **experimenting innovative education methods** that encompass all levels of schooling up until the access to the workforce, open to all members of the EU. In the context of the EU, education plays a central role in spreading concerted policies and choices. The Educational and Lifelong Learning Hub (ELLH) aims to further the work of online platform Twinning by supplying the EU with a physical space where teachers and students from all over Europe can meet and exchange views.

**THE PROJECT.** The project comprises three main elements. The HUB, facing the plaza, is the new heart of Bekkerveld. The HUB reassembles the pre-

existing and disused St. Anne's Church, school and building under a wide flat covering, equipped with solar panels for internal energy production. These buildings, integrated with new open spaces, shape the place for education activities. The system of pre-existing schools and cultural buildings is transformed and integrated with sporting routes and new related facilities. This system creates a wide and diversified offer of urban functions, especially geared towards the younger generations. The re-organization of some pre-existing road axes creates a new network of roads and thematic pedestrian routes - encompassing **history and archaeology, arts and culture, sports and energy** - that link the main centres of Heerlen.

**DEVELOPMENT DESIGN PROGRAM.** The creation of the ELLH in the Bekkerveld district has the potential to draw people from all over Europe, with positive consequences for tourism. **This could re-activate interest in the entire region of Parkstad**, particularly for its historical, archaeological and environmental heritage, characterized by the presence of the quarries. Main sponsors could be: EU, in order to launch the ELLH project; the local schools, in order to improve the education they offer; private enterprises interested in building new urban services, sporting and tourism facilities, and new residences in order to meet a renewed demand.



"Nederland heeft een aantal decennia dingen uitgewist. Wat wij zoeken is de energie die in het ondergrond zit en hoe jij die op een of andere manier kunt uithalen en weer zichtbaar kunt maken".

**THIJS ASSELBERGS**  
**TU DELFT**

Garden city  
Parkstad, 2015



prof. Thijs Asselbergs



Cross border landscape  
Parkstad, 2016

jr prof. Carolin Stapenhorst & prof. Wim van den Bergh

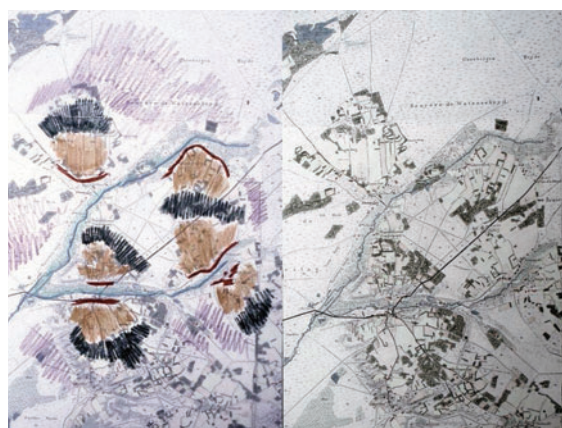
"Wir haben mit den Studierenden vor allem am Thema der Identitäten gearbeitet, der versteckten Identitäten, auch gemeinsame Identitäten, was sind gemeinsame Themen die nachvollziehbar sind und haben diese lokalisiert".

**CAROLIN STAPENHORST**  
**RWTH AACHEN**

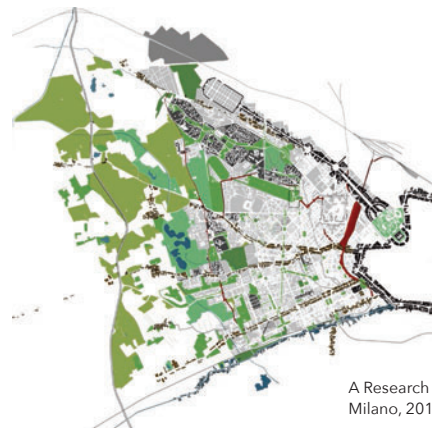
"Het thema van de workshop is reconciliation, is verzoening, en verzoening van de kwaliteiten van alle tijden door elkaar, is iets wat wij zouden kunnen doen.

**PETER BONGAERTS**  
**UNIVERSITEIT HASSELT**

Sharing Common Landscape  
Genk, 2016



lecturer arch. Nick Ceulemans & prof. Peter Bongaerts



A Research on urban fringes  
Milano, 2015

ass. prof. Marco Bovati & ass. prof. Emilia Corradi

"Credo che questa sia l'occasione per promuovere, soprattutto nel campo della ricerca tra università un'azione di servizio all'Europa e alle popolazioni che vivono in contesti fragili sotto molti aspetti."

**EMILIA CORRADI**  
**POLITECNICO DI MILANO**

"Ritengo molto interessante questa occasione per poter confrontare le conoscenze che i singoli architetti e le ricerche universitarie estere possono portare in questa facoltà"

**PIETRO FERRARA**  
**UNIVERSITÀ IUAV DI VENEZIA**

Venice Faculty of Architecture



ass. prof. Claudia Pirina & lecturer arch. Pietro Ferrara



Revitalizing social housing districts  
Rome, 2015

"E' una grande opportunità quella di mettere a confronto idee diverse su tematiche così complesse in un momento di trasformazione per l'Europa, in cui cerca una propria identità. Credo che l'Europa in questo momento stia affrontando una fase di decantazione, di sosta e di riflessione"

**LUIGI PAGLIALUNGA**  
**UNIVERSITA' LA SAPIENZA ROMA**

lecturer arch. Luigi Paglialunga



# IBA PARKSTAD & EU URBAN AGENDA

Jo COENEN

Parkstad, with Heerlen as the most densified municipality, has a relatively short urban history of barely 100 years. Despite the short time, it has changed its spatial appearance at least three times. The spread out rural environment became a high performant charcoal industry at the dawn of the twentieth century. The coal lasted only for sixty years, then clerks took over the mining employment, finding a desk in the large anonymous administration buildings of the sixties. Meanwhile the city planners, in adoration of the CIAM doctrine, divided the land in mono-functional zones with a one-dimensional use and splitting it with roads and highways. The result is an illegible urbanised landscape, with a poly-centric structure. 250.000 people living in an archipelago of isolated urban zones, causing more motorised traffic than necessary.

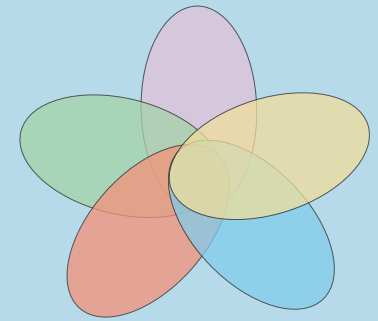
Spatial conditions have changed, as well as the social stratification. Segregation, exclusion and poverty have emerged. By lack of employment, the population shrinks, resulting in an increasing unattractiveness of the whole region. Parkstad, is not an isolated case, but an example of what massive urbanisation created in vast regions of Europe. Regions that have to deal with the same problems as metropolises like London or Paris. Many European areas have a mix of urban zones and isolated parts in an open landscape. Their urban appearance and fragmentation have the same spatial and social conditions as the outskirts of, for example, Milano. Like the big cities they are confronted with problems of migration, poverty, vacancy of houses and the decline of shopping streets, unemployment, sustainable energy supply and mobility. This condition can change and even turn around when border-regions open

up to neighbours and mid size cities start to cooperate, as shown in the case of Liege, Eindhoven and Köln, a cross-border regional region that is considered one of the most innovative of Europe today.

How can we re-unite scattered areas? How can we implement The Pact of Amsterdam? How can we develop structures for a more sustainable living environment and place it on the EU Urban Agenda?

The method of the IBA Parkstad can be the pilot case for innovation in policies and process by experimenting with an integrated approach, going beyond the duality of the 'top-down' and the 'bottom-up' procedure. The integrated approach, was also used in the International Studio where governance policies and design strategies were combined with social participation and research implementation. Resulting in a large, long lasting and durable transformation for the future development of the region. The IBA approach engages people, makes them proud of their ideas and plans by a system of labels. Gathering all initiatives, publishing and exhibiting them, it visualises positive energy, changing the attitude towards the region and creating a new believe in their own future. The IBA exhibition in 2020 is just a milestone in a process that goes far beyond.

In the European perspective the key challenge for restoring the sense of community in the future is to re-gain the idea of 'common' and use it as a strategy. The Netherlands whom are working on 'immigration' and Belgium, together with France, that have addressed 'poverty' as the main task, could find each other in the Parkstad case. Parkstad combines



both problems and is an example for similar urban regions. Starting with IBA Parkstad and from there thinking in ripples, first to Genk in Belgium then Aachen in Germany and further on to other regions and countries. All can learn from the IBA method, add on knowledge and develop an European approach.

Universities are an ideal intermediary for Parkstad and surrounding areas. They are analytical and using the IBA context as a think-tank and as a platform to implement and test research results. They share experience and knowledge. A network of European relevance - IBA Academy and the International Studio - reflect on the political, social inclusion, the new impetus for economy, cultural and ecological forms of designing cities and territories. They ease the way for implementation in similar contexts. The EU, more specifically the European Committee for Regions and Cities, should take in consideration to use IBA Parkstad as the pilot project for the Urban Agenda, and foster the alliance between Research, Social Participation, Governance Policies and Spatial Design by the mean of a Knowledge network that focuses on contemporary urban agglomerations. Areas that are parallel and not minor to the metropolitan cities.

with the contribution of  
 prof. Peter Bongaerts, Hasselt University  
 Fabrizia Berlingieri  
 Yvette Masson Zanussi

