

THIRD SPACES

COUVEN - QUARTER / "Lustauflife"/ BÜCHEL - QUARTER Freeing / Re-Framing Open Spaces



A Synergetic Approach to Research by Design -
Evaluating Ongoing Urban Transformation in Aachen

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Research Methods/ Urban Transformation 2 in the Master Course of "Transforming City Regions",
Chair of Urban Design/ UNESCO/ European Urbanism, Univ. Prof. Christa Reicher, RWTH Aachen

THEME

THIRD SPACES - *To enrich the places of living and working by places of staying, of information, of learning of communicating, of sharing – pleasure in perception, experience and education – contributing to **LOCAL CULTURE** as the fourth leg of sustainability by providing **public spaces with niches for privacy in built and open inner urban spaces**, giving respect to location and type of the urban structure – by a **FRAMED VARIETY of STRUCTURAL ELEMENTS, BUILDING SPACES.***

Basic Philosophy – ISL, 1997, GRÜN.RAUM.STRUKTUR-Aachen in Schichten, RWTH Aachen, Matthias Ripp, 2022, A Meta-Model for Heritage-based Urban Development, Springer, Cham, focusing on Grounded Theory and Local Culture, mainly related to the scale 1:500 as part of a multi-scale approach; Henri Lefebvre, 1991, The Production of Space, Blackwells, Oxford; Andreas Kipar, LAND; “Deseal the land”, KlimaVertrag, EU Nature Restoration Law 07-2024

Student Participants – Ana Paulina Cabello Ocampo; Jana Westerkamp; Lindy Huang; Laura Barbosa; Cemre Cabuk; Juliana Garcia Valencia; Elif Ertemiz; Shubhrata Naik; Elies Horemans; Irem Bozdogla; Yuhan Liu; Hsin-Hsuan Chen; Yining Sun, Qian Chen; Tooba Tahir; Kazi Ruhi Rizoana; Aquib Arfi; Wanyun Ling; Yunyi Huang; Huijuan Wu; Muhammad Bin Monsur

Inputs – Andrea Haase/ Hossein Abdeyazdan/ Daniel Christian Wahl/ Lutz Meyer/ Björn Schötten/ Hermann Josef Pilgram/ Hermann Schnell/ Georg Helmes/ Markus Ulrich/ Ulrich Lieser/ Klaus Schavan/ Stephan Vreydal/ Mehmet Celik/ Antje Eickhoff/ Anke Fissabre/ 3 Tuesday evening Conferences “Innenstadt der Quartiere” in Foyer of REIFF Museum, Faculty of Architecture, RWTH Aachen – by Christa Reicher (23.04. 2024; 14. 05. 2024; 18.06. 2024)/ 2 Public Meetings about “Haus der Neugier”, in: “Aachen Fenster” at Mayersche Meeting Area – conceptualized and organized by Björn Schötten (6.12.2023;10.04.2024)

Review – Aims of Teaching and Learning

This booklet reports on the experiment of linking the two courses of “Urban Transformation II” and “Research Methods” as a combined course’s approach to understanding and evaluating creatively ongoing processes of Urban Transformation in the City of Aachen at two location by means of “Research Methods – by Design”.

Content – Teaching and learning were preparing for concept-finding relative to contemporary tasks of responding to stages of “emptiness” in urban transformation, preparing for **“THIRD SPACES”**. Both the combined courses, the compulsory course “Urban Transformation II” and the elective course “Research Methods”, have found contemporary roots in the path-leading philosophy of the publication “Matthias Ripp, 2022, A Meta-Model for Heritage-based Urban Development, Springer, Cham”.

On this methodical basis, related processes of making the urban society understand the specifics of the urban structure and its potential for transformation have been set up and have led to scenarios with changing paradigms for local area transformation per considered time period. Major importance was given to the starting point of investigation (“what do I know for certain?”), clarifying the basis for outlining the direction of research and evaluation (“What do I want to find out on this basis?”).

Review – Aims of Teaching and Learning

Structure – The compulsory course “Urban Transformation II” has defined the framework for the professional orientation of recognizing and guiding paradigms of urban change in place and time. It has set up a multi-faceted tool-box with impulses for getting to know and derive criteria to be applied for knowing how to seize, evaluate, develop and guide processes and their products relative to spatial and socio-cultural as well as legal context conditions. The elective course “Research Methods – by Design” has introduced an additional tool-box. This tool-box distinguishes the four major levels of knowledge (science, skills, folk and tacit knowledge) and allows for identifying the appliance of these levels by considering historical traces of establishing and influencing these levels. It illuminates the historical turn from the industrial ways of developing knowledge within the disciplines of theory (mode 1) to the late industrial way of developing knowledge across the disciplines from and for practice (mode 2). It regards basic theories behind methods (innovation-, system-, modernization – theory) and offers – per theme and research interest – appropriate ways of research about environmental qualities. It equally introduces how to decode and how to codify the gained information for their evaluation by qualitative searches for valid data of varied qualitative and quantitative kind.

Review – Aims of Teaching and Learning

Structure - The elective course “Research Methods – by Design” became the “motor” for stating and evaluating stages of local urban transformation qualitatively. It introduced and trained the attempts of gaining knowledge about reasons, possible strategies and measurement for creating **“THIRD SPACES”**, reusing sites and buildings in process of falling derelict. Deductive research activities by literature review and case-study analyses became the back-bone of the inductive side of searching for and finding spatial answers to waiting sites in the compulsory course Urban Transformation II”. That means: Space – on different levels of scale – was the major issue of the combined consideration. Values and criteria for finding a “valid answer” to a “valid question” were searched for group-wise in order to become defined and applied locally for the overall aim of qualifying the urban space in place and time appropriately.

In the combined courses, the students were introduced to bind their investigation to a “starting point of knowledge”, to learning critically and creatively to widen, to deepen and to position their knowledge about ongoing processes of urban transformation guidance, to evaluate general goals and locally specific conditions in close relationship with local culture in local time - as the compulsory root of sustainability.

Review – Aims of Teaching and Learning

Structure – The students were challenged to check the value of existing strategies and concepts critically and creatively and were invited to interpret - still open to be defined – existing official planning proposals by their visions to be set up, argued for and to be discussed as alternatives.

They were taught to settle and carry out the processes of arguing with themselves individually and collectively and to precise and control their positions through searching for socio-cultural and spatio-economic concepts in contrast to obsolete patterns of modernization from past eras of urban development.

That means, they were asked to localize

- Multi-disciplinarity in understanding the needs for guiding urban transformation
- Process-thinking by applying modernization theory
- System- thinking by applying innovation theory
- Multi-scale impulses, respecting the urban morphology/ local cultural heritage – tangible/ intangible kind of
- General knowledge about the benefits of gentrification activities/ related stake-holding to be initiated in terms of short-/mid-/ long-term scenarios

METHODOLOGY/ QUARTER

From Hypothesis/ Vision to Concept-Finding

Theory/ Empiry

URBAN SPACE/ URBAN STRUCTURE/ HERITAGE PRESERVATION/ LOCAL CULTURE

Best-Practices about Adaptive Reuse and Third Spaces

Theory/ Empiry Real Estate Management

Strategies – Basic Proven Goals (Global theory/ Practice/ Local needs and conditions)

Strategies – Vision Driven Goals (Global theory/ Local needs and conditions)

Strategies – Measurements (Global theory/ Practice/ Innovation/ Local needs and conditions)

Systemic/ Regenerative Design (Principle sketches for testing options)

Topography, Geography, Climate and Natural Ressources (Ground Water)

Roots of Local Culture in Urban Space (Arts, Events, Places, Spatial patterns ...)

Planning Law and Exemptions (Density, Ground coverage, Height) for specific allowances in case of (... implementing innovative technologies for gaining Energy from Natural Ressources)

Built Form Arrangement (Ground coverage, Patterns of public-private, Roof spaces, Facades)

Open Spaces (Ground plan patterns, Mobility, Streetscape, Footscape, Active living, Biodiversity, Climate efficiency)

Specific Aspects like “Common Ground”/ “Third Space”/ “Productive Spaces”

Policy Appliance

Case-Related reflexive approaches to selected clients in Regional/ Local Contexts, Interweaving Goals for qualifying Space with Goals for reducing lacks like Emptiness, Scarcity of Housing/ of Service and Supply/ of Spaces for Living and working with Culture etc.

Review – Aims of Teaching and Learning

The lectures – were enfolding a set of thematic fields, relevant in general but also in terms of understanding local specifics, like needs for preserving heritage culture.

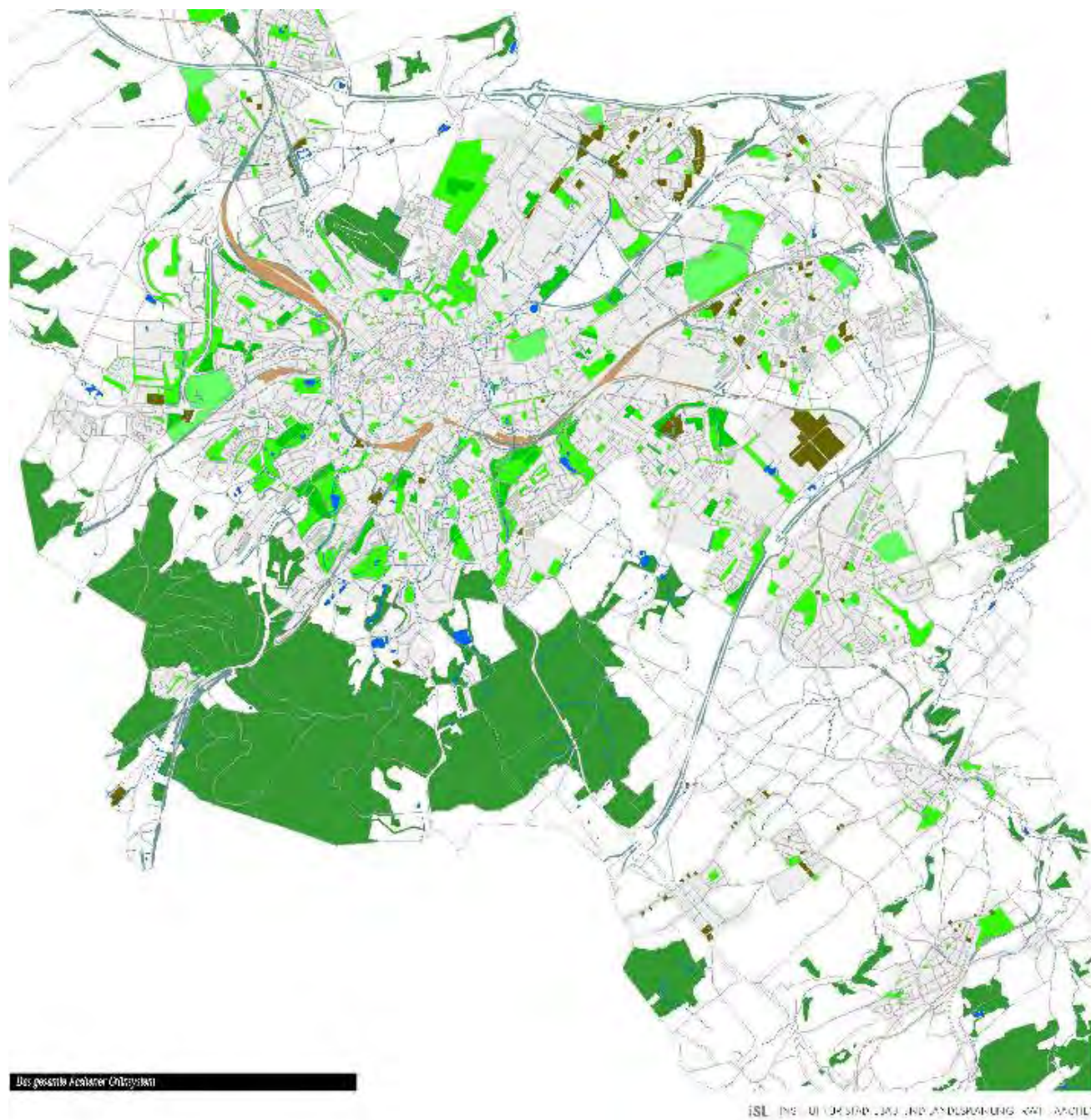
In the course “Urban Transformation II” they have tackled the range of a basic understanding of urbanity, updating well known definitions of “sustainability” relative to “local culture” and discussing on this background possible realities of the “City as nature”. Approaches to an understanding of a “nature-based-economy” were traced back to needs for environmental qualification and were introduced and reflected on in relationship with existing philosophies of an “economy of common welfare” and of “de-growth”.

These philosophies became confronted to traditional criteria for a quality of building and revitalizing urban space with open listings for appropriate categories (legibility, robustness, framed variety, permeability/changeability, usability, accessibility, connectivity).

Review – Aims of Teaching and Learning

The lectures – Philosophies and criteria for evaluation illuminated wanted structural conditions of morphologies as valid bases for valid processes and outcomes of urban transformation with respect to tangible and intangible heritage. They envisaged essential structural conditions of urban space like the systems of land ownership and plot division relative to major patterns of culture and of geography for aims of “infilling built form” into existing urban contexts. They introduced into the major secrets of City Marketing (by considering the need of bringing different kinds of stakeholders together), they reminded of the major influences of the cultures of planning per time and place. They introduced and discussed the “Bilbao-effect” as a – not always successful - strategy to respond responsively to the local conditions. They have pointed to the need for identifying and excluding preventatively unwanted effects by design for design-practice.

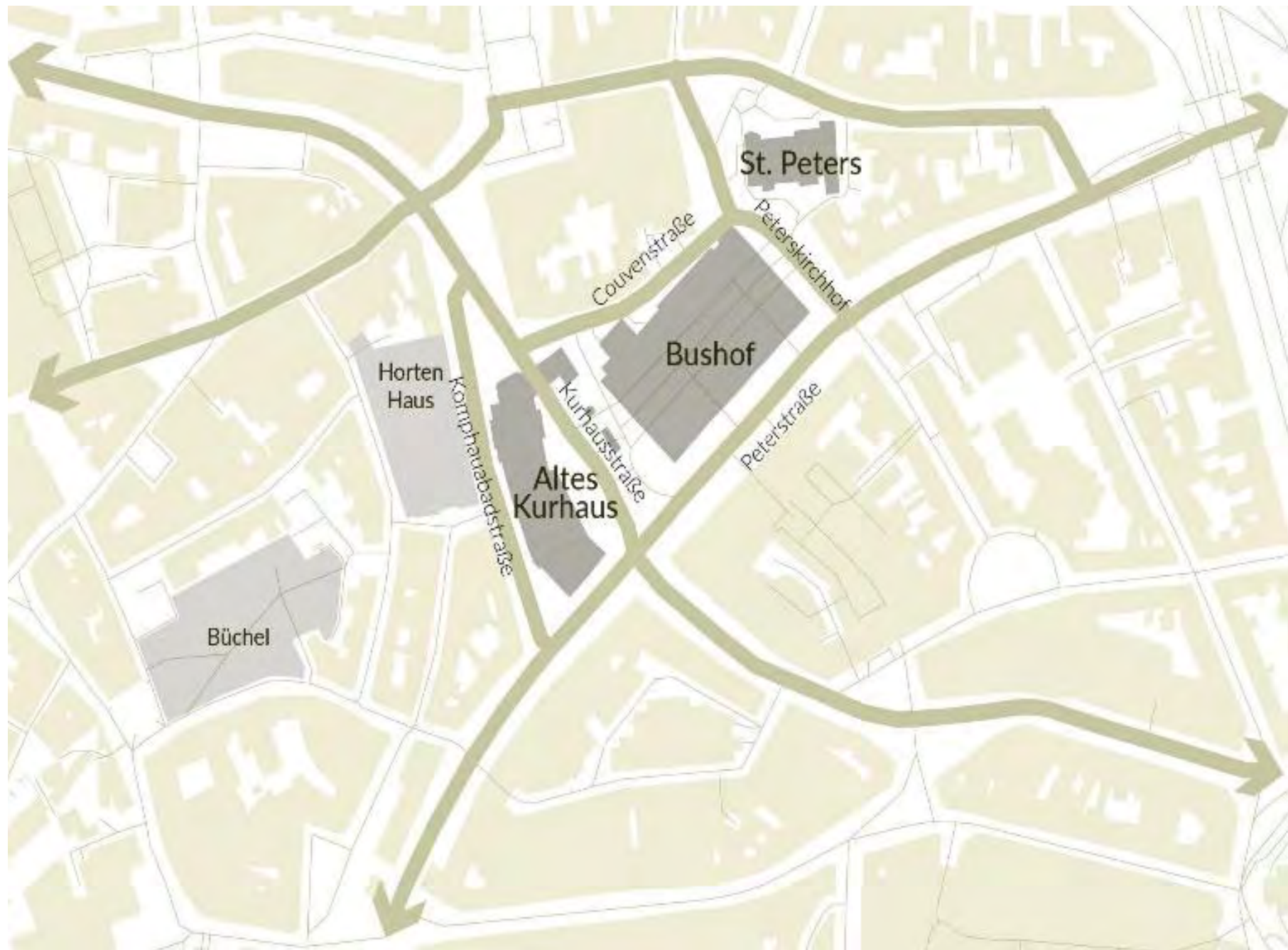
In the course “Research Methods – by Design” they have tackled the range of options for not only setting up concepts by design inductively by individual “masters”, but for making design a tool to be reasoned and justified collectively on the basis of embedding it into the appliance of developing knowledge relative to theories and evidence. The therefore applied meta-model of a methodology refers to a general introduction into developing knowledge, into understanding and applying “grounded theory”, into defining the starting point of a process of developing knowledge by distinguishing the importance of its variables like object-context relationships, into creating space relative to desired results of space-become “atmospheres” of the urban morphologies.





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Review – Aims of Teaching and Learning

The exercise –The visions and derived concepts for urban transformation aimed to qualify spatial, environmental and socio-cultural as well as economic urban conditions. There was a discussion about how far new impulses may be part of (which kind of) “urban growth”, and if qualification of space can be based on alternative impulses which are not representing the classical historical images of “urban growth”. Equally, basic needs for fulfilling the locational advantages and their meaning for continuing the local heritages have been looked at by searching for hidden roots of local culture.

As the overall location of needs for reusing central inner urban areas in Aachen, the former Horten Building (“Lust auf Life”) is already labelled as an opportunity for a “Third Place”, we considered this term and its meaning in planning paradigms as a starting point for developing knowledge about future processes. The process of discussing values and criteria was reminding ourselves of the tangible heritage of the local historical roots in use, image and spatial organization on former Roman/ mediievally founded ground and in between the two mediievally established walls and their later appearances as – more or less completed - ring roads.

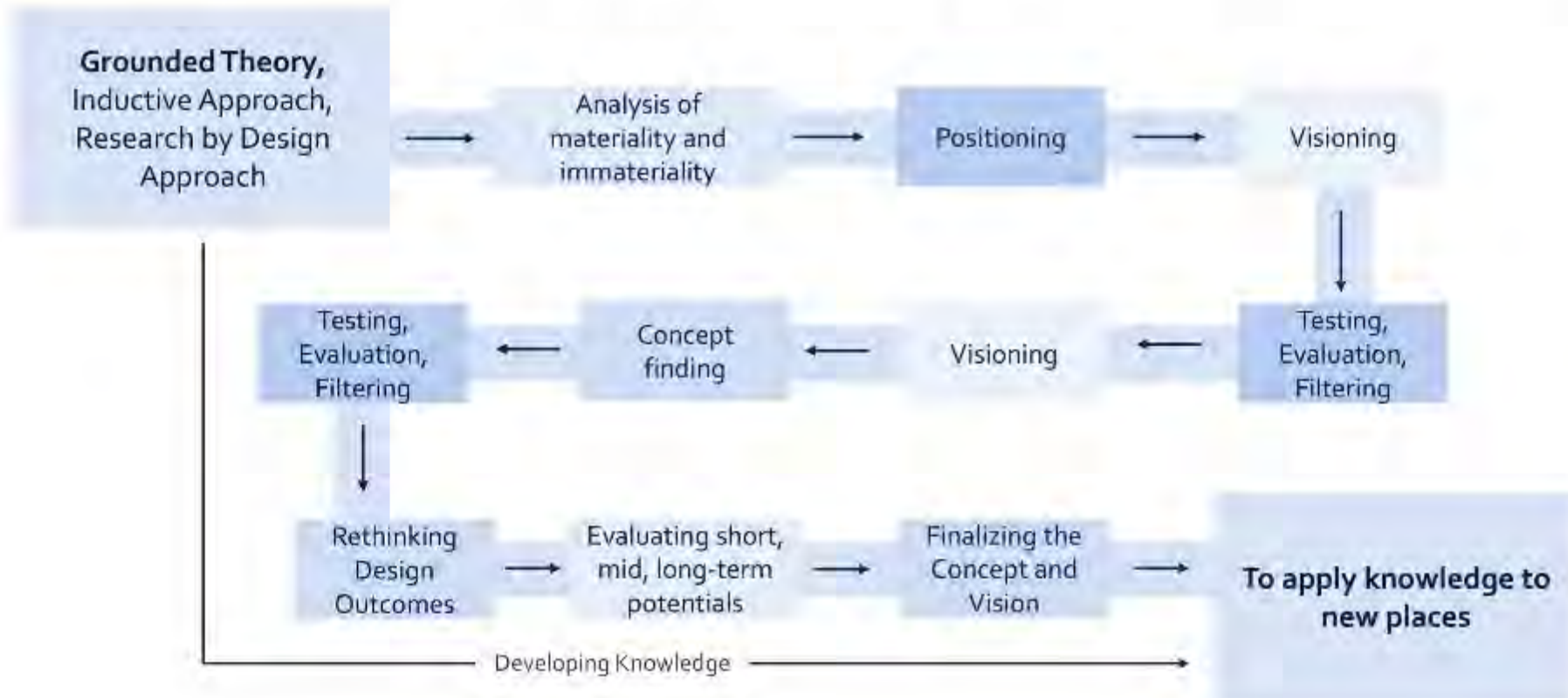
The most essential difficulty in initiating and, consequently, guiding urban transformation is always to find the major gaps in existing conditions of history as “caught locational factors” for “telling the story of place in a new way” - by which the whole process of urban transformation might be turned to a higher quality.

Research by Design Method

Research by Design is an approach that integrates design practices with research methodologies to address complex problems and generate knowledge.

Research by Design is a methodology that blends design practices with research methodologies to tackle complex issues and create new insights or knowledge. Unlike traditional research, which often follows a more theoretical or analytical approach, Research by Design uses the design process itself as a form of inquiry. This means that through designing, experimenting, and iterating, new information is discovered, problems are explored, and solutions are tested.

In architecture or urban design, Research by Design might involve creating multiple design proposals for a city's public space. Throughout the design process, designers would gather feedback, test different solutions, and reflect on the outcomes. This iterative process would help solve the design problem while also producing valuable knowledge about how people interact with public spaces.



Review – Aims of Teaching and Learning

The exercise – reminded of not confusing past with presence but nevertheless preparing for a continuity of changes by giving respect to major traces of urban culture and its heritage. Thus, it became a culturally and politically integrated part of discovering and mediating existing knowledge about the urban history and generating appropriate information for the remaining challenges to respond to.

It has operated as a binding field for learning how to apply the different tool-boxes of theory for learning from practice. This was carried out by giving insight into an utmost relevant condition of urban transformation of today: emptiness of inner urban sites which had been used more densely, bound to function under industrial conditions, to be looked at in the international discourse about gentrification and interim-uses since the 1970ies as classical phenomena.

Herewith two locations in the central core of the ring-radial urban structure of the city of Aachen have offered valid information and insights into ongoing processes of contemporary urban transformation. The locations of Couven-quarter/ Horten/ Büchel-quarter represent two closely linked inner urban core areas of different historical origin and locational advantages in the utmost “Holy middle” of Aachen. They show - in their major sites for intervention and in their immediate surroundings - spatially different needs for counter-balancing future processes of decay - in consequence of changes in user demands and mobility policies. Thus, the increasing emptiness of the centrally located, inner urban area of Aachen has been taken into consideration exemplarily for evaluating existing long-term potentials of the urban topography (water sources) and unfolding long-term perspectives by back-casting for mid-/ and short-term scenarios of urban transformation.

Review – Aims of Teaching and Learning

The exercise - Conditions of historical value to be freed from current restrictions of neglect and to be re-discovered for re-flourishing by enhancing continuity of cultural heritage and by introducing innovation were to be named locally:

- The hot and cold water sources in the ground as an overall attraction for well-being in public space with implications on surrounding local economies (retail, gastronomy, exhibitions...)
- The layout of built form and gardens as individual elements on the ground, building patches of spatial units surrounded by public space – according to medieval roots
- The former existence of a Werkkunstschule during the 20th century, having been incorporated into Fachhochschule in 1971, offering a potential for revitalizing inner urban uses of culture and educational infrastructure in between science (RWTH, Fraunhofer Institute) and social work (Lebenshilfe) as well as arts (the variety of galleries) as a place for mediating new processes of customer-oriented fabrication
- The use of prostitution in Antoniusstrasse, - one of the oldest use of the city -, does not suffer from emptiness and is crucial to be restricted by spatial replacement of public open space. In order not to cause any conflict of use by planning without counter-balancing it preventatively, the whole length of Antoniusstrasse needs to be protected from approaching uses of public space and infrastructure by an appropriate framework of built form arrangement/ walls.
- The solar energy production in combination with a higher density of built form usage in ground coverage and height of built form (concept of the novellation of Baugesetzbuch – 2024) might be an appropriate option for a new concept of a legally binding plan at Büchel.

Review – Aims of Teaching and Learning

Process – The task was oriented on a collective analysis of the historical roots of culture and space in the two quarters, to be looked at as a critical-creative reflection on the ongoing local community activities. This was experienced by site visits, reports of local actors to class sessions, aiming to find collectively procedural and structural answers to the open questions about reusing the inner urban area in full consideration of its locational heritage and its location advantages and finally learning from these places for other locations.

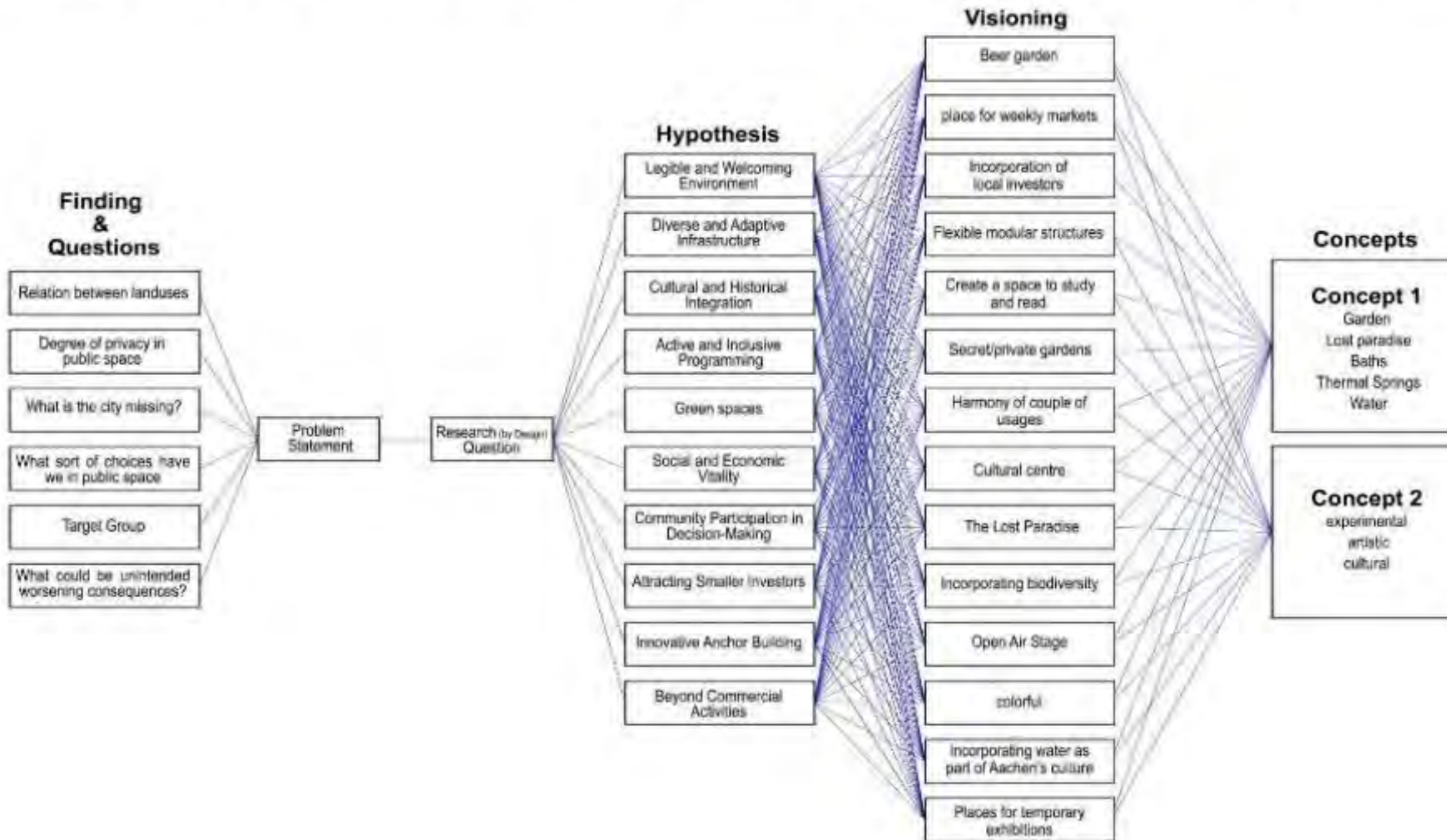
The supervision of visioning/ concept-finding for the two different locations had to fight – equally into different directions – against the naive understanding of time in place and the unaware perception of space as something equal to any „living-quarter“ without reference to the very specific type of the urban structure of the town of Aachen.

In consequence of this initial collective unawareness (based on different national backgrounds of origin), images arose, which reproduced firstly - in a non-reflected way - the functionalization of spaces (f.i. for sportive activities like skating or for play-grounds in central inner urban areas) or repeated the purely functional separation of means of transport spatially. This way, these initial routines were up to giving “new life” to the modernization of the city along the phenomena of sub-urbanization since the 1920ies and even more strongly along the effects of the post-war-II time. Firstly, no innovation yet - without supervision!

From Analysis to Concept Finding

Project Design Process Structure

The various stages of the design process are interconnected, forming a network that influences the development of a concept. From the initial analysis to the final stage of concept creation, each phase plays a crucial role in shaping the overall outcome. In this network, different parameters—such as user needs, constraints, and environmental factors—interact with one another, each having a unique impact on the process of concept development.



Couven Quarter, Toward Place Making - Third Place



Couven Quarter

Visioning Process and Concept Finding

Brainstorming and Problem Statement

Brainstorming

Why should we plan in a sustainable and environmental friendly manner?

How can we make more communication in Couven Quarter ?

What are the alternatives for vacant mega structural buildings in Couven Quarter?

What do we mean by Community Engagement?

What could be unintended worsening consequences?

Can we make third-place in Couven Quarter ?

Problem Statement

Despite its central location, the area encompassing Bushof, Altes Kurhaus, and St. Peter Church faces significant challenges that hinder its potential as a thriving community hub. The area suffers from a **lack of effective management**, leading to **uncoordinated development** and missed opportunities for improvement. Numerous **properties** remain **abandoned**, creating eyesores and potentially **unsafe** environments that discourage investment and community engagement. Furthermore, inadequate infrastructure limits accessibility and connectivity, hampering economic activities, social interactions, and the overall **quality of life** for residents. Addressing these issues requires a comprehensive approach to revitalizing the Couven Quarter, focusing on improved management, repurposing abandoned properties into vibrant third spaces, and enhancing connectivity and accessibility.



Couven Quarter

Visioning Process and Concept Finding

Research (by Design) - Question and Hypothesis

Research (by Design) - Question

How can comprehensive strategies address the challenges of ineffective management, property abandonment, and poor connectivity and accessibility to revitalize the Couven Quarter?

Hypothesis

The vision for the Couven Area is to Transform the area into a sustainable, environmentally-friendly third space that promotes community well-being and celebrates local culture, history, and identity. Key elements of this vision include:

From Concrete to Canopy: Creating a sustainable and environmental friendly area to promote the well being of the community

Couven Quarter has already filled with numerous immutable concrete structures, there is a pressing need for additional flexible spaces dedicated to green systems, artistic installations, smart guidance, etc.

This approach not only beautifies the local environment but also unlocks greater potential for the utilization of space.

Cultural Identity : Infusing elements of local culture, history, and identity into the design

Everywhere you look in Aachen the hard facts of its history are kept alive in its ancient civic and religious architecture, its medieval walls and gateways, its monuments and its, more recent, fine fountains. We have preserve them and bring contrasting elements to fill the gap of gap

Community Engagement : Fostering community engagement by involving them in design and activities, shifting community members from passive users to influential decision-makers within the project.

Gather residents' expectations and visions for this area across different time periods, take actionable steps to realize these visions according to the timeline, and demonstrate the feasibility and positive outcomes of these efforts.

Aachen Topography - Flood Risk

The topography and location of key urban facilities are closely interconnected. Based on the topographic and flood maps of Aachen, it is evident that the Bushhof area is situated in a critical zone. Specifically, it lies near a triangular region with the lowest elevation, making it vulnerable to flooding during heavy rainfall. To mitigate the potential flood impact on Aachen's main bus station, several strategies can be considered. For example, increasing the green space in this area and creating a water management system around Bushhof could help reduce the severity of flooding.

Additionally, given the significance of water in Aachen's cultural heritage, we can explore innovative approaches to transform floodwaters into an asset rather than just a threat. By implementing a passive water management system, we can capture and utilize floodwater in a way that enhances the urban environment. This could involve the construction of modern canals, which would channel excess water through the city in a controlled manner, preventing damage while creating a visually appealing landscape. Additionally, water fountains and decorative pools could be designed to collect and store floodwater, turning it into a resource that enhances public spaces. These features would not only mitigate flood risks but also reinforce the cultural and aesthetic importance of water in Aachen, integrating functional infrastructure with the city's rich traditions.



Couven Quarter Analysis

Core and Edges

The main core areas of Aachen's inner city are the Aachener Dom and Elisenbrunnen. The Bushof is considered a sub-core area but is still significant due to its proximity to the main core areas. This location can provide additional space to attract visitors and enhance the urban experience.

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Markt&Hof : Historical&Public space; Concentration of restaurants, Cafes, Bars; Place for events and weekly market;

Bushof : Central bus station; Sub-Concentration of restaurants, Cafes, Bars; Sub-Concentration of Public service agencies.

Alteskurhaus : Historical Building ,Place of events.

Intersection : Center of shopping malls, bushof, KaiserPlaze

Peterstraße : Concentration of shopping center, retail and markets



Concept 3: Long-term (15 years)

“Kurhaus-Garden and PetersKirche-Student’s Living Yard”



Concept 3: Long-term Use/ Image/ Spatial organization

“ Kurhaus-Garden and Peterskirch-Students’ LivingYard”

Use:

Students’ living accommodations around an inner open space Peterskirch-Yard nearby Kurhaus-Garden

Image:

Completing green islands between the inner and the outer ring

Spatial Organization:

Demolishing the ceiling and upper floors in the middle of Bushof. Reusing the outer framework of built form of Bushof for elevations (5-7 floors) within the context of a redefinition of the functions of surrounding public spaces

Concept 2: Mid-term (10 years)

“Kurhaus-Garden and Peterskirche Market-Hall”



Concept 2: Mid-term Use/ Image/ Spatial organization “Kurhaus-Garden and Peterskirch Market-Hall”

Use:

Enhancing staying and outdoor-gastronomy near Altes Kurhaus/ establishing temporary markets by reusing the whole hall of Bushof

Image:

Enriching, widening and defining the inner urban ring space by garden-patches below a double row of trees/ connecting St. Peters Kirche and surroundings with the new quality of Kurhausstrasse

Spatial Organization:

Leading the busses on minimized lanes around the former Bushof through Couvenstrasse/ Peterstrasse/ Kurhausstrasse with temporary stops only in Peterstrasse

Concept 1: Short-term (5 years)

“Sidewalk Shared Spaces & Altes Kurhaus”



Concept 1: Short-term Use/ Image/ Spatial organization “**Shared Space: Kurhausstrasse**”

Use:

Extension of economic ground-floor-uses into public space

Image:

Completing green islands alongside the inner ring

Spatial Organization:

Narrowing Kurhausstrasse for motor-car-traffic, qualifying and connecting the paved areas on both the sides for all users into a coherent Shared Space

Concept 1: Short-term Use



Use:

- Car-free Komphausbadstraße
- Narrow the roads
- Reuse Bushof Building Ground Floor for Temporary Activities
- Replan Bus System
- Altes Kurhaus for Public Use
- Reopen the Use of the Stair Project

Concept 2: Mid-term Use



Use:

- Create Quality Open Spaces
- Introduce Water Feature
- Connect the Open Spaces to Other the Inner City
- Introduce Commercial Uses in Bushof Building
- St. Peter Church as the New Social Core

Concept 3: Long-term Use



Use:

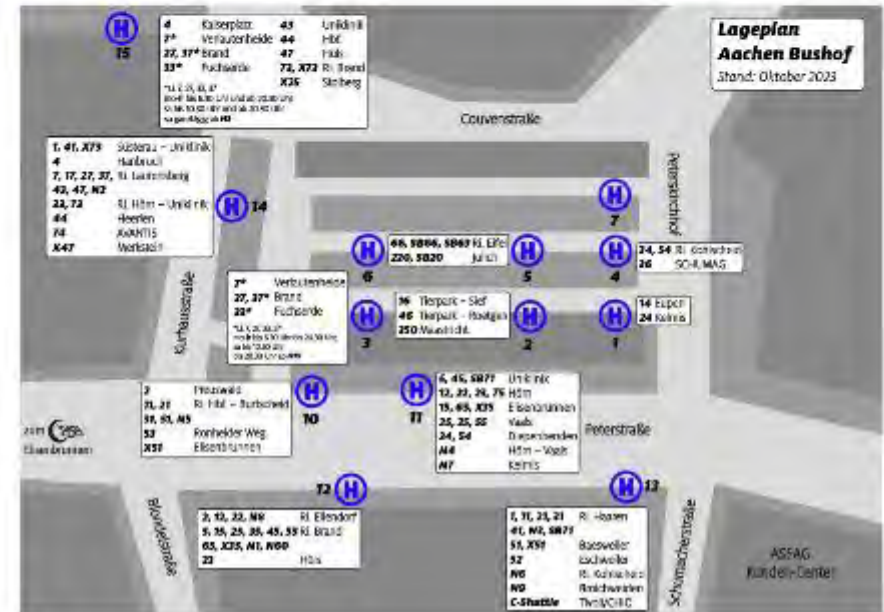
- Restructure Bushof Building
- Reuse the Building for Student Accommodation
- Introduce New Tramline
- Connect the Stair Project with Bushof Building
- Introduce Publicly Accessible Roof Gardens

Concept Visualization

Concept 1: Short-Term Developments

Sidewalk Shared Spaces & Altes Kurhaus

- Narrow the Roads
- Car-free Komphausbadstraße
- Altes Kurhaus for Public Use
- Reuse Bushof Building Ground Floor for Temporary Activities
- Reopen the Use of the Stair
- Replan Bus System



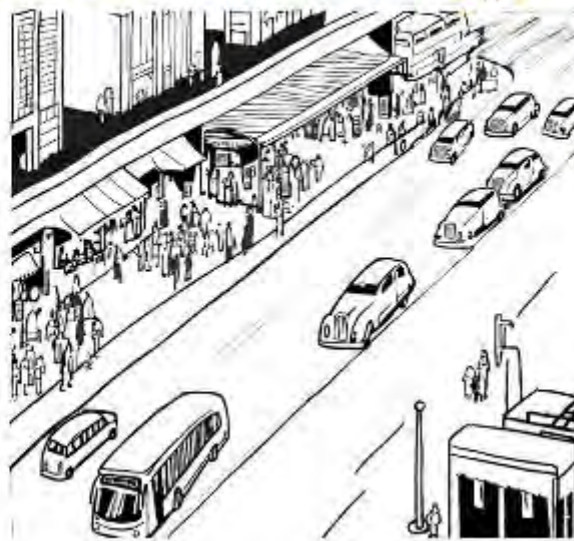
The bus station has 12 stops, which are served by a total of 55 bus lines, including 8 express buses and 9 night buses. The stops H. 1 to H. 7 are located under the building; the stops on Peterstraße are designated H.10 to H.13 and the stops on Kurhausstraße are designated H.14 and H.15.

Concept Visualization

Concept 1: Short-Term Developments

Shared Space: Sidewalk Shared Spaces & Altes Kurhaus

Shared Space is an urban design concept where traditional distinctions between different types of street users, such as pedestrians, cyclists, and vehicles, are minimized. This is done to encourage more interactive and harmonious use of space, improving safety and accessibility while fostering social interaction. Sidewalk Shared Spaces specifically refer to sidewalks that are designed to be multifunctional. In addition to their primary role as pathways for pedestrians, they can serve as areas for seating, dining, social gatherings, or temporary events. The aim is to enhance the usability of sidewalks and make them more vibrant parts of the urban environment. These are temporary markets set up in public spaces where vendors sell a variety of international or local cuisines from food stalls or trucks. They offer an opportunity to showcase different cultures, provide affordable dining options, and create a lively atmosphere. Altes Kurhaus could host or support these types of events, transforming the surrounding areas into dynamic, multifunctional spaces that cater to both the cultural and social needs of the community.



Concept Visualization

Concept 2: Mid-Term Developments

Kurhaus-Garden and Peterskirche Market-Hall

Connected open spaces in the inner urban ring can be transformed into vibrant community hubs through temporary cultural activities. These spaces offer the perfect setting for a variety of potential events, such as second-hand markets where locals can exchange goods and promote sustainability. Additionally, the inclusion of cultural performances and workshops would create opportunities for people to engage with art, music, and hands-on learning experiences, enriching the social fabric of the area.

Create Quality Open Spaces

Introduce Commercial Uses in Bushof Building

Introduce Water Feature

Transform the Stair Project into a Bus-Waiting Area

Connect the Open Spaces to the Other Parts of the Inner City



Concept Visualization

Concept 3: Long-Term Developments

Kurhaus-Garden and PetersKirche-Student's Living Yard

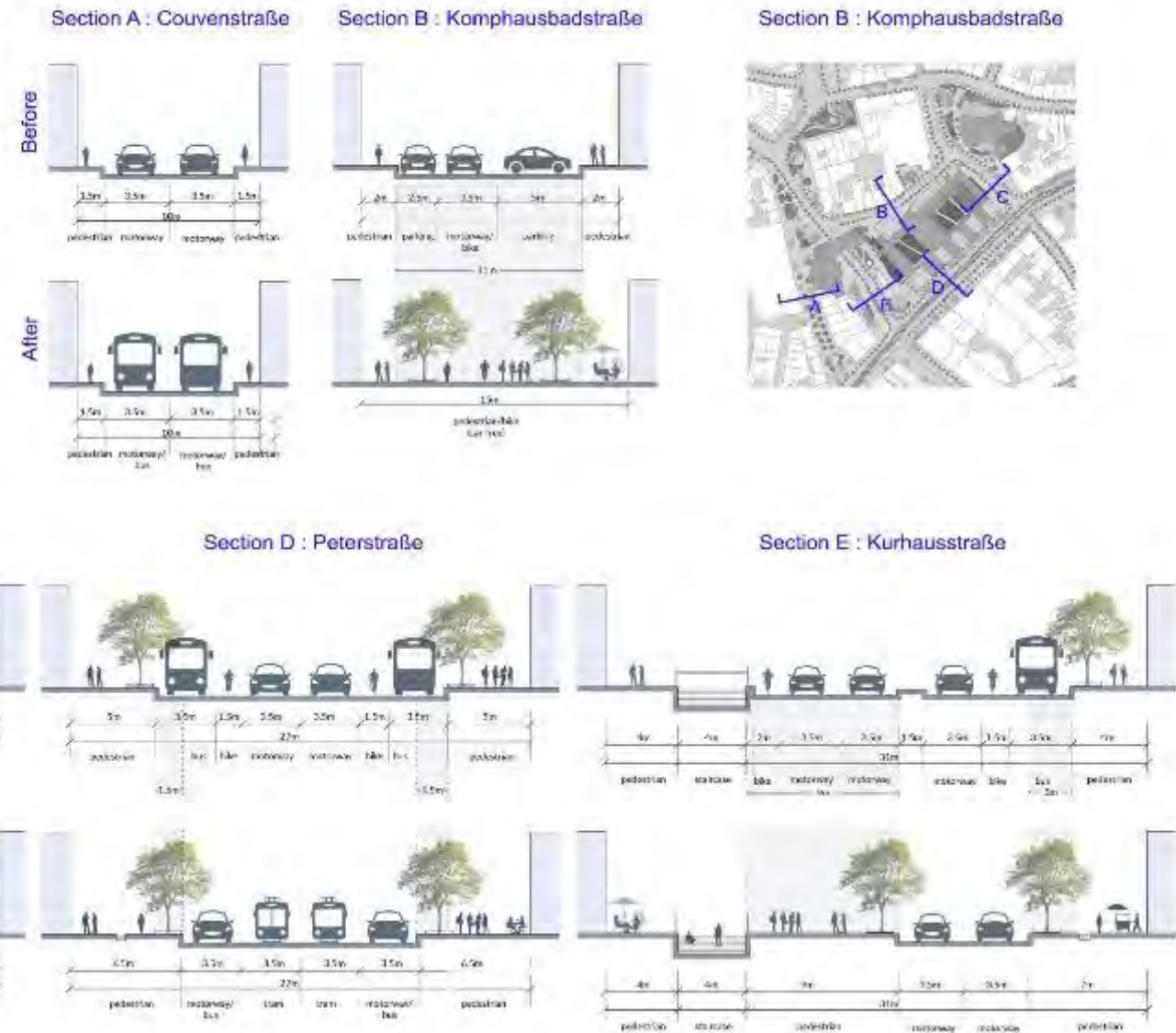
- Introduce Publicly Accessible Roof Gardens
- Green Hub
- Reuse the Building for Student Accommodation
- Restructure Bushof Building
- Introduce New Tramline
- Connect the Stair Project with Bushof Building



Concept Visualization

Streets Sections and New Functions

Altering street furniture and the transportation system can influence people's behavior in various ways. Our goal is to enhance communication while also expanding green spaces in the streets near the Bushof area. For instance Komphausbadstraße Visualization can consider as a pedestrian path in our design.



Priority Levels relative to Use, Image and Spatial Organization

We can determine the action priority at each step. In this way, we can show which action is more important than others, and in the following steps, we can propose an action plan based on these priorities

Intervention criteria	Concept 1: Short term Small spatial changes	Concept 2: Mid-term Medium spatial changes	Concept 3: Long-term Large spatial changes
Integration and Accessibility	Shared Space Design: Creating a shared space for pedestrians, cyclists, and potentially limited car traffic promotes inclusivity.	Public Open Space: Creating a welcoming garden area accessible to all. Improved Connections: Connecting St. Peterskirche and the inner city improves pedestrian accessibility. Bus Stop Integration: Transforming the stair project into a bus waiting area provides a more accessible experience for riders.	Public Green Spaces: Creating rooftop gardens and interconnected walkways accessible to all. Student Housing Integration: Integrating student housing into the urban fabric fosters a more vibrant community. Improved Connectivity: Connecting the lost spaces and the Stair Project with the Bushof building improves pedestrian social interactions.
Cultural Identity	Culture in events: through the events done in Kurhausstraße	Water Feature Design: Incorporate the design of the ancient water canals into the water feature to connect to the city's history.	Adding student accommodations to the quarter ultimately enriches the cultural diversity in the area, moreover, future inhabitants will be able to enjoy the cultural additions done throughout the years
Adaptability to current needs	Multi-uses: The project allows for both economic activities (ground floor uses) and recreational activities (leisure on pavement) to happen in the same space. This caters to a wider range of needs. Flexibility: Repurposing existing elements (stair project, Kurhaus building) and narrowing streets for shared use allows for adjustments based on future needs. Bushof Replan: Adapting the bus system to free up space demonstrates the ability to incorporate future transportation changes.	Multi-use Space: Creating a Kurhaus-Garden for leisure and outdoor dining caters to changing needs for recreation and socializing. The temporary market hall allows for diverse uses of the Bushof building. Flexible Public Space: The garden and market hall can be adjusted to accommodate different events or activities	Mixed-Use Development: Combining student housing with publicly accessible green spaces caters to the needs of students for housing and the community for recreation. Flexible Public Space: The rooftop gardens and interconnected green spaces can be used for various activities and events. New Tramline: Introducing a tramline prepares for potential changes in Aachen's transportation system.
Environment	Reduced Car Traffic: Prioritizing pedestrians and cyclists over cars can lead to lower emissions. Green Islands: Adding vegetation can improve air quality	Green Space: The Kurhaus-Garden and potentially rooftop greenery on the Bushof building can improve air quality and rainwater management.	Green Rooftops: Creating rooftop gardens can improve air quality, rainwater management, and provide insulation. Public Transportation: Introducing a tramline promotes a more sustainable mode of transportation.

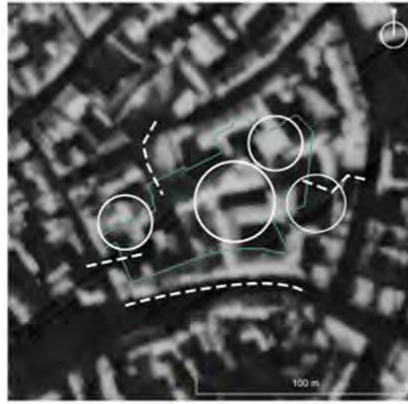
High Priority

Büchel as an Opportunity Toward Community Centre - Third Place



Büchel

History of Development and Current Status



1943

The Büchel Park area originally featured numerous structures, including a row of buildings to the south that created a barrier. Access to the semi-public and private areas was available from the north, east, and west.



2005

A multi-story parking structure had been introduced, along with a new building to the north that blocked previous access routes. Another building to the east has been replaced by a parking lot. In the south-east, what was once a semi-public area, now the site appears more private and access-restricted.



2013

A group of buildings has been removed to make way for a second parking lot to the west.

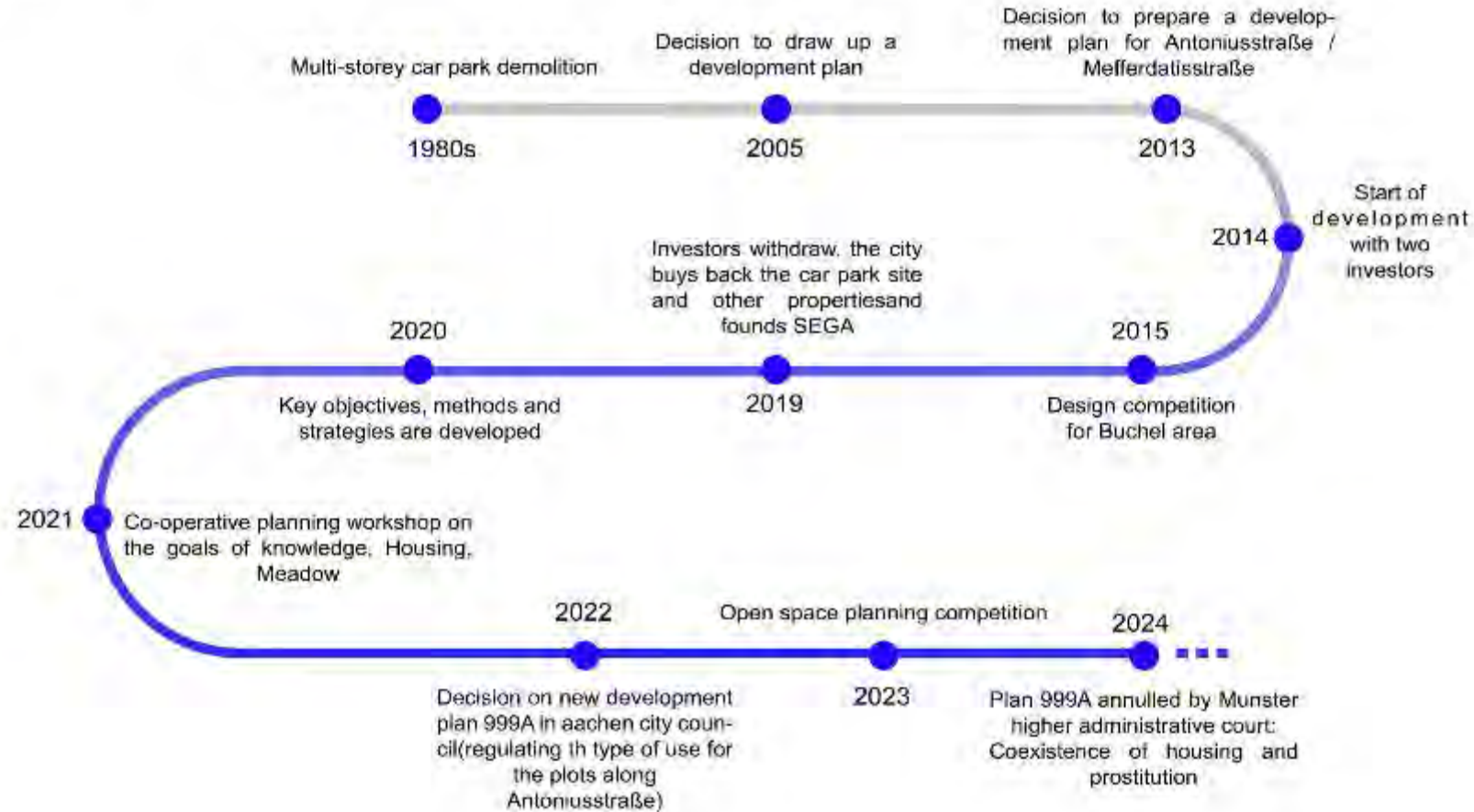


2023

The demolition of the parking building has led to open access onto the inner urban meadow.

Milestones in the Development of the Büchel Location

To develop our concepts for the Büchel site, it's crucial to understand the historical decision-making processes and the area's previous functions. Since 2005, the city municipality has aimed to transform Büchel into a space that fosters social interaction. They have worked to create a transparent decision-making process, allowing community members to contribute to the design.





Summary of Students Questions

Importance of Water as a Cultural Element

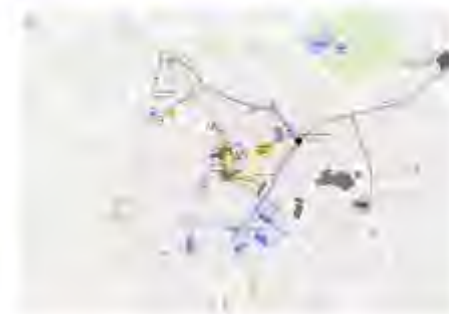


While the proposed design emphasizes Aachen's cultural elements and the relationship between people and their environment, it does not adequately highlight water as a significant cultural component of Aachen. Although water is included in the design, its cultural value is not sufficiently acknowledged or emphasized.

So, the question is: How can we highlight the significance of water in the Buchel area?



Cultural Open Spaces



While the proposed design focuses on Buchel Park as a community center and shows a diverse range of people in the area, it lacks specific functions along the edges. Conversely, this area is close to Aachen's city center, which offers numerous cafes, shops, and other third places. The question is:

Why would people choose to visit this area when the city center provides more opportunities?



Büchel

Visioning Process and Concept Finding

Brainstorming and Problem Statement

Brainstorming

How is the relation between the land-use (prostitution and living) in the future?

Regarding Aachen's culture: what is the city missing?

What sort of choices do we want the public to have when they enter this space? ("framed" variety)

Who will be our target group in the community? (artists, students, tourists, inhabitants,...)

What could be unintended worsening consequences?

What different degrees of privacy can be created in this public space? Where and how?

Problem Statement

The Büchel area, despite its prime location in the city of Aachen, remains an unqualified and underutilized space. Positioned near the historical and sacred core of the city, Büchel has the potential to serve as a crucial third space, significantly impacting the dynamics of the city center. This area could function as a place of congregation and as a transitional zone that connects various urban actors and diverse built form typologies and their traditional and also new uses. However, it currently stands as a vast, **empty space**, with a **lack of guidance for orientation**, defined use, and variety of services necessary for vibrant third places. Compounding these issues are the current questions about long-term land use plans and interests in **investment**, the presence of **unattractive backside** facades overlooking the area, and the **stigmatized activities** and populations in the **vicinity**. These conditions pose substantial obstacles to the future revitalization of Büchel, still preventing it from fulfilling a positive role in its urban environment, despite the various temporary interim events of Christmas and food markets.



Büchel

Visioning Process and Concept Finding

Research (by Design) - Question and Hypothesis

Research (by Design) - Question

How can the revitalization of the Büchel area enhance its spatial and functional integration and contribute positively to the socio-economic and cultural fabric of the surrounding community, and what are the necessary elements and activities that may be implemented to achieve a successful qualification of the space?

Hypothesis

The vision for the Büchel area is to transform it into a vibrant, inclusive, and multifunctional urban hub that seamlessly integrates with Aachen's historical and cultural fabric. This revitalized space will serve as a dynamic third place, fostering social interaction, cultural exchange, and economic activity, becoming a central gathering point for residents and visitors alike.

Key elements of this vision include:

Legible and Welcoming Environment: Develop pedestrian-friendly pathways and inviting public spaces to encourage social interaction and community engagement.

Diverse and Adaptive Infrastructure: Introduce mixed-use developments and flexible structures for various events, combining residential, commercial, and cultural spaces.

Cultural and Historical Integration: Preserve and enhance the surrounding historical elements through design strategies.

Active and Inclusive Programming: Curate diverse activities and events to ensure broad community participation and encourage local businesses, artists, and cultural organizations to engage with the space.

Green spaces: Incorporate green zones into the space, such as community gardens and semi intensive vegetation, in order to reinforce and qualify the "Meadow" character of the site spatially and ecologically.

Social and Economic Vitality: Support local entrepreneurs and small businesses through affordable retail spaces and market opportunities.

Community Participation in Decision-Making: Involve community members in decision-making through participatory planning processes, forums, workshops, and advisory committees.

Attracting Smaller Investors: Divide the area into smaller plots to attract small and medium-sized investment, providing incentives for local entrepreneurs.

Innovative Anchor Building: Construct a landmark building with innovative features to attract people, such as an interactive museum, cultural center, or artist workshop space, that could include multifunctional areas like co-working spaces, cafes, and community rooms. This way the space can be utilized by different actors at all times.

Beyond Commercial Activities: Develop attractions in the park beyond commercial activities, such as interactive installations, public art, community stages, and educational areas like outdoor learning spaces or interactive playgrounds. Redefine the exclusive economic driven uses from the vocation of the place.

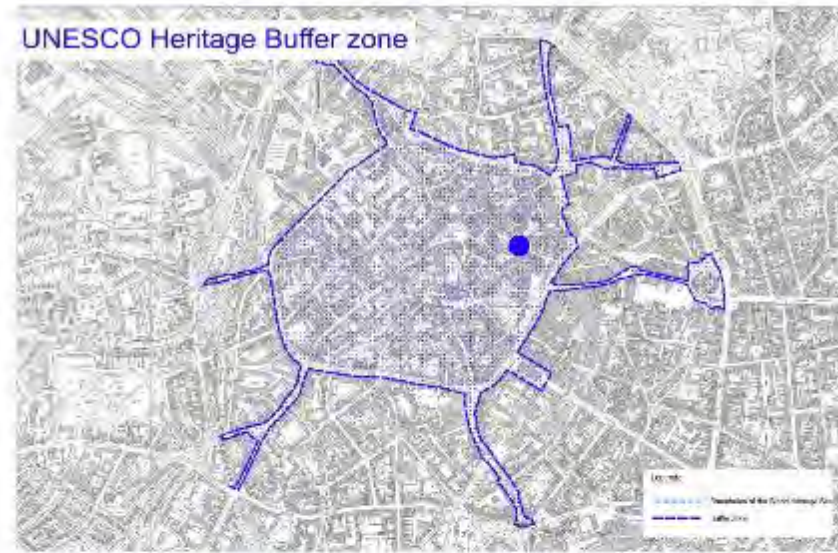
Buchel Area Analysis

UNESCO Heritage and Monuments Map

The significance of Aachen's Historical Cathedral extends beyond its designation as a UNESCO World Heritage Site; it also profoundly impacts the surrounding area. The UNESCO designation imposes restrictions on construction within a defined buffer zone to preserve the integrity of the site. This conservation effort shapes the urban landscape, influencing how nearby areas are developed.

The Buchel area, a sizable plot adjacent to this historic urban center, presents an important opportunity for thoughtful urban planning. Rather than being overlooked, this area should be strategically integrated into the broader context of Aachen's historical and cultural landscape.

By establishing a thoughtful dialogue between the historic UNESCO site and new developments in the Buchel area, we can create a harmonious relationship that respects the historical significance of the cathedral while introducing contemporary concepts. This approach could involve designing connections that enhance the visibility and accessibility of both the historical site and the new urban space, fostering a cohesive urban environment that celebrates Aachen's rich heritage and accommodates future growth.



On the other hand, near the Buchel area, there are several historic and monumental buildings that can serve as landmarks to improve the ease of locating Buchel. There are 7 architectural monuments in the planned area, which must be taken into account:

- 1- Antoniusstrasse 18 2- Antoniusstrasse 32 3- Mefferdatisstrasse 8
- 4- Mefferdatisstrasse 4/6 5- Kleinkölnstrasse 18 6- Nikolausstrasse 17
- 7- Büchel 41

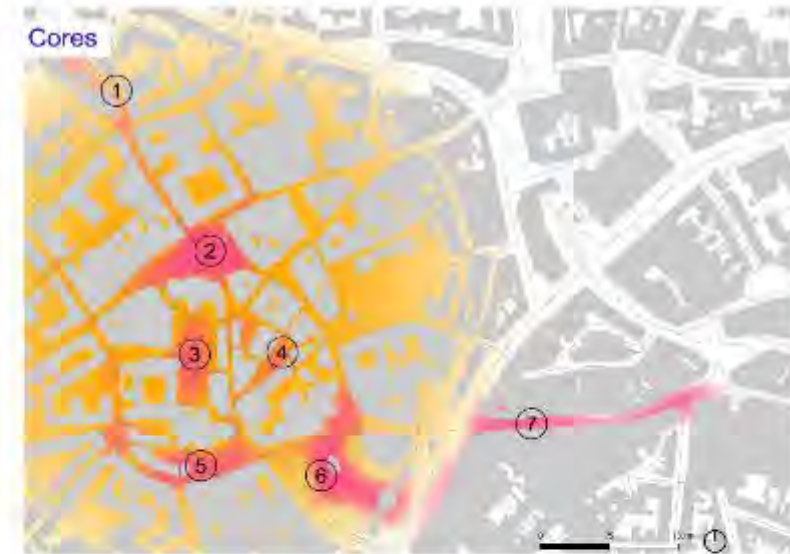
Buchel Area Analysis

Sub-Cores & Topography

Urban cores play a pivotal role in the structure and vibrancy of cities. These central areas, often characterized by a high concentration of economic, cultural, and social activities, act as the heartbeat of urban life. They serve as hubs of commerce, government, culture, and transportation, making them crucial for the overall functionality and appeal of a city. These cores may have distinct geometric shapes or irregular forms, with thresholds indicating a transition from high to low concentration. On our site, we observe various types of cores with a range of functions, which can be listed as follows:

1-Pontstraße	Concentration on Bars and restaurants Night Life, Clubs	2-Markt	Historical Public space Restaurants Weekly market , Events	
3-Katschhof	Historical Public space Restaurants Weekly market , Events	4-Hof	Restaurants	5-Munsterplatz
				market Tourism
6-Elisengarten	Green Area Having a Break , Icecream	7-Adalbertstraße	Retail	

On the other hand, the topography map allows us to consider the water cycle on our site and explore visual opportunities based on varying elevation levels. Combining the water system with sequential views and functions informed by the topography and landuse can generate creative design concepts.



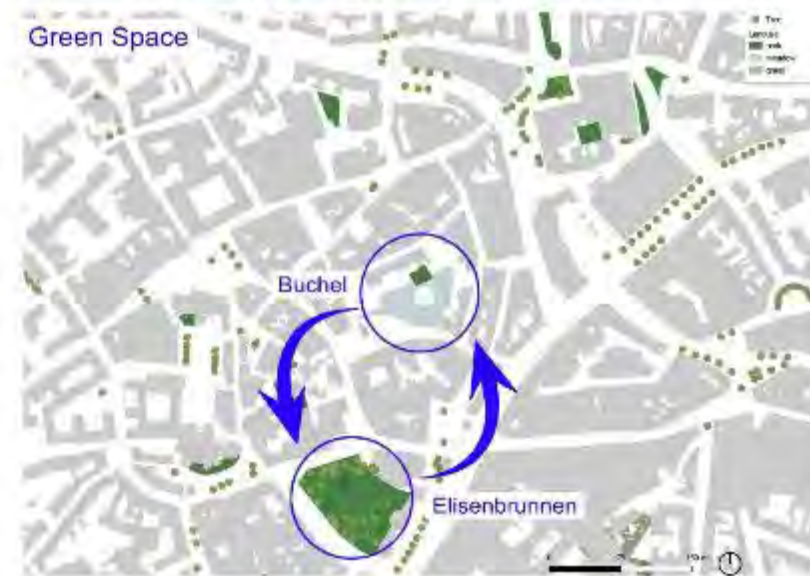
Buchel Area Analysis

Water as a Cultural Element - Green space

Without a doubt, water has historically played a crucial role in shaping urban morphology. Fountains and other water-related constructions in Aachen highlight its cultural significance to the local community. Many popular spots in Aachen, such as Elisenberg, demonstrate how water features serve as gathering places for people. Additionally, warm water presents an opportunity to enhance both city and public spaces, offering potential benefits that can be creatively integrated into urban design specially in our site.



In terms of green spaces, the central part of Aachen lacks significant greenery. However, Elissenberg provides a substantial green space for the city. The Büchel site also has the potential to function as a green space, creating a connection with Elissenberg. These places can consider as a third-place and increase people communication



Concept 3: Long-term Use/ Image/ Spatial organization "The Urban Garden-Knowledge-Park"

Use: Open spaces increasing biodiversity, revitalizing the local (monastery) garden culture, built form allowing for exhibition spaces for a variety of "free scene" interests, allocating representatives of arts and knowledge production/ RWTH

Image: Turning the back-side facades into front-side frameworks for garden, arts, and knowledge culture in a highly central inner urban location, nearby the Cathedral

Spatial Organization: Extending the mediievally generated pattern of distributing uses of built form and open spaces in between public spaces. Integrate new developments with Aachen's historical and cultural context. Position boarding houses and towers to complement the urban landscape. Design coworking spaces to facilitate collaboration and innovation.

Prospective Value



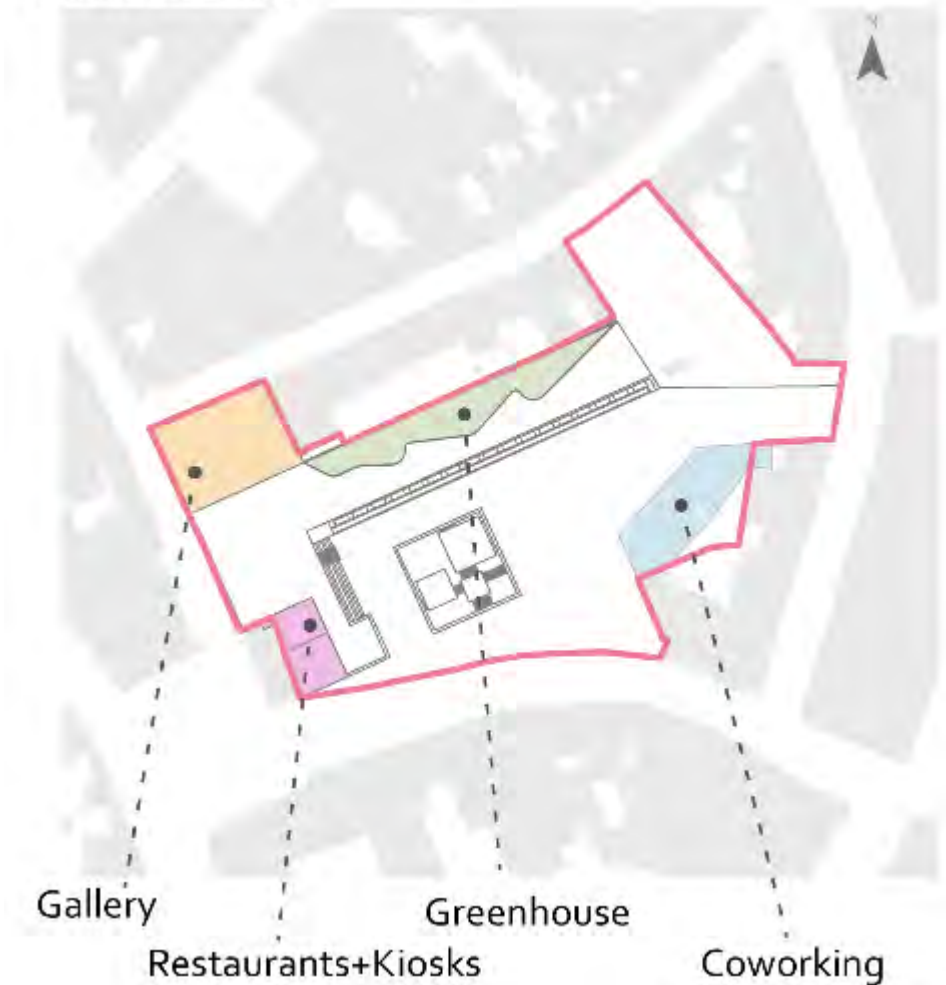
Concept 2: Mid-term Use/ Image/ Spatial Organization "From Defined Wilderness to an Urban Park"

Use: Temporary gardens of different dimension for public relaxation and temporary events, first infillings for mediating a local culture of arts and knowledge to the public.

Image: Framing the recently opened public spaces spatially by appropriate constructions for garden, arts and knowledge culture, enriching and contributing to the utmost hierarchy of public spaces nearby the Cathedral .

Spatial Organization: Re-establishing the mediievally generated pattern of distributing uses of built form and open spaces in between public spaces;
Fortifying the buffer spatially by planted walls, membranes and built form construction

Utilization Value

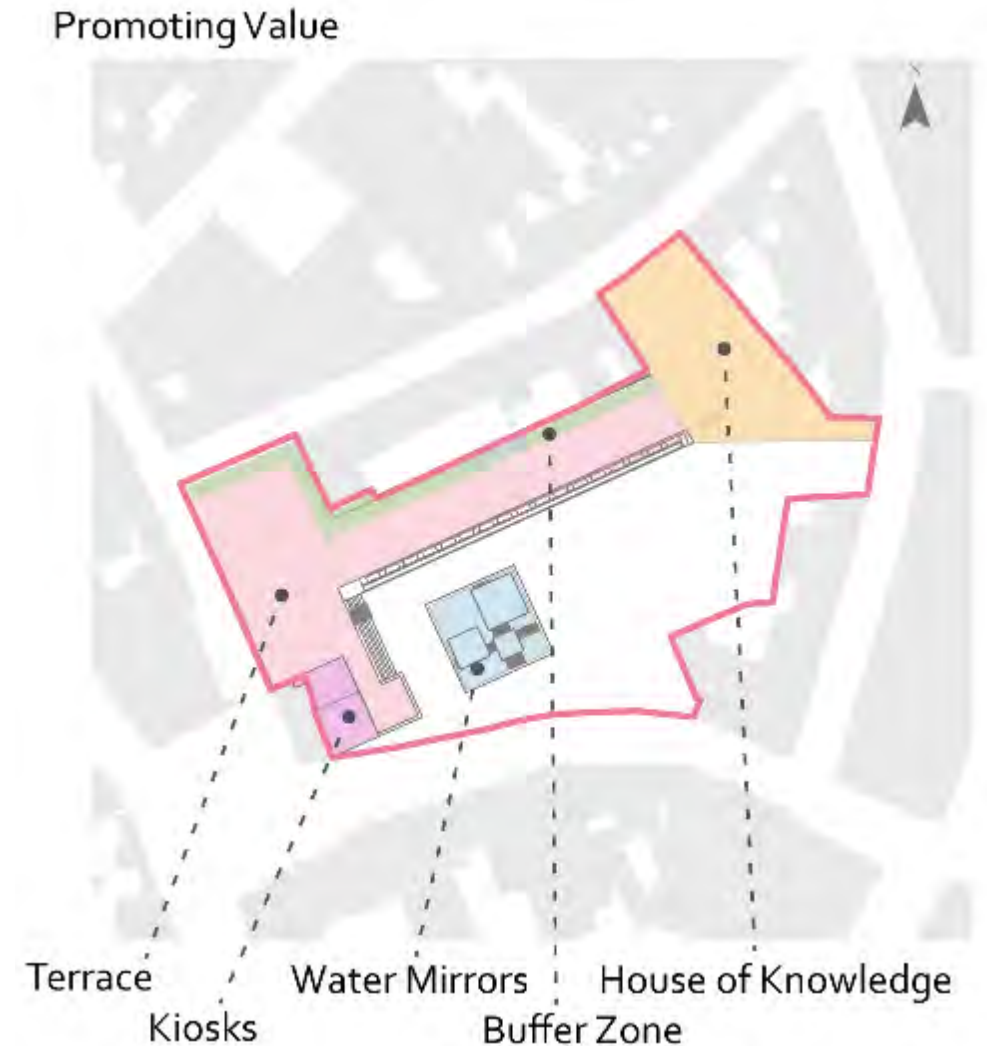


Concept 1: Short-term Use/ Image/ Spatial Organization "From The Meadow to a Defined Wilderness"

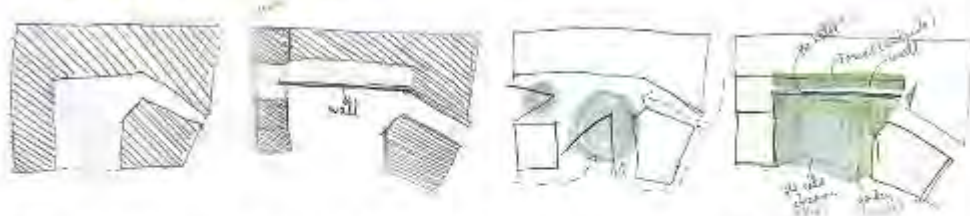
Use: Open spaces increasing biodiversity and allowing for temporary events and staying/ relaxing individually and collectively in public open space

Image: Supporting the branding of Bundesamt für Naturschutz "Blühwiese" (Praxisbeispiele)

Spatial Organization: Building a temporary 3-dimensional buffer in between urban mixed uses and the prostitution area. Position water mirrors strategically to enhance the aesthetic value. Develop terraces as seating and viewing areas. Introduce small kiosks to serve visitors and promote local businesses.



Design Process



In the concept visualization phase, establishing a relationship between mass and space, considering the geometry of the void and existing masses, plays an important role. Subsequently, the use of ideas from the visioning phase concerning the creation of cultural and artistic spaces, as well as leveraging Aachen's natural and environmental potentials, such as the city's hot and cold water flow systems and the utilization of green spaces and urban corridors plays a crucial role.

Criteria for Intervention

Revitalizing the water-bound tradition and cultural heritage:

The project aims to make the city's historic waterways and cultural traditions visible and tangible again, which contributes to the uniqueness and identity of the place.

Community engagement :

The many opportunities for participation that have now become established in Büchel need to be sustained and developed in order to maintain and encourage active participation and a sense of belonging in the local community.

Adaptability to contemporary needs :

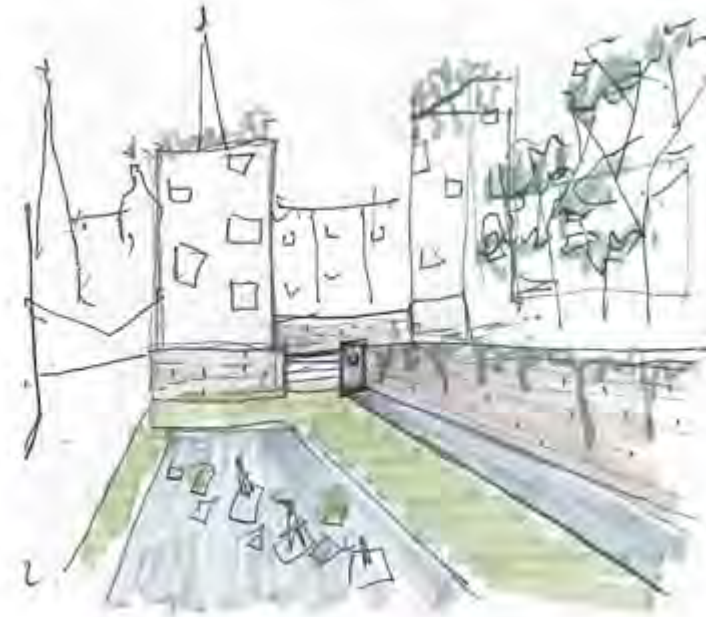
The design should enable flexible use and leave room for adaptability to accommodate the changing needs of the city and its inhabitants over time.

Resilience to climate change :

Regenerative design approaches and nature-based solutions will be integrated, and the design will contribute to the use of renewable energy to help protect the climate and conserve biodiversity, as well as mitigate the effects of climate change and increase the area's resilience to extreme weather conditions.

Cultural vibrancy :

The place is intended to be a lively cultural meeting and event place as it has started to be during the "Zwischenzeit", promoting art, music, etc. and contributing to the cultural diversity and dynamism of the city.



Promoting Value

**Use:**

Open spaces increasing biodiversity and allowing for temporary events and staying/relaxing individually and collectively in public open space

Image:

Supporting the branding of Bundesamt für Naturschutz "Blühwiese" (Praxisbeispiele)

Spatial Organization:

Building a temporary 3-dimensional buffer in between urban mixed uses and the prostitution area. Position water mirrors strategically to enhance the aesthetic value. Develop terraces as seating and viewing areas. Introduce small kiosks to serve visitors and promote local businesses.

Utilization Value

**Use:**

Temporary gardens of different dimension for public relaxation and temporary events, first infillings for mediating a local culture of arts and knowledge to the public.

Image:

Framing the recently opened public spaces spatially by appropriate constructions for garden, arts and knowledge culture, enriching and contributing to the utmost hierarchy of public spaces nearby the Cathedral.

Spatial Organization:

Re-establishing the mediably generated pattern of distributing uses of built form and open spaces in between public spaces; Fortifying the buffer spatially by planted walls, membranes and built form construction

Prospective Value

**Use:**

Open spaces increasing biodiversity, revitalizing the local (monastery) garden culture, built form allowing for exhibition spaces for a variety of "free scene" interests, allocating representatives of arts and knowledge production/ RWTH

Image:

Turning the back-side facades into front-side frameworks for garden, arts, and knowledge culture in a highly central inner urban location, nearby the Cathedral

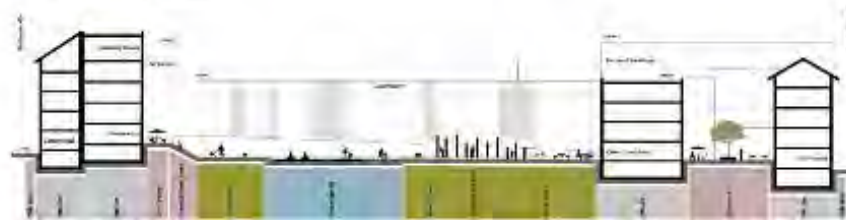
Spatial Organization:

Extending the mediably generated pattern of distributing uses of built form and open spaces in between public spaces. Integrate new developments with Aachen's historical and cultural context.

Concept Visualization

Buchel Location

A transformative urban intervention in Aachen, utilizing the city's existing hot water system as a key element in reimagining public spaces. By tapping into the geothermal and industrial hot water networks, your project introduces innovative features such as heated benches, thermal baths, and warm pavement areas that not only provide comfort during cold seasons but also create unique social gathering spots. This thoughtful use of Aachen's hot water infrastructure turns a functional system into an interactive cultural experience, making the city's energy resources visible and enjoyable for its residents and visitors. In contrast, in proposed design employ cold water as a dynamic cultural element, integrating it into your design through water features like cooling fountains, misting installations, and shallow reflective pools. These elements add both aesthetic and sensory dimensions, offering a refreshing respite in warmer months. Moreover, design introduces new green spaces along these urban corridors, creating a series of connected parks, gardens, and green rooftops that act as urban oases. These spaces serve not only as places for relaxation and recreation but also as ecological systems that improve air quality, reduce urban heat, and increase biodiversity. By integrating green infrastructure, your design makes the city more resilient, environmentally friendly, and visually appealing. These new green spaces also reinforce the connection between Aachen's modern urban life and its historical roots, enriching the overall urban experience.



Section A-A



Section B-B



Elevation 01



Elevation 02

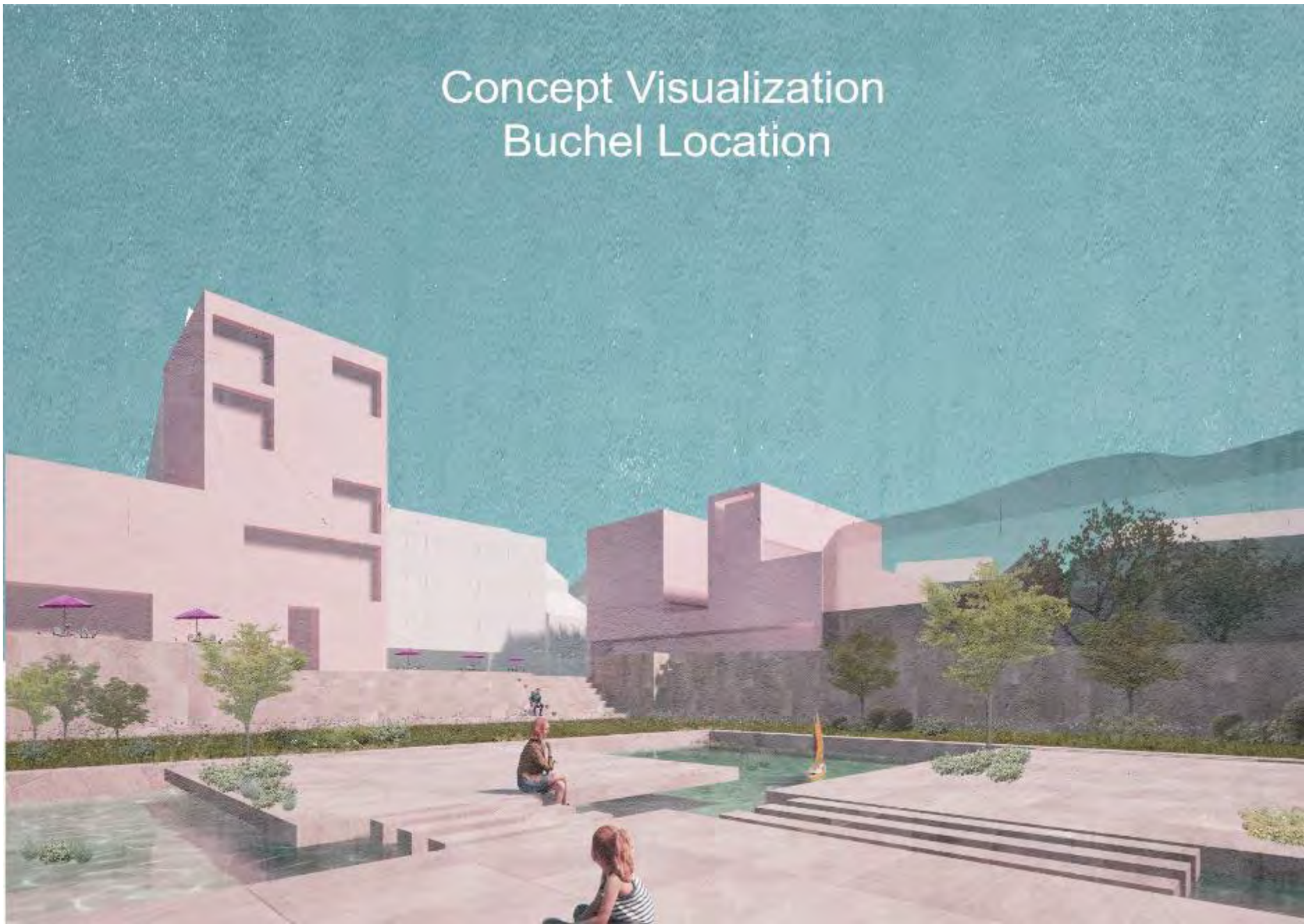
Priority Levels Relative to Use, Image and Spatial Organization

We can determine the action priority at each step. In this way, we can show which action is more important than others, and in the following steps, we can propose an action plan based on these priorities

Intervention criteria	Concept 1: Short term	Concept 2: Mid-term	Concept 3: Long-term
Revitalizing the water-bound tradition and cultural heritage	<ul style="list-style-type: none"> Opening the ground for thermal water source and flow. Develop informational displays about the historical significance of water in the region. 	<ul style="list-style-type: none"> Water for leisure and play, and a cooling respite in the urban environment Enhance walking paths along water features. 	<ul style="list-style-type: none"> Solidifying the image of water revived in the city, connecting the thermal bathing history, an attraction for both visitors and locals
Community engagement	<ul style="list-style-type: none"> Navigating the buffer zone to prostitution use in Antoniusstrasse and finding an agreement on how the land / building use will change Organize community events such as weekend markets, outdoor exhibitions, and local cultural performances. Implement temporary art installations and pop-up events 	<ul style="list-style-type: none"> Allowing community events to continue Establish permanent community spaces such as gardens, outdoor squares, and performance stages. Encourage local schools and community groups to use these spaces for educational and recreational activities 	<ul style="list-style-type: none"> Develop permanent community centers and cultural and educational hubs within the park for educational programs and workshops. Create a large central plaza for major community events, festivals, and gatherings, following the cloister concept
Adaptability to contemporary needs	<ul style="list-style-type: none"> Defining new uses, such as the Fraunhofer Institute occupying the House of Knowledge. Adapting use of physical space to how we use digital space / media. People are informed of events primarily through social media and word-of-mouth. Prostitution and its built form implications need to be addressed, it has been determined residential use cannot be too close to prostitution, but densifying could be a solution to still allow this use while addressing the business owners' demands. Other cultural uses such as an art gallery and workshop will be located on the corner. 	<ul style="list-style-type: none"> Allow for change in uses of buildings and open space, flexible layouts and rental agreements for a different mix of people in the area. Completion of the built form with appropriate density (approximately 3 storeys), ensuring not to obstruct the view to the cathedral (has heritage monument protection rights). Prepare for re-defining the inner urban conditions into a cloister relative to the medieval and holy core (long-term concept) 	<ul style="list-style-type: none"> A location attractive to students as a place to study and relax. For visitors to relax and learn about the significance of the site. And for residents to relax, gather with friends for market events, shows, and concerts, and contribute to the garden. Completion of structures which create new patterns of moving through the space, spots for resting, for individual (i.e. third space for a calm mind, and to relax) and social needs (i.e. events, conversing, enjoying food and drinks, gardening).
Resilience to climate change	<ul style="list-style-type: none"> Maintain open meadow space, areas designated for native plants and gardens, maintain the de-sealed nature of the ground that has been established 	<ul style="list-style-type: none"> Expand green spaces with flowering plants to connect different park areas and enhance ecological networks. Bold contemporary buildings made of circular and local materials, and zero carbon emissions Develop rain gardens for water management 	<ul style="list-style-type: none"> Implement extensive green infrastructure, including green facades, roof gardens, and urban forests. Use permeable materials for walkways and parking areas to reduce runoff and recharge groundwater. Install solar panels on park buildings and structures to generate renewable energy and reduce the park's carbon footprint Create corridors for wildlife to promote biodiversity within the urban environment.
Cultural vibrancy	<ul style="list-style-type: none"> Continued community events, keeping use of open space for events Partner with local artists and cultural organizations to host small festivals, workshops, and cultural events. 	<ul style="list-style-type: none"> The new users in the buildings will simultaneously adapt and shape the interior and exterior spaces, e.g. outdoor public activities extending from the indoor Integrate public art installation that reflect local history and contemporary culture. 	<ul style="list-style-type: none"> Future residents and visitors will be delighted by the richness of activities and spaces available

High Priority

Concept Visualization Buchel Location



Concept Visualization Buchel Location





A Synergetic Approach to Research by Design
Evaluating Ongoing Urban Transformation in Aachen

Third Spaces

COUVEN-QUARTER / "LustaufLife" / BÜCHEL-QUARTER

Freeing / Re-Framing open spaces

Date and Time: The 3rd September 2024 , 18:00 o'clock

Location: "LustaufLife", Komphausbadstrasse 10, 52062 Aachen

