Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences

Graduation Plan: All tracks

Personal information	
Name	**Tijs Reijer van der Eng**
Student number	4696786

Studio		
Name / Theme	Explore lab	
Main mentor	Henri van Bennekom	Architecture
Second mentor	Eric Hehenkamp	[Academic field involved]
Argumentation of choice of the studio	From a personal involvement in a post-disaster housing project in Türkiye, from where I wanted to dive deeper into the role of culture and cultural heritage in the aftermath of a disaster	

Graduation project	
Title of the graduation project	Research title: " The Layman's Mosaic" (current) Design Project title: " Pusula no.1 " (Compass no.1)
Goal	
Location:	Kuzeytepe district, City of Antakya, Hatay province, TR
The posed problem,	1. Supplied solutions by architects, NGOs and other aid organizations often not meeting the demand of users in a post-disaster context 2. The current lack of focus on public spaces versus housing in Antakya, while they actually could offer relief for many of the victims 3. The 'Culture of Forgetting' in which many of the Turks, after something impactful as this happens, major changes in behaviour over time are yet to be seen and people tend to get back to 'how it was before' rather than going to a more resilient construct
research questions and	"*How can a Space of Gathering offer relief on the short term and generate resilience within a community on the long term in the post-disaster context of Antakya?*

design assignment in which these result.	An attempt to the design of such a Space of Gathering which adhere in the offering of relief and the production of resilience. In this case the site for this project will be the district of Kuzeytepe, since I have held my participatory workshops as part of my research in the village of Örnek Evler which lies in this district as well. From the research this seems to turn into a multi-function complex with a natural environment as central component. Derived from the participatory workshops, initial ideas for the functions are: A modern interpretation of a Darussifa (Ottoman Healing house), a tea garden and a sport function. This due to their inherent relation to a natural environment and the way their amenities can confluence.

Process

Method description

Rooted in the theoretical framework, a methodology for this research has been composed. This combines a Research-through-Design (RtD) and a Participatory Action Research (PAR) approach (PARtD). The RtD methodology integrates design practices and processes as a central component of investigation. In this case, the act of 'designing' is not just a means of applying or testing existing knowledge but itself is a method of inquiry. I argue that the exploration towards a Space of Gathering (S.o.G.) which offers the said relief and resilience is best done along such a method, since it will need to involve a kind of 'testing and feedback' cycle. Moreover, does the participatory approach embedded in the proposed temporal framework rely on the premises of researching and generating ideas along design tools. In the same vein, lies the important notion that this RtD is not done by mere experiments conducted by myself. Building forth on the proposed temporal framework, this research aims to find results along the participatory design strategies throughout the different phases of the so-called S.o.G.-production. For this reason, the RtD strategy does not hold up by itself, yet needed to be supplemented with elements of the PAR approach; which focusses on the social context and actively involves this context, its communities, their members and their opinion, which is exactly what the participatory design approach is all about.

Within my research, this PARtD method has taken the shape of a multiple-part structure. Herein, firstly a preliminary Space of Gathering-checklist has been designed.

Then, within the checklist, the parts which have been considered to be "open"/ambiguous in the way that they can be manifested, have been identified. These are: 1) Function, 2) Location, 3) Safety & Comfort, 4) Organization and 5) Recognizability. From there, these open parts have been converted into scenarios, upon which several P.D. toolboxes have been developed to discuss these said scenarios with the sample groups from the Örnek Evler village during two participatory workshop sessions. Eventually the validity of the P.D. toolboxes, the scenarios and the list of requirements have been discussed contraversim upon which an advice for the establishing of such Spaces of Gathering has been given. Having done so, the foundation for the design project lies in the revised checklist of requirements, and further fed by the outcomes of the workshops.

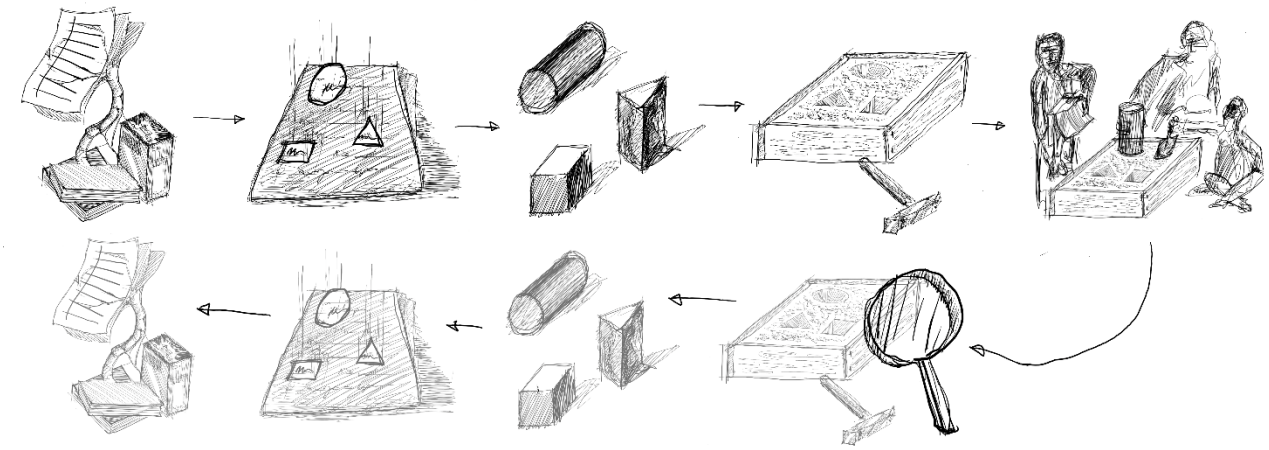


Figure 1 Methodology: 1) establish prel. List or Requirements; 2) Identify "Open" parts; 3)Create Scenarios along prel. research; 4) Turn into Participatory toolboxes; 5) conduct Participatory workshops; 6) evaluate toolboxes; 7) evaluate scenarios 8) evaluate and update list or requirements

Literature and general practical references

- Açıkgöz, S., Demirbaş, G., & Haudenhuyse, R. (2021). Sport and development in Turkey. In Routledge eBooks (pp. 185–200). https://doi.org/10.4324/9781003024002-13
- Afet ve Acil Durum Yönetimi Başkanlığı - Afet ve Acil Durum Toplanma Alanı Sorgulama. (2023). https://turkiye.gov.tr/afet-ve-acil-durum-yonetimi-acil-toplanma-alani-sorgulama?harita=goster
- Akiyol, E. D. (2008). THE ROLE OF MEMORY IN THE HISTORIOGRAPHY OF HATAY [Masterthesis]. Sabancı University.
- Aquilino, M. J. (2011). Beyond shelter: Architecture for Crisis.
- Benek, B. S., Şakar, H., Bayram, R., & Gümüştekin, K. (2015). The oldest medical center of the Anatolia : Gevher Nesibe Darussifa and Medical School. Acta Medica Anatolia, 3(3), 108. https://doi.org/10.15824/actamedica.19183
- Benek, S., Bayram, R., Şakar, H., & Gümüştekin, K. (2015). An example for the application of music therapy in the medical history: Divrigi Darüssifa. Acta Medica Anatolia, 3(2). https://doi.org/10.15824/actamedica.16068
- Bhandari, R. B., Okada, N., & Knottnerus, J. D. (2011). Urban Ritual Events and Coping with Disaster Risk a Case Study of Lalitpur, Nepal. Journal of Applied Social Science, 5(2), 13–32. https://doi.org/10.1177/193672441100500202
- Fuchs, C. (2018). Henri Lefebvre's Theory of the Production of Space and the Critical Theory of Communication. Communication Theory, 29(2), 129–150. https://doi.org/10.1093/ct/qty025
- Ghezelloo, Y., Hokugo, A., & Tsukihashi, O. (2023). Production of gathering spaces in post-disaster recovery scenarios: case studies from the Great East Japan Earthquake and Tsunami-2011. City, Territory and Architecture, 10(1). https:// doi.org/10.1186/s40410-023-00195-4
- Gülkan, P., & Langenbach, R. (2004). THE EARTHQUAKE RESISTANCE OFTRADITIONAL TIMBER AND MASONRY DWELLINGS IN TURKEY. In 13th World Conference of Earthquake Engineering.
- Interactive map of natural hazards worldwide. (2017, May 3). American Geosciences Institute. https://www.americangeosciences.org/critical-issues/maps/natural-hazards-worldwide
- Khan, H., Vasilescu, L. G., & Khan, A. (2008). DISASTER MANAGEMENT CYCLE – a THEORETICAL APPROACH. Management and Marketing, 6(1), 43–50. https://www.ceeol.com/content-files/document-142487.pdf
- Krokowska, J. (2021). Healing Architecture [Master Thesis]. LTH.
- Nagarajan, M., & Shaw, D. (2021). A behavioural simulation study of allocating evacuees to public emergency shelters. International Journal of Disaster Risk Reduction, 55, 102083. https://doi.org/10.1016/j.ijdrr.2021.102083
- Norman, L. (2005). Health and Hygiene in Evacuation Centers. In Texas a&M AgriLife Extension Service (ER-0206-06). Texas A&M.
- Rosenberg, H., Errett, N. A., & Eisenman, D. (2022). Working with Disaster-Affected Communities to Envision Healthier Futures: A Trauma-Informed Approach to Post-Disaster Recovery Planning. International Journal of Environmental Research and Public Health, 19(3), 1723. https://doi.org/10.3390/ijerph19031723
- Sanders, E., Brandt, E., & Binder, T. (2010). A framework for organizing the tools and techniques of participatory design. Unknown. https://doi.org/10.1145/1900441.1900476
- Spence, C. (2020). Senses of place: architectural design for the multisensory mind. Cognitive Research: Principles and Implications, 5(1). https://doi.org/10.1186/s41235-020-00243-4
- Structural Community. (2022, October 21). Advantages & Disadvantages of steel construction | Structural community. Retrieved December 11, 2023, from https://structural.community/articles/advantages-of-steel-construction/
- The harmonic healing houses of Turkey | BPS. (2020, December 16). BPS. https://www.bps.org.uk/psychologist/harmonic-healing-houses-turkey
- The links between colour, architecture, and mental health. (n.d.). Centre for Urban Design and Mental Health. https://www.urbandesignmentalhealth.com/blog/the-links-between-colour-architecture-and-mental-health

- UNICEF & IOM. (2016). Building safe spaces for the community: A Practical Guide for Constructing Disaster-Resilient Community Evacuation Centres in the Philippines.
- Venturi, R., Brown, D. S., & Izenour, S. (1972). Learning from Las Vegas. https://academic.oup.com/jaac/article/33/2/245/6337444
- Wang, T., Chen, J., Yujiang, Z., Wang, X., Lin, X., Wang, X., & Shang, Q. (2023). Preliminary investigation of building damage in Hatay under February 6, 2023 Turkey earthquakes. Earthquake Engineering and Engineering Vibration, 22(4), 853–866. https://doi.org/10.1007/s11803-023-2201-0
- Weichselgartner, J. (2001). Disaster mitigation: the concept of vulnerability revisited. Disaster Prevention and Management, 10(2), 85–95. https://doi.org/10.1108/09653560110388609
- Wohl, S. (2016). The Turkish Tea Garden. Space and Culture, 20(1), 56–67. https://doi.org/10.1177/1206331216646058
- Mortice, Z. (2023, April 10). How Trauma-Informed design can create healing architecture. *Bloomberg.com*. https://www.bloomberg.com/news/features/2023-04-10/how-trauma-informed-design-can-create-healing-architecture
-

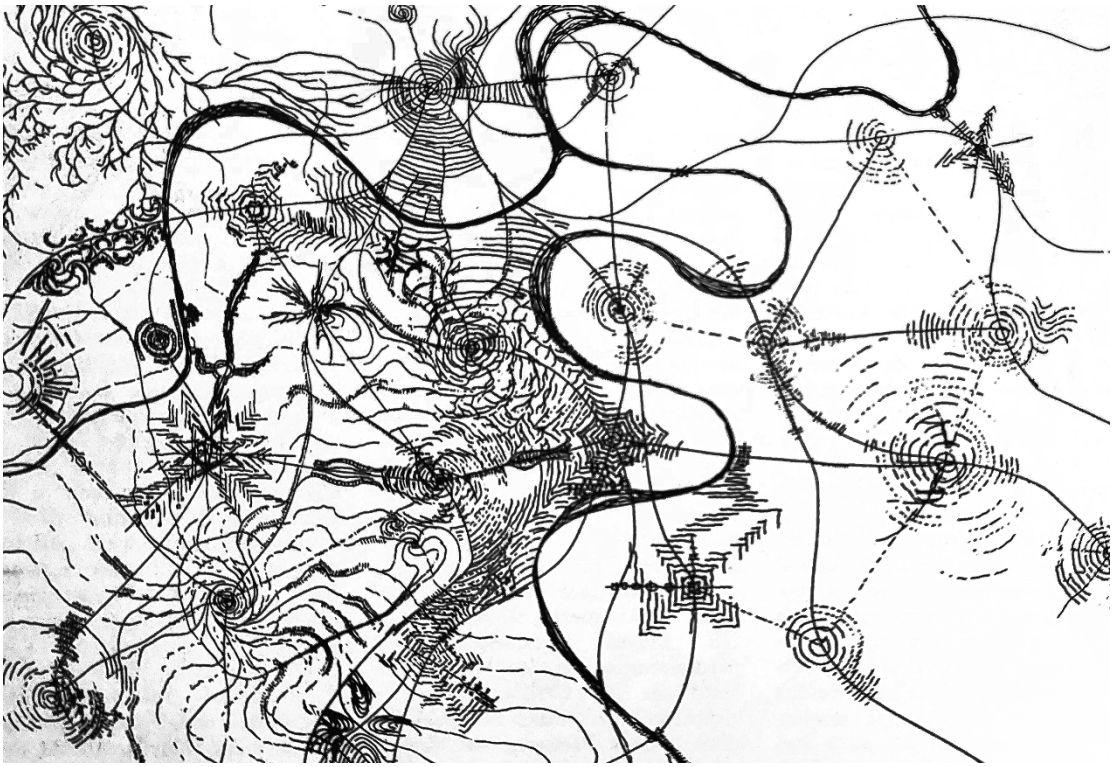
Preliminary reference projects:

- Fuyang Yinhu Sports Center / UAD
- Sunny Gymnasium / Tekhnê Architectes
- Sports Hall in Borky / OV-architekti
- Farnum Community Recreation and Evacuation Center
- Narlıca Aile Çay Bahçesi Ve Nargile Café, Antakya
- Nest we grow / Kengo Kuma
- Health Clinic Ruukki / alt Architects + Karsikas
- Sulemanye mosque complex, Istanbul / Mimar Sinan
- Haseki Sultan Mosque complex, Istanbul / Mimar Sinan

Reflection

See next page

On the verge of a new chapter



Graduation Reflection Essay

Tijs Reijer van der Eng

Explore Lab 2023-24

Introduction

This last year which concludes my time as a student, has been an exciting one. Throughout the last 10 months I felt like everything I have done thus far throughout my years of study, the internships I have done as well as during the little work I have already been able to do "professionally", all led up to this graduation year. This therefore also came with the necessary melancholic reminiscences about courses which I have done, teachers and tutors who inspired me and reflecting back on how I myself developed into something which is coming close to an architect.

I find it generally interesting to see, that whereas in other fields of study, after one is finished with their studies they often *are* that for which they have studied, I cannot by a long shot consider myself an *Architect* with a capital A. I think that in fields like these, the crafts which make up these fields of work, the skill is something honed and developed forever, like a skilled artisan. This has at times given

me a little scare, but most of the time excites me throughout, as it promises me a future in which I will be learning continuously and do not have to fear running out of things to like, things to be curious about or learning new skills.

My graduation Track

My graduation project in the shape it has unfolded, would never had had this form, if I had not gone to Türkiye last year to work there. This in its turn would have not happened if I hadn't meet my now dear friend and colleague Zülal on the coincidental encounter in the heart of Bologna where I was visiting my brother. I do think however, that it was almost meant to be. Looking at the work and internships I had done in which I explored sub-fields of architecture which aren't necessarily heavily represented in the bachelor's (or masters) curriculum, combined with the master courses I had done the year prior to my departure to Türkiye, it all makes forms a perfect picture in my optic. The focus on small(er)-scale architecture, which allows for a much more in-depth exploration on the human-scale experience has something that over the years captured my preference. I feel that often when the projects get bigger, they tend to foster 'an idea' or 'concept' more than how people from their perspective will actually experience and live those spaces and places. I therefore appreciate studios like the *Form Studies* and *Interiors Buildings Cities* which I was luckily able to participate in. This combined with writing a thesis on Japanese Woodblock prints and their relation to architectural expression and diving into experimental techniques during *Making* all together became the perfect storm for a gradation project.

All taken into consideration, I cannot imagine doing another studio than Explore Lab. And I would recommend it to all future graduation students. Shaping your own project in its research and design development allows you to deep dive and be confronted with yourself as a student, architect, person and user all at once. In my experience this has helped me greatly into thinking also about what can or should be next for me. In my case, it for example showed me that I cannot or want not to work merely behind a computer, but need to work with my hands as well. In that same train of thought, am I convinced that it would do *all* students of this and other architectural faculties good to experience a hands-on application of their studies. I know of many of my fellow students who have been studying already for years but never touched a brick so to say. I therefore would also press the dean and faculty to look good into their curricular structure and perhaps even be as bold to just stick another year to the bachelor in which student can (obligatory) dive into internships and the practical side of the field. Taking these abstract ideas and drawings away from the table into something practical will generate a much better relation between "the architect" and other actors involved in these building processes.

The Research, Design and Methodologies

Even though the graduation year is divided into a 'research' semester and 'design' semester, my research is ongoing until the very end and probably even beyond that. This is of course a blessing and a curse when one shapes their own graduation project like that within Explore Lab. After the P2, in which we present our research outcomes I found myself diving into many other small studies necessary for shaping my design project. I look back on this way of research as rather successful. Of course there are always things that can be developed further or certain deep dives which have seemed unnecessary in hindsight. But then again, a year suddenly becomes a short year when it is a graduation year. I am very pleased to see however, to which extent the research I have conducted is interwoven into every part of my design, leading into what I would (humbly) call a rather complete project.

I furthermore think that the participatory way of working and workshops I developed could be used in a broader way, beyond this specific topic (participation in a post-disaster context; which is a topic which in itself already has so much to still dive deeper into).

Still, the methodology and theoretical framework I developed for my project came with an inherent problem which I was going to run into no matter what. I also describe this in my discussion, but the fact that I pose that these participatory trajectories are to be run along the whole line of a project and then myself only involve the people in the research stage has a hypocritical odor to it. This is something I am aware of, and if I had the appropriate time and funds this of course would have looked different and would have me going back once or twice more the least.

The Larger Value

As I stated, this project feels like the accumulation of all the previous I have done. This includes my general way of working on projects. I have this tendency to bring a lot of different elements together and making it work. This has often worked for, but sometimes also against me. And every time I tell myself: "next time I am going not to go down such a rabbit hole again". Within my graduation project this 'bundling of ideas' did however make a return to some extent. I do have the feeling that nonetheless it worked in my favor this time around and resulted into a project which tackles all facets throughout all scales and layers. Of course the danger embedded in this, is that certain things are not worked out into the greatest detail. Within this specific project however, this is also not the most important. But rather the ideas which flourished along the line of this project are to be valued for their usage on a larger research and practical application base. I argue that the outcomes of this project could be used directly in the field, if not for the technical application, then at least as an directing incentive for the critical needs as explained throughout my research. The idea is then also to take this project back to my colleagues in Türkiye and see to which extend it can be used by them and hopefully lead to an actual change; again, if not in a 1:1 execution, than at least as an eye-opener of how people could actually shape an harmonious environment. One that serves them and they can rely on. And one in which the architect and other actors in charge are challenged by these same eye-opened people upon which they will have to actually act.

Transferability

Throughout the course of this project, the ideas, results and solutions have been heavily built upon long histories of knowledge and research. This can be seen in the research on participatory design methodology and the development of the checklist of requirements, as well as the design part of the project where techniques and solutions are based upon century-old techniques, informing the project throughout its layers and scales. In this same vein, I believe that this project can be taken into the opus of this direction of research within our field of architecture within being a redundancy.

Further Thoughts

On Explore Lab and the faculty I have called my second home over the last 6 years

As stated before, I would motivate my fellow future graduates to indulge in Explore Lab, whether they feel comfortable or uncomfortable with working in such a manner. Especially the latter, as often from such discomfortability, beautiful things can sprout. I do see of course the issue for many students in this who (and I speak for myself as well) are afraid of 'failure' or in other cases just want to create a project fit for their portfolio as this is the verge of a new chapter for us and the pressure seems to get increasingly tighter with the years. I think the faculty can play an important role in here and motivate students to keep exploring and testing as that is what a research-based university should be for an should be stimulating. Architects (can) play an important role in society as culture-creators rather than culture-followers. It is therefore important that this faculty keeps being the fertile soil for this cause. In

my experience, I am most pleased with my study time here and have never visited another faculty from any study, which I found as pleasant as our very own TU Delft Architecture home base. I think it does a good job in stimulating exploration and preparing these culture-creators. The problem however is, that once they step out of the door here with a diploma under their arm, they fall into a world where established offices with established (often old male) architects who surpassed their retirement age already years ago, who have very clear ideas about architecture, fueled by the idealization of the modernistic regiment which has made up much of the educational direction over the last 50 years. So once our dear students end up within these offices, they get trained along these sometimes old-fashioned ideas and ways of working, getting drained from their exploratory mindset, which has been carefully nurtured by the faculty and slowly lose the ability to become the culture-creators which we need. I therefore would love to see the faculty see how they can play a role in bringing this pre- and post-graduation mindsets closer together. As for me, I am not done exploring yet and will do so until the very end.