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Research Methods – General Introduction

There are two very general directions of Research Methods (Research by Literature/ Best Practice Review and Research by Design). Both approaches have in common that they follow a research question, thus, mediating in between a problem-statement and a hypothesis which indicates a perspective (text and/or spatial vision) for resolving the stated problems by a strategy and measurements (text and/or spatial vision).

- The course Research Methods of Winter Semester 2023/ 2024 was mainly oriented on deductive approaches by Literature and Best Practices Review. It has shown very successful results preparing for a self-selected thesis, which is to be evaluated individually by "valid answers" for a self-defined "valid question" of research interest, narrowed within the context of a general theme and having tested the hypothesis for final confirmation or denial.
- The course Research Methods of Summer Semester 2024 is mainly oriented on inductive approaches to a locally specific site. It is about exploring and developing general and locally specific information about its stage and the options for transformation by the analysis of material and immaterial heritage and of ruling external conditions. According to the assumptions of the hypothesis (a socio-spatial and cultural vision for Space on different levels of scale), it is about deriving and evaluating individually and collectively socio-spatial and cultural concepts (of building/ transforming/ modifying the urban/ rural fabric) for space in time respectively as "valid answers" to a "valid question":

Both approaches have in common again to settle an argument with oneself (individually/collectively), testing the hypothesis by investigations of existing or envisaged conditions.

Synergetic Teaching Approach SS 2024 – Courses Urban Transformation 2 (compulsory) and Research Methods/ by Design (elective) to be combined!

The Synergetic Teaching Approach will help generating an insight and knowledge about inductive approaches, starting from and relating to local specifics and giving respect to the dynamics which rule the processes of transformation. It is bound to the selection of a site; it is ideally worked on by a multi-disciplinary team; however – it is at least to be dealt with by a group of responsive representatives of urban design and research experience.

As the compulsory course Urban Transformation 2 is preparing the ground for enfolding and applying basic knowledge and methods of finding visions and testing concepts by lectures, - which are to be applied by the exercise about an inner urban location in Aachen (in class and in students groups) -, the elective course might strengthen the (individual) research activities in the background of this exercise, working like the more scientific back-bone for the inductive side of the compulsory course and for its resulting needs for a reasoned evaluation.

Both courses, compulsory and elective one, are based on the path-leading philosophy of the publication "Matthias Ripp, 2022, A Meta-Model for Heritage-based Urban Development, Springer, Cham", available for you in the library.

Content – The summer-semester will dive into preparing for concept-finding relative to contemporary tasks of stages of "emptiness" in urban transformation, preparing for "THIRD SPACES". Contents and program of teaching by lectures and by working on a case-study are based on a meta-model-methodology about the importance of place and related processes of the urban society to be set up and manifested with changing paradigms. This approach needs to be precised as such by considering major contents and processes of guiding urban transformation locally in reality from the sides of both courses.

Structure – The lectures in Urban Transformation 2 will define the framework for the professional orientation of recognizing and guiding paradigms by setting up a tool-box to be applied for knowing how to seize, develop and guide processes and their products relative to spatial and socio-legal context conditions. The lectures in Research Methods will introduce another tool-box to work with for developing knowledge professionally: It contains the different levels of knowledge, the basic theory behind methods and related ways to select aims of research as well as to decode and to codify gained informations for their evaluation by qualitative searches for relevant data of varied qualitative and quantitative kind. One major exercise will operate as a binding field of practice for showing how to apply the tool-boxes in reality by giving insight into an utmost relevant condition of urban transformation of today: emptiness of inner urban land which had been used more densely under industrial conditions.

The lectures – are enfolding a set of thematic fields, relevant in general but also in terms of locally specifics.

- They tackle in Urban Transformation 2 the range of a basic understanding of urbanity, of an urban location and its structural values for experiencing urban space, of the understanding and of the appliance of spatial conditions of "sustainability", updating existing definitions and discussing the "City as nature". Approaches to an understanding of a "nature-based-economy" will be introduced and confronted to traditional criteria for a quality of building space (legibility, robustness, framed variety, permeability). Thus, they illuminate existing structural conditions of morphologies as valid bases for valid processes and outcomes of urban transformation with respect to tangible and intangible heritage. They envisage 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 introduce into the major secrets of City Marketing (by considering the need of bringing different kinds of stakeholders together), they remind of the major influences of the cultures of planning per time and place. They introduce and discuss the "Bilbao-effect" as a strategy to respond responsively to the local conditions.
- They tackle in Research Methods the range of options for not only setting up concepts by design inductively but for making design a tool to be reasoned and justified on the basis of embedding it into the appliance of developing knowledge relative to theories and empiry. This 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 variable: object- context relationships, into creating space relative to resulting "atmospheres".

The exercise – becomes a reminder of not confusing past with presence but nevertheless building up a continuity of changes by giving respect to major traces of heritage. Thus, it becomes a culturally and politically integrated part of discovering and mediating existing knowledge and generating appropriate information for the challenges to respond to. The selected case represents a core inner

urban area of three closely linked locations in the town of Aachen. It shows needs for preventing future processes of temporary decay in all these locations and in their immediate surroundings: Decay - in consequence of changes in user demands and mobility policies, having led to the demolition of former industrially established functions like parking, shopping and transport. Thus the emptiness of the centrally located, inner urban area of Aachen (Büchel/ Horten/ Bushof) will be taken into consideration for seizing/ evaluating existing long-term potentials of topography (water sources) and enfolding ways of conceptualizing substantial perspectives for short-/ mid-/ long-term urban transformation. The concepts for urban transformation are aiming to qualify spatial, environmental and socio-cultural as well as economic urban conditions. There will have to be a discussion about how far new impulses are part of (which kind of) "urban growth", and if qualification 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 are to be envisaged.

The fulfillment of the task - will be oriented on: a collective analysis of historical roots of the case, a critical-creative reflection on local community activities, to be 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 qualitatively and quantitatively in full consideration of its locational heritage and its advantages and learning from this place for other locations.

EXERCISE – Synergies between the two courses

The exercise itself is based on several historical and contemporary fundaments which need to be considered, evaluated and applied individually and collectively:

- Scientific work in Europe from around 1975, when late industrial effects of shrinkage and decay of mono-functions became visible in inner urban areas, calling for reuse and economic re-valuation (W.L. Forsyth, Master thesis, Department of Architecture and Urbanism, University of Oxford, 1979).
- Practice- and theory related assessments about evaluating and planning for the area (Prof. Dr. I. Schild, Dr. L. Henning-Meyer, Denkmalpflegerisches Gutachten Aachen, 2014; B. Schötten, , Aachen, 2026, Xiaoyu: Research on the use of Wasteland/ Research Methods, WS 23/24; SEGA Stadtentwicklungsgesellschaft Aachen, 2022-2024, Stadtplanerische Beitäge Büchel, Aachen; Reports from local actors: ARCHIGRAPHUS/ MEFFIS/ Georg Helmes)
- Area-related planning potentials for interventions into ongoing and needed urban transformation, discussing, evaluating and counterbalancing existing/ arising emptiness of inner urban areas by strategies for process-management and by existing concepts for spatial/ environmental/ economic qualification (SEGA, Büchel, Stadt Aachen, 2023)
- Starting points of developing knowledge about "THIRD SPACEs" for conceptualizing management processes and socio-spatial products for: PEOPLE The exercise considers inhabitants of the city of Aachen equally valid as clients in comparison to tourists from regional, national and international origin. Expressed local demands are to be represented by different stakeholders (f.i. Georg Helmes). SPACE: USE/ IMAGE CONCEPT The location, nearby the "holy core" of the city of Aachen, within the overlapping reaches of Belgian, Dutch and German cultures, make the place regionally specific as a potential magnet for a rejuvenation of a contemporary hot spot. The central location is predominantly appropriate

for highlighting uses of regional arts, music, crafts and sciences; the existing spatial formation of "front" and "back sides" as well as the current and planned dimension of unbuilt spaces needs to be discussed and evaluated relative to the existing concepts of urban planning, mainly giving priority to unbuilt space. TOPOGRAPHY/ CULTURE - The ground of hot and cold water sources needs reflection, concept and representation. HERITAGE – Central spaces for cultural uses benefitting the public welfare have a tradition in Aachen since Roman times, mainly revitalized in 1830 (Elisenbrunnen), however are not yet fulfilling contemporary major public needs for meeting and exhibiting culture, arts and wellbeing in inner urban areas. The existing museums are widely spread over inner urban areas with distances of 2 kilometers between different places. A contemporary common place of culture ("Third place") is expressed to be needed since decades, binding all the different existing places with offers for cultural perception, learning experience and creative activities and exhibitions of arts and performances to a central place in the urban core area. Mobility connections may be adapted to current mobility strategies, ideally provided by a shuttle bus, moving from place to place for guided tours. Such a place needs to be attractive enough for visitors to stay for some days in the city, finding hospitality in surrounding hotels, restaurants, coffee bars and basic offers of service and retail in order to revitalize the uses of staying, meeting, curing, walking, promenading, living the spirit of time in place. CLIMATE CHANGE - The needs for unsealed ground in inner urban areas go along with needs for enriching the conditions of biodiversity through water, humidity, plants, trees on the ground, on facades and on roof tops. There are innovations in legal conditions of planning law to allow for a higher density of built use in cases of proven contributions to enriching the natural sources of energy production.

Finding answers for the urban transformation of the area will be carried out by labor division/collaboration in all parts. The aimed to outcome refers to the following parts of urban analysis and concept-finding:

April 2024 – Analysis of conditions

- I. Drafting the template for a class-publication (Transforming "Büchel Area image, atmosphere and framework conditions") to be worked on during the semester: titlepage, names of students, description of task, content structure: s. above ... (A. Haase + volunteers)
- II. Literature review: Influences per kind and timeline of effects, having caused the current stage of emptiness; consideration of potential clients, investment and funding, evaluation of the planning philosophies in their historical course and leading the ongoing political debate about reuse, planning guidance and marketing; Problems/ Hypothesis/ Interim Conclusions about criteria for urban transformation in place and time by defining "sustainability" with respect to local culture (A. Haase + volunteers)
- III. Case-Study: Spatial analysis of the core area within the first ring-road; morphology, public spaces and their usages, "linked and integrated spaces" ("Space Syntax", s. Bill Hillier), landmarks (cathedrals, towers, fountains... etc.), front and back sides of built form arrangement, views, passages, historically valuable path-connections ground-plan (1:1000) and photos/ sketches of silhouettes, views, characteristics (whole class/individual contributions)
- IV. Problem Statement/ Research Question/ Hypothesis to be defined. Criteria for evaluation to be derived.

May 2024 - Setting up visions

- I. Visions for making the overall area become the late-industrial expression of a primary location nearby the "holy core" beside the cathedral (to be related to successful cases of urban intervention like Bilbao- Museum and Elb-philharmony). Three visions will be selected to be worked on in more detail, linking Büchel/ Horten and Bushof sociospatially (whole class, subdivided by three for working on the vision)
- II. Each of the three visions will become object of drafting 3 concepts (the 3 "vision-groups" to be subdivided for 3 concepts of different duration 3-4 students each):
- Interim uses of current revaluation per site (perspectives: 5 years)
- Interim uses as place-maker/ attractors for future uses per site (perspectives: 10 years)
- Investment into built form/ open spaces per site (perspectives: 15 years+)
- III. Visions to be evaluated by criteria

June 2024 - Analysis/ Evaluation of visions and concepts

- IV. Detailing the visions/ related concepts for the private/ public qualities of a "Third space-area"
- V. Considering/ Evaluating the cost-use-efficiency of the individual concepts per vision/ site by criteria of sustainability/ local culture
- VI. Conclusion Selection of "Valid answer" to the "Valid question" with reasons from the analysis
- VII. Editing the results of class-work to be published in a shortened version on the home-page of TCR (5 pages in total).