

RESILIENT VEJLE: A CASE STUDY

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ABSTRACT

The city of Vejle in Denmark with 60.000 inhabitants is the smallest and also the only Nordic city which became part of the “100 Resilient Cities Network”, pioneered globally by the Rockefeller Foundation. Its insignificant size in comparison to other cities and metropolises like Paris, Milan, Lagos, Bangkok, Buenos Aires, Boston or Mexico City determines Vejle as a small scale laboratory for testing resilient strategies: Decision making processes and implementation of new policies as well as unavoidable spatial transformation can go faster and are stronger and more directly connected to citizen involvement compared to Vejle’s much bigger fellow cities. Vejle is particularly vulnerable at risk of flooding which happens repeatedly and according to predictions, large parts of the city might be under water by 2100. At the periphery of the city centre, a large and 60 years old rubbish dump is an unpredictable toxic threat as well as a potential quality space for inhabiting many new citizen, potentially taking pressure from a scarce housing market. Furthermore, the city has exemplary social policies in relation to immigrants or homeless, which makes it a magnet for the latter. The author is member of an advisory board for “Resilient Vejle”, where he represents Aarhus School of Architecture since 2015. The paper is a case study which documents and illustrates how evidence based student projects with integration of citizen activation can have an impact in resilient thinking. The range of outcomes is very wide: from speculative projects, transformative architectural proposals to students building in 1:1, using material and components of a demolished building for a “pavilion for resilience”. This paper focuses on a specific “on-site” participatory design workshop with strong citizen involvement for the transformation of poor and non-resilient urban infrastructure.

Keywords: Resilient Vejle, citizen activation, Ideenwerkstatt, evidence based student’s projects, transformation architecture, on-site architecture.

1 INTRODUCTION

Vejle is a municipality in Denmark with 110,000 citizens while Vejle as a city has about 60,000 inhabitants. The city is fast growing with expected 100,000 inhabitants by 2050 but it faces several threats: it is one of the ten most vulnerable areas in Denmark at risk from flooding. By 2100, it is predicted that low-lying residential and business areas will be underwater and recent frequent flooding gave a hint on what could happen in future. Creating new jobs and the integration of refugees are further priorities to tackle the physical, social and economic challenges facing the 21st century. *“The city is also struggling against a growing apathy and lack of social cohesion, and the current structure of government benefits are costly...The city is looking to increase its resilience by re-learning the value of working together, of being responsible for our fellow humans, and for the environment”* (Vejle’s Resilient Story, <https://www.100resilientcities.org/cities/vejle/>).

Vejle is the only Scandinavian city which was selected to be part of the global network “100 resilient cities” [1] and by far the smallest of all (Fig. 1). In March 2016 it was the first city in Europe to announce its “Resilience Strategy” [2] and declare its vision: *“Vejle seeks to turn its current challenges into opportunities. Our ambition is to become an innovative lighthouse that demonstrates how small cities can solve big problems and show great responsibility. With our resilience strategy we invite all partners to take action and cooperate in the development of tomorrow’s resilient Vejle – a cohesive, robust and sustainable city”* (Vejle’s Resilient Strategy, 2016, p. 3).





Figure 1: Map of 100 resilient cities and map of “local citizen committees” in Vejle. (Source: *Vejle–morgendagens resiliente*.)



Figure 2: Flood-maps for storm flood in Vejle: 2012, predicted 2050 and 2100. The red line shows the main railway, the red circle the station. (Source: *Vejle municipality, 2015*.)

Aarhus School of Architecture (AAA) is one of the partners in Vejle’s resilience network. The school’s contribution happens on different levels: The rector is a member of the board and he is represented by different teachers who take part in workshops or give lectures on the relationship between resilience and architecture. Master students in their design studio worked on different assignments such as projects related to water or the transformation of a precarious dumpsite. Several final thesis projects addressed various issues like flooding (Fig. 2), cultural resilience or an architectural proposal for intensified seafood production in Vejle Fjord. “*In developing the city, water is seen as a resource that must be utilized, as opposed to a threat to be mitigated*” (<https://www.100resilientcities.org/cities/vejle/>).

In spring 2018, another studio of Master students designed and builds 1:1 a public information pavilion about waste reduction and material cycles directly at the dumpsite. The students reuse building materials from a demolished house in Vejle and experience how reuse and design for disassembly affect tectonics, details and aesthetics. Altogether, a multi-layered and fruitful alliance between AAA and “Resilient Vejle” has been established over the last three years and it is supported by the municipality in different ways.

Jonas Kroustrup, Vejle’s first Chief Resilience Officer wrote: “*Officials are hoping to build community resilience, thus strengthening social capital where citizens act collectively and do their share in sustaining the welfare state, ensuring equal quality life standards for everyone*” (<https://www.100resilientcities.org/cities/vejle/>). It was the starting point for a student project in 2016, which included creative citizen activation and the setup of innovative participatory design processes. This paper focuses on this project. It documents and discusses

the layout and experiences with an on-site and participatory design workshop inside Vejle railway station with third year's bachelor students.

2 PARTICIPATORY DESIGN WORKSHOP IN VEJLE RAILWAY STATION

2.1 Vejle railway station

The main railway line between Copenhagen, Aarhus and the north of Jutland cuts Vejle into two parts and creates a very strong and problematic barrier between the city and its seafront. As can be seen in the flood map Fig. 2, part of the railway tracks are flood-prone. The station building and its surroundings, although rather new (Fig. 3), suffer many functional and spatial problems: The spacious ticket hall was abandoned and replaced by only two ticket machines in a rather narrow corridor. The connections between trains, busses, taxis and bicycles are very bad in terms of orientation, distance and comfort considering frequent rain in Denmark. No cafeteria or inviting waiting room existed and the kiosk has a shortage of space. The railway and its station affect the development of the city as well as the daily life of thousands of commuters every day.

2.2 On-site-architecture (Architektur vor Ort)

“Architektur vor Ort” (“on-site architecture”) and “Nonconform Ideen Werkstatt” [3] are participatory design methods which strongly promote and support user involvement. Nonconform ideenwerkstatt® was developed by Vienna based studio nonconform [4], a studio which works almost exclusively in the field of architecture, urban development and municipal development. *“In order to be able to accompany the decision-making professionally, nonconform has created a participatory planning instrument with the nonconform ideenwerkstatt®, which manages the organization of municipal project development and planning processes with the greatest possible involvement of the citizens from the search for ideas to their implementation”* [5].

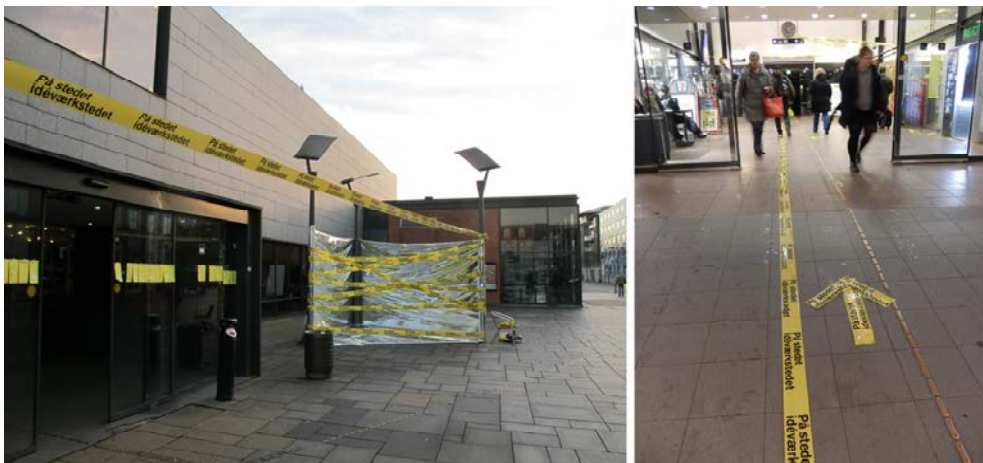


Figure 3: Vejle's railway station. Student's decoration, to generate attention, frame the problem zones and make the workshop space easy to find. (Source: Unterrainer, W.)

Architect Peter Nageler, one of the founders of nonconform, was appointed as visiting professor at Aarhus School of Architecture in 2016. His task was to prepare and instruct a real-life student's workshop for a speculative transformation of Vejle railway station, by applying the principles of nonconform ideenwerkstatt® to “resilient Vejle” and with an educational perspective.

2.3 The method

Nonconform ideenwerkstatt® is characterized by the fact that nonconform is involved in the planning process at a very early stage – usually before a concrete program or building task have been determined. This method was tested in about 150 municipal workshops in Austria and Germany. It includes two main specifics, which distinguishes it methodologically from other participatory design approaches: The workshop takes place “on site”, meaning on the location where the transformation or intervention should be situated. The active citizen involvement is temporally compressed into an intensive workshop of normally three days. Both specifics give the creative process and discourse a productive momentum, which often gets lost in long-lasting and exhausting citizen involvements.

2.4 Participation and conflicts

The nonconform ideenwerkstatt® is an alternative model when classical planning methods have failed or are about to fail. On a general level it is a tool to identify, reveal, discuss, evaluate, negotiate and tackle so called “wicked problems” [6], complex and often ill-defined design problems, which are difficult to solve because of incomplete, contradictory, and changing requirements and a diversity of interests which are often difficult to recognize.

For such participatory processes, “non-compliant” working formats need to be introduced; the classic event with linear discussions and flipchart is a discontinued and unattractive model. The collective idea-finding needs to be fully transparent, process-oriented, inclusive and collaborative. It must be well prepared, entertaining, exciting and open, so that serious participation can happen. This promotes trust, acceptance and identification with any outcome for a future spatial solution. The designers and specialists who lead such development processes must be authentic and natural, behave honestly and may not have hidden agendas. *“The process fails when the framework for participation was not strictly demarcated and clearly communicated. Or if the workshop is stuck around individual ideas and does not understand the real needs behind. Certainly another reason for failure is pre-programmed if the political leaders in a municipality are not personally supporting citizen involvement. Furthermore, if participation is to seek justification and legitimacy for a disputed approach or an already finished project”* [7].

2.5 Student assignment

The assignment was to prepare, organize and realize a three days on-site workshop in the form of a nonconform ideenwerkstatt® in the abandoned ticket hall of Vejle railway station, in order to generate evidence based ideas and informed proposals for a future transformation of the spatial deficits and negative urban impact of the site. The emphasis clearly was on the quality of the process and the citizen involvement, not on an elaborate building design. That said it is logic that no specific program was predefined but had to be developed and found by the students.



3 THE ON-SITE-WORKSHOP IN THE RAILWAY STATION

The duration of the whole student project was three weeks while the actual on-site workshop happened during three days between December 10th and December 12th 2016. The student project can be divided into three phases: preparation and activation, actual on-site workshop and postproduction.

3.1 The preparation phase

3.1.1

The first week was about learning and testing different communication forms, interview techniques, presentation tools and mediation processes. For instance the student prepared statements which they found by interviewing fellow students and presented them to each other, followed by self-evaluations.

A letter was written to the municipality, to individual politicians and to the railway company inviting their stakeholders to the on-site workshop: *“To create a most realistic process and achieve coherent results it is important to talk to people with local knowledge, expertise and different points of view”* [8]. In particular, they were invited to take part in a kick-off breakfast and to the public presentation and discussion of the results.

Furthermore, a group of students built a precise physical model 1:200 of the whole area around the railway station.

3.1.2 The activation for participation

During a three-day “activation period” just before the start of the on-site workshop, the students raised interest and invited citizen for taking part on the event. Beyond posters and leaflets, they applied a number of creative methods: they decorated the windows of the station with questions about the site; they got in contact with a youth group which felt excluded from public spaces. Considering the workshop happened shortly before Christmas, a group of student rolled a Christmas tree through pedestrian zones and initiated discussions, all with the goal to make citizen join parts of the three days event (Fig. 4).

3.1.3 Decoration and preparing the workshop space

The whole railway station and the empty ticket hall were decorated with a sort of striking “crime scene tape” (Figs 3–6) with the imprint “på stedet – idéværkstedet” (“on-site ideas workshop”) to generate attention, frame the problem zones and make the work space easy to find. Tables and benches were organized and transported, a copier, a printer and a coffee machine were installed and large rolls of paper and many felt pens provided.



Figure 4: Creative citizen activation in the centre of Vejle. (Source: Unterrainer, W.)



Figure 5: Citizens at the “idea table” in the former ticket hall. (Source: *Unterrainer, W.*)



Figure 6: Organised skateboard competition for youths in the former ticket hall. (Source: *Unterrainer, W.*)

3.2 The actual workshop

3.2.1 Start-up breakfast

The workshop started on a Thursday at 9:00 a.m. with a well prepared start-up breakfast. The food was sponsored by businesses which had an interest to improve the site. In the relaxed atmosphere of this breakfast, some stakeholders like the manager of the railway kiosk or the speaker of the taxi-cooperation informed the students about their views and goals. The students then were primarily listeners and documenters, they summarized the presentations in front of the presenters and were skilled to get as much of specific information as possible.

3.2.2 Proposals, interviews and discussions

During the three days, more and more citizens dropped in and asked questions, discussed with students, used the prepared posters and “idea tables” for comments, sketches, complaints, proposals in manifold ways (Fig. 5). Some visitors used the model with the provided model building material to make their statements, which then were photographed by the students. There was no censorship and no distinguishing between “good” or “bad” ideas, all proposals were accepted and presented to everyone. Nevertheless, the students were not “neutral” or passive observers, they could debate and “test” their own (and divergent) views and ideas in these discussions with citizen.

3.2.3 Skateboard competition

During the activation period, the students invited a local youth group for a well appreciated skateboard competition (Fig. 6) in the spacious ticket hall. This was a fabulous idea to bring younger age groups to the event and have a conversation about the railway environment beyond skate boarding.

3.2.4 Classification and presentation

All collected information and ideas were organised, sorted in different categories and classified already during the workshop by a group of students. The citizen statements and summaries of discussions were also put into a presentable and understandable form and placed on the walls (Fig. 7). New participants who entered the workshop space could get an overview from start and could relate to statements given before by others.

3.2.5 Discussions with politicians on site

In particular productive was the student’s discourse with some politicians during the workshop. They joined the event for a while, and used the physical model 1:200 interactively in the debates with the students (Fig. 8). Some mutual barriers existing were dismantled and it became clearer that “Resilient Vejle”, although a large scale project, can and needs to be scaled down to very local and specific challenges, questions, layers, sites, understanding, agreements and thus giving birth to productive proposals and partial solutions.



Figure 7: Documentation, presentation and communication of categorised citizen’s ideas. (Source: *Unterrainer, W.*)



Figure 8: Local politicians discuss ideas in the ticket hall by using the physical model. (Source: *Unterrainer, W.*)

3.3 Postproduction

After the on-site event, by analysing its immediate results, the students in groups developed their design ideas further. A fruitful discussion between students was accelerated, what the different roles for architects could be and how they need and can engage with real world problems, which very often originally have no clients. Particularly relevant were insights how antagonistic perspectives of different stakeholders, which can bloc every progress and solution, could be overcome and transformed into win-win situations. This was the start of a discussion about how to address different and divergent values for better though not perfect solutions for the common good.

One direct result, with the support of a film maker, was a short film “Being Architect” (<https://vimeo.com/185452832>). The documentary connects Vejle’s societal challenges and local problems with proactive, evidence based and inclusive design strategies of the workshop.

4 WORKSHOP OUTCOME

4.1 Learning outcome for students

The workshop got a very good feedback from the students who were in their third year of education. Beyond new skills in urban field-work and communication they had learned and applied, they understood that architects do not necessarily need to wait for a client or someone wanting them to translate a program into a building and they experienced that they can go far beyond being a service provider: by being proactive, generating a consistent and coherent program, organising the resources and moderating design processes on a multiplicity of scales. The experiences were in a positive sense related to what Pritzker prize winner and Biennale curator Alejandro Aravena criticized [9]: “*One of the biggest mistakes that architects make is that they tend to deal with problems that only interest other architects... It’s not enough to raise awareness. I want people to leave with more tools. We must share the challenges so we are aware of the coming battles*” (Aravena A). In contrast to still

widespread opinions inside the profession, citizen involvement does not diminish design skills but in the opposite lifted them on a new level.

4.2 Impact on municipality

The municipality supported the workshop and invited the students afterwards to exhibit their projects publicly in the municipal “resilience exhibition”. The process was a step further for a deeper collaboration between Aarhus School of Architecture and Vejle municipality: In a student project of a master studio the following year, which focused on the challenge of a hazardous dumpsite and landfill inside the framework of “Resilient Vejle”, politicians and department leaders of the municipality (urban design, social department, infrastructures) and municipal specialists for garbage, geology and hydrology gave inputs and stepped into a discourse with Aarhus School of Architecture and its students. In 2018, the municipality sponsors a “pavilion for resilience”, designed and presently built 1:1 by another group of master students, using material and components of a demolished building

5 CONCLUSION AND CRITICAL REFLECTION

Besides many positive results and inspiring learning outcomes, there is space for improvement for the future. Most of the critical reflections relate to the preparation phase.

On the side of the educational institution, such a project should better be imbedded in a longer design project. This requires stronger awareness of educational leaders for real life and citizen involvement projects, thus resulting in higher flexibility in the curriculum: conflicts between societal events and educational schedules need to be addressed on the institutional side; local societies and occurrences do not follow the schedules of schools of architecture. When the municipality gave us multi-layered and transdisciplinary support by their different specialists, this would be desirable also on the level of educational institutions, meaning the integration of students and teachers of other disciplines who work on similar projects.

The activation of different groups of citizen was successful and productive. Its extent was a positive surprise, considering that a workshop less than two weeks before Christmas is not an ideal date. But there were deficits in the activation of relevant stakeholders: For instance we did not succeed to involve any representative of the Danish railway company in the workshop. The railway company is considered as one of the most bureaucratic institutions in Denmark, shaken by several scandals on accounting and procurement over the last years [10], [11] and notorious for poor service. Despite strong efforts, the students and teachers were not creative enough to bring railway managers to the table in the railway company’s own interest, as it did not succeed over a longer period to rent out the former ticket hall and fill it with new programs. This might also uncover missed opportunities in working with the local press.

Nevertheless, the form of an architectural and urban “Ideenwerkstatt” with creative citizen involvement for addressing a neuralgic spatial challenge gives rich experiences to future architects. Last not least, the process has the potential to improve mutual understanding and to lift the reputation of the profession of the architect among the population.

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