TATIVANIS INSAIC

THE PARTICIPATORY SEARCH TOWARDS
RELIEF AND RESILIENCE IN THE POSTDISASTER SETTING OF ANTAKYA

Tijs Reijer van der Eng Expirimental Master Thesis

{Angels with dirty faces}

Let us cut the wings

Let us dwell among

Let us become

For that is the way to things better & better things

{Abstract}

In Februari of 2023, The south of Turkiye was struck by a devastating earthquake, taking the life of thousands and dispossessing the homes of millions. After having spent three months in Hatay in the wake of the earthquake I have seen how by means of their culture and getting together, the people are able to find comfort. The attention towards public spaces which could provide in this is however nihil, where the focus is mainly oriented towards housing. Moreover do many architects, NGOs and other aid organizations in similar post-disaster situations, offer solutions which do not meet the demand of the users. Lastly, is there in Türkiye a 'Culture of forgetting', which disables them from being shielded from future adversaries.

All of these issues have led to the exploration on how Spaces of Gathering (S.o.G) can be produced, which offer relief on the short term but also generate more resilience on the long term.

Within this research, this has been sought for through a combined methodology of Participatory Action Research (PAR) and Research through Design (RtD). This took the shape of establishing a List of Requirements (L.o.R.), of which the ambiguous parts in that list have been defined through a Participatory Design (P.D.) strategy. This resulted in a preliminary attempt towards a checklist for the production of such Spaces of Gathering, in order for them to provide in providing relief and generating resilience. The final result is succoured with an advice for the improvement of the methodology and strategy to be adapted in future endeavours. The final checklist is furthermore provided. The idea however is that this will be revised and bettered continuously.





'Wasururu wa
ukiyo no tsune to
omon ni mo
mi wo yatu kata no
naki zo wabinuru'

'To be forgotten in these sad times is not unusual – What is depressing, is the lack



{Prologue}

This thesis is composed within the limitless boundaries of the Explore Lab Studio: A graduation studio built for students who are determined to critically explore beyond the given. As somebody who has always tried to look beyond the standards, in my personal life as well as my journey-so-far within the field of architecture, as a student as well as intern as well as a starting professional, this studio has offered exactly those challenges and responsibilities I see embedded into the working field. This thesis is extra important and lies rather close to me, because it touches upon a subject, or better said deals with a group of people, from who everything has been taken away over the course of hours and yet I have seen and experienced the strength and warmth still residing within these people. For this reason alone, I have not been able to shy away or give less than a hundred percent in working towards something I can say I deem worthy of presenting to either my fellow peers, my tutors, my close Turkish friends and the people for who all this is in the end: all those people who have lost their homes, their friends, their family and their livelihood. I believe the knowledge we as architects posses can only become something bigger, when we share this and invite everybody to think about how we can (re)shape the world into something better.

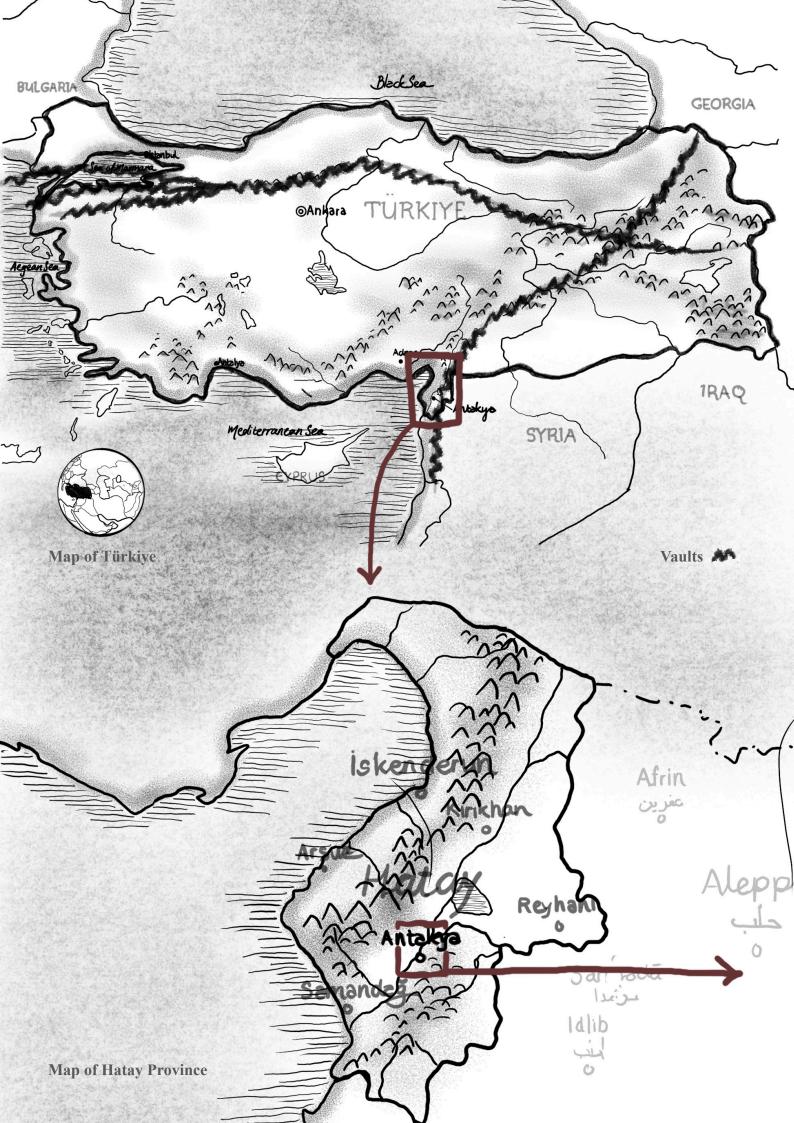
A special thanks to:

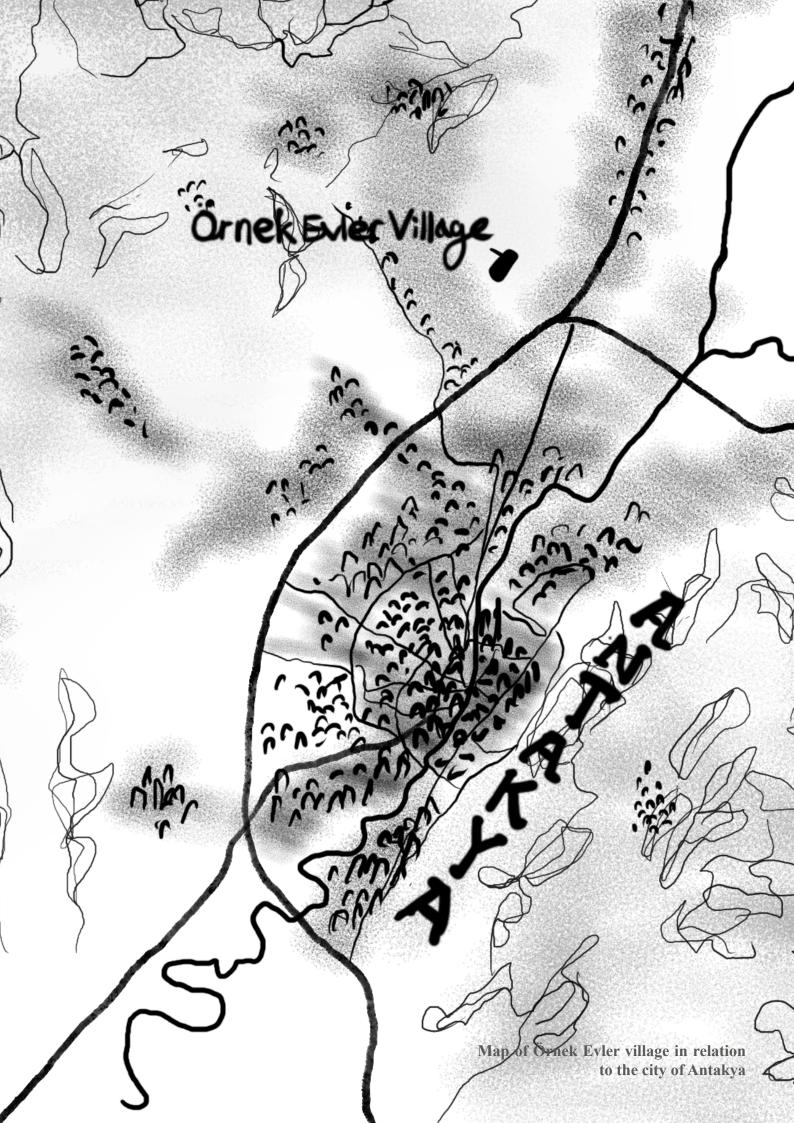
Carola Hein and Henri van Bennekom, for being the sharp, critical yet motivating tutors I felt strengthend by along my research journey; and Zülal Cakici, initator of the Örnek Evler project in Antakya and my dear friend who not only helped me during the research but has been a source of inspiration when it comes to how we can understand and position ourselves as architects.

{Contents}

Introduction	12
Theoretical Framework	20
Methodology	34
Results	48
Conclusions and discussion	50
Bibliography	52
Appendix	54

All drawings and images in this work are provided by the author.





{Introduction}

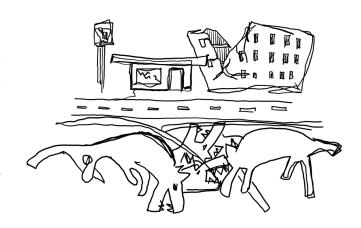
Opening

"When I opened my eyes after having dozed off in the comfort of riding passenger in the early morning of April's final days, I was confronted with the first torn building, neighboring - and now heavily leaning on - a deserted gas station. It was as if its legs were ripped away from under its torso by a bloodthirsty Cerberus who shook the earth on the 6th of February this year. It indicated the start of landscape of which I had never thought I would encounter upon one and conjured up feelings I did not even know how to give a place within for a while."

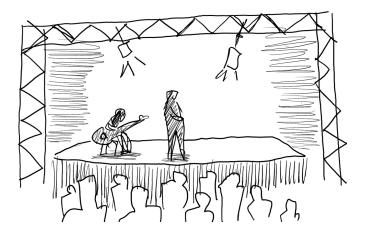
This described morning was one of the first of a three-month stay in Türkiye in which I spent half of the time in Antakya, Hatay; a Mediterranean city bordering Syria, which has seen glorious kingdoms rise and fall while harbouring a rich potpourri of (religious) culture. Now however a wasteland in which still-standing structures are the exception due to the devastating earthquake which took the life of over 40.000 people and left 1.5 million people without a home (UN News, 2023).

The reason for my stay, was my involvement in a housing project for victims of the earthquake. During my stay, I was mesmerized by the ways of people's coping with the situation. Several individuals organized small music, sports or other sorts of events or tried to console their fellow citizens through offering workshops. By doing so, these individuals knowingly though without hesitation carried heavy weights on their shoulders without any direct support from governmental institutions nor international aid organizations whatsoever. Along these observations and being able to become part of these events, I started recognizing a pattern: All these coping mechanisms had two elements inherently bound into them: {1} They consisted of people gathering and seeking relief together, through {2} clear expressions of their culture.

The idea of culture and cultural heritage as a tool for recovery in a post-disaster setting is a subject which has been described in various literature (Chandani





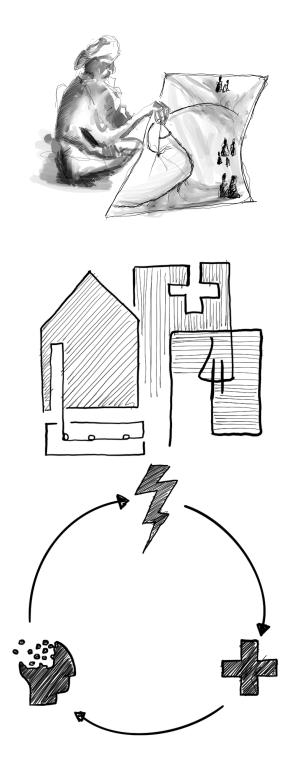


et al., 2019; Eyre, 1999; Bhandari et al., 2011). Similarly, the importance of Spaces of Gathering in a post-disaster context is underlined within a precedent body of research (Ghezelloo, 2023; Klinenberg, 2018; Chandani et al., 2019). Moreover, is there a clear unison agreement throughout the literary review about the need for active engagement of victims and a bottom-up approach when it comes to post-disaster projects (Schilderman & Parker, 2014; Aquilino, 2011; Davidson et al., 2007). This is often described through methods of community participation and participatory design approaches. The primary idea of participatory design (P.D.) can be seen as an approach in which the designer, user and stakeholders have an equal input to 'generate a design' (Hussain, Sanders & Steinert, 2012).

Problem statement

While from the previous it seems like there is a general consensus on ingredients necessary for victims in the aftermath of a disaster to get back on their feet by means of public (gathering) spaces, in practice there are several reoccurring issues which prevents this from being done properly.

First of all, often within post-disaster responses from architects, aid organizations, the global community or even from struck countries' own governmental organs, supplied solutions do not meet the demands of the victims. And even with enormous sums of money being raised, often due to lacking coordination between organizations, corrupt institutions or simply the way victims are viewed by these actors, proper and sustainable action is often far from being taken (Aquilino, 2011; Z. Sadiqi et al., 2016). In Türkiye this for example led to 40.000 donated container houses that are not being used because they didn't meet the safety criteria, generating a pile of waste without even served its function prior. Then, there seems to be an uneven focus on housing and infrastructure (Ghezelloo, 2023), not considering the need for spaces where people can come together and grief, find relief or just a simple distraction from their harsh reality. And lastly, there is the issue of what one might call a 'culture of forgetting'; where in many parts of the world people seem to constantly waver or suppress the collective memory on past disaster events and are perpetually surprised when disaster strikes. In Türkiye, some people rather believed that the United States were responsible for what happened by detonating underground explosives, than understanding they have been living on seismic active soil for their entire life.



Research question

The described problems distilled to the questioning what the necessary tools are for the successful production of public (gathering) spaces, which can offer relief on the short term, but also generate more resilient communities and societies in the face of future adversaries. To narrow down the scope of this topic, this research will focus on the city of Antakya and more specifically, the community of the newly built Örnek Evler village in the Kuzeytepe district (see p.10-11). The reasoning for this choice has three main pointers: First of all, the city of Antakya is prone to several disasters due to its geographical nature (*Interactive Map of Natural Hazards Worldwide*, 2017) as well as the political tensions tied into the region (Akiyol, 2008; Tokyay (2022). The second pointer has to do with my personal ties to the village. Because I have helped constructing the village and worked with the people involved in this project, this takes away certain potential obstacles like the matter of trust and willingness to engage from the side of the community members. Lastly, is the fact that the inhabitants of the village were originally selected due to their status as 'vulnerable groups' (e.g pregant women, widows with children, families with physically or mentally disabled children, eldery). I argue that this is of great value, since these groups are often forgotten or not being able to express their opinion in post-disaster projects (Sadiqi et al., 2017).

All of the foregoing has accumulated in the following research question:

"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?"

On the path towards an answer to this question it has been important to first establish the theoretical framework which will shape the base of this research. Following from this, a detailed methodology in which the ways the research has been prepared and executed in presented. Hereafter the results of the research are described. Finally, a chapter dedicated to the conclusions drawn and a subsequent critical discussion round of this research.

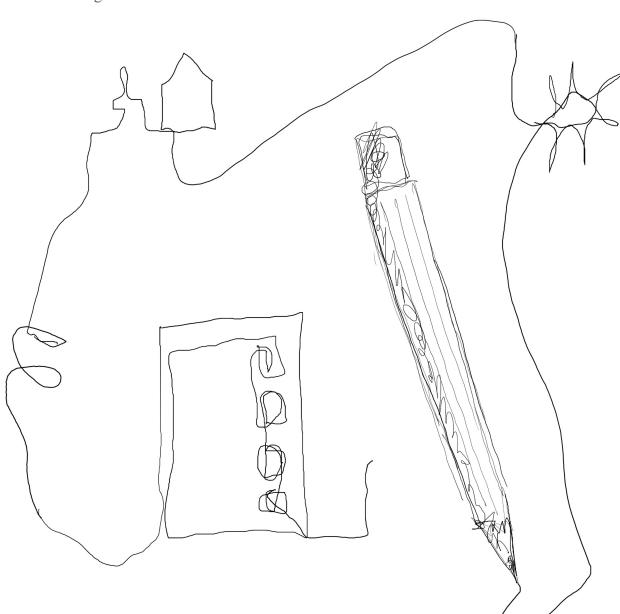
Goals & Position

This research is not aimed to provide an all-solving solution to the multitude of problems which are riddled within a post-disaster context. Rather, this research is to be understood as a critical exploration on how to aid in the production of spaces of gathering and the necessary participatory design methods which in their turn are apparent cogs in the 'post-disaster recovery machine'. And if optimized, can perhaps lead to an actual 'better', within the 'building back better'. Or when generated preventory, can provide in better prepared communities. In both ways, I have been interested to see in which ways it might lead to more resilience among communities prone to disasters. And even when not necessarily contributing to a long-term rebuilding strategy, I have personally witnessed that offering relief, consolation or just a little distraction from such a harsh reality can already be beneficial. Being able to broadcast this message in the shape of this thesis to future designers, architects or other actors, and make them critically think about their approach is my humble intent. Furthermore, is it important to underline that this research focuses on the post-disaster context initially and from there venture onwards to solutions which can perhaps become part of a pre-disaster strategy. For this reason, I have composed an easy-to-distribute document, advocating my research findings in image and (little) text. In theory, this could be used by governments, aid organizations and designers as a tool to generate spaces of gathering in the post-disaster setting, but also to develop preparatory spaces of gathering which could serve their function immediately if a catastrophe is upon.

Moreover, as I (the author) consider personal perception and relations to be a crucial aspect of doing research, I argue that this does not have to be clouded by a cryptic and informal literary writing style or jargon. Accordingly, when deemed necessary, the personal pronounce will be used. Furthermore, it is important to note that I am aware of my position

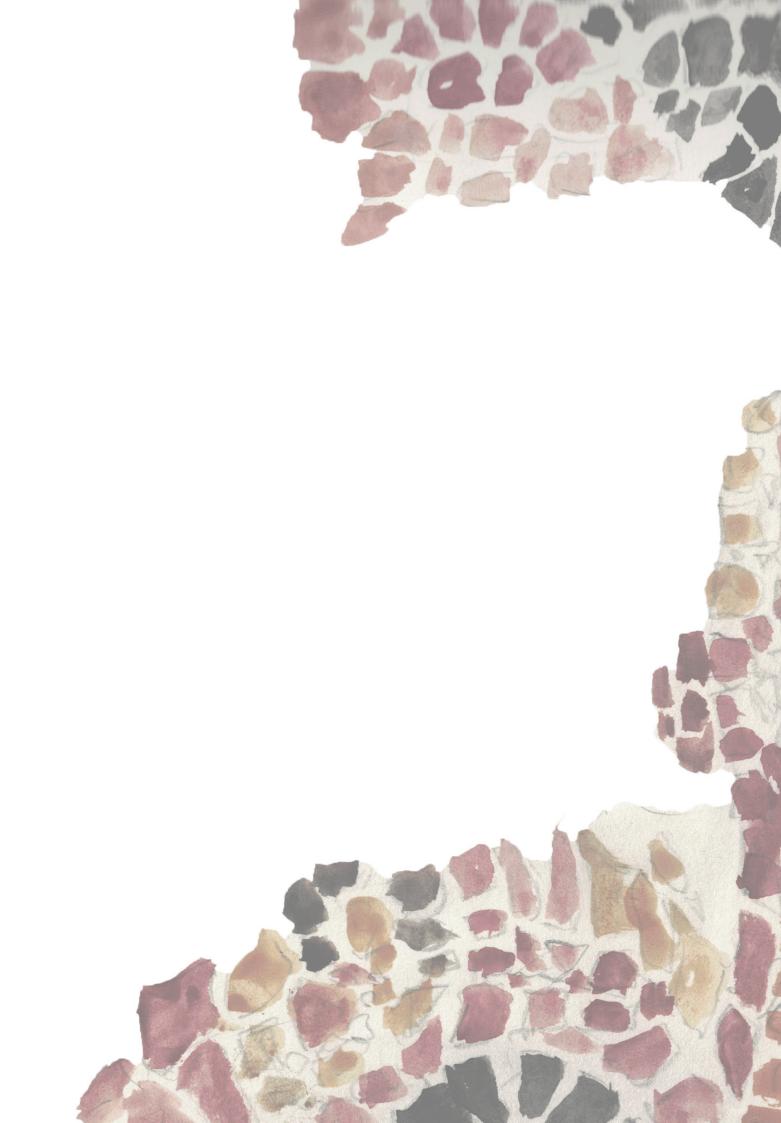
as a white, West-European architecture student. How this might have influenced the research and the design project in its turn, is discussed by the end of the thesis.

Lastly, do I believe that as architects who are trained to be visual message conveyers, and have an understanding of the power of the image in addition to the written word, architectural theses such as these, don't have to be existing out of these mere words. For the reason of having people better 'memorize' what they have been reading (Carney & Levin, 2002) as well as enlarging the impact it has on people on an emotional level as 'images speak louder then words', denying any emotional reactions from the thesis' recipients by describing theses as objective, would be naïve, so why not empower the recipients in their emotions, and hopefully spark the critical thoughts with the help of images? This is why I have decided to accompany the thesis with drawn images which assist the narrative intertwined throughout.



'Nishi no umi wo omoiyaritsutsu tsuki mireba tada ni nakaruru koro ni mo Aru kana

'brooding and longing, gazing at the moon over the western sea, it is a time of nothing but tears'





{Glossary}

Disaster

Disasters are generally divided within two categories: Anthropic (manmade) and natural disasters. Within this research, I position myself along the ideas of Juergen Weichselgartner (2001) in which he poses that "All disasters are man-made". He states that when treating all disasters as such, not as unexpected acts of god and with the idea that the only certainty is uncertaincy, the following implications of rethinking natural disasters are made:

- Mitigation much stress social rather than physical approaches
- Stimulate pro-active rather reactive actions
- Reduction of vulnerability must be integrated as part of ongoing policies and programs
- Acknowledge that complete prevention is unattainable, which can lead to long term loss reduction

Community Participation

As Davidson et al. (2007) point out, 'participation' has been an overly and widely used term outside of and within the post-disaster context. I stand by them flagging the idea of defining community participation in a 'project environment'. Based on Arnstein's original theory the following definition is given:

"When a community is actively involved and empowered throughout several parts of decision-making processes throughout every phase of a project"

Participatory Design (P.D.)

The primary idea of participatory design can be seen as an approach in which the designer, user and stakeholders have an equal input to 'generate a design' (Hussain, Sanders & Steinert, 2012).

Participatory Action Research (PAR)

Space of Gathering (S.o.G.)

Within this research, my position in regards to the defintion of gathering spaces follows from the research of Ghezelloo and others (2023) who use the term 'gathering spaces' as a more universal applicable way of describing public spaces. It stems from Habermas' definition of public spaces, but framed by the built environment: "Platforms/spaces/ places that are accesible to everyone, no one enters them with an advantage over another, and they have a potential foundation for a critique of society based on democratic princples"

However, as Ghezelloo and his fellow researches point out, is the term 'public' not universally similar. As an example they point out the differences between "public-public" and "private-public" spaces in Japan. By using the term 'Spaces of gathering', this problem is overcome.

Participatory Strategy (P.S.)

In their research, Sanders, Brandt & Binder (2010) give clear definitions of the elements which make up P.D. methodology. These are the following:

- Tools: Material components that are used
- Toolkit: Collection of tools
- Technique: Tools & Toolkit put in action
- Strategy: Combination of tools, toolkits and techniques that are strategically put together.

List of Requirements (L.o.R.)

An overview of requirements to which a S.o.G. Will have to adhere in order to provide in certain qualities. In this case specifically within a post-disaster context.

Research through Design (R.t.D.)

Community

Such gathering spaces, especially in a post-disaster context, will be bound in their accesibility by geographic constraints. Therefore, such spaces will be often used by people in their direct environment. This, combined with the participatory design theory which will make its way in this research, asks for a clear describtion of the users. I suggest that they can be identified as a 'community', along the following defintion by Jha and others (2010:361).

"group of households that identify themselves in some way as having a common interest, bond, values, resources or needs as well as physical space. a social group of any size whose members reside in a specific locality, share the same government and often have a common cultural and historical heritage"

Resilience

"The ability and plan for absorbing and adapting more successful to adverse events"

"The ability to resist the onset and impact of a disaster" (Combaz, 2016)

Relief

"the immediate support provided to minimize suffering and provide human needs such as food, water and shelter" (FutureLearn, 2022)

"A feeling of reassurance and relaxation following release from anxiety or distress." (Meriam Webster, n.d.)

Disaster Management (D.M.)

{Theoretical Framework}

Chapter exordium

As touched upon in the introduction, spaces of gathering can hold an important role in the recovery within a post-disaster setting. So establishing what they encompass, represent and how they could be produced is essential. The literary backbone of this research exists of two main parts: The first one deals with the meaning of spaces of gathering and their production in the post-disaster context. The second part deals with the terms relief and resilience and how they might hold relation to such a space of gathering in the post-disaster context. Together, these parts provide the necessary substantiation for the construction of the methodology and the conducted research in turn.

Production of Spaces of Gathering in the post-disaster context

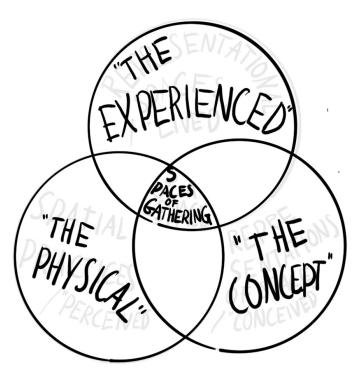
Spaces of Gathering

In their analysis research on post-disaster projects located in Japan, Ghezelloo et al. (2023) coin the term gathering spaces as being a more universal applicable terminology for the idea of public spaces. Their importance in the post-disaster context is characterized by their ability to provide in diffrent dimensions of place attachment and ability to adress issues like displacement, lack of formal emotional support and lack of communal recovery (Nelan and Schuman, 2018).

In their theoretical preposition, Ghezelloo et al. (2023) argue that the creation of such Spaces of Gathering can been seen along the line of Lefebvre's triad of space theory.

In this theory, Lefebvre distinguishes three essential elements necessary for the accumulation of spaces in the social realm. These elements or triads are respectively: The spatial practices or "perceived space" and has to do with the physical configurations embedded in the public sphere; The Representation of Spaces or "conceived space", which is based on planning attempts and the abstraction, like maps and models and The representational spaces or "lived space" which deals with the individual experiences in the produced spaces (Fuchs, 2019; LeFleur, 2020).





...in the post-disaster context

Ghezelloo and his fellow academics propose this theory seen in the light of the post-disaster context (2023). I argue along this proposal. Because when projected upon this context, the triads each seem to play their important part. I contend that the Perceived space concerns with the physical appearance and is shaped by the important note on public spaces in a post-disaster scenario being best working when informed by local culture (Chandani et al., 2019). The Representation of spaces, I propose can be regarded as the spatial solutions and developed plans, or concept if you will, for such post-disaster spaces of gathering which are essential to be carefully worked out. If not, the problem of the supply not meeting the demand is imminent (Aquilino, 2011). Lastly there is the Representational or "experienced" spaces which are to do with the way such spaces of gathering will be used. This is in end what is most vital, since the users, or disaster victims, will need to find their comfort in these spaces.

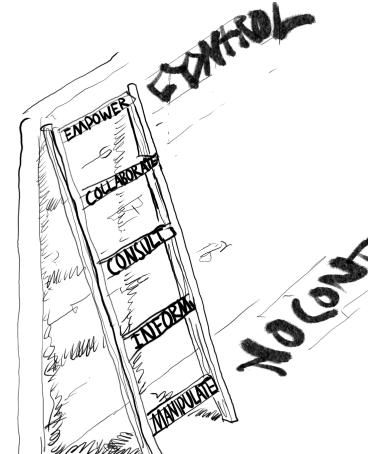
Participation

Continuing from there, in their research Ghezelloo et al. (2023) also imply the importance of a participatory approach and for that reason they combined Lefebvre's theory with Arnstein's ladder of participation as a tool for analysis. Arnstein's ladder describes the different levels of community control over project decision-making, ranging from manipulating (no control) to empowering (control).

As Davidson et al. (2007) however point out, 'participation' has been an overly and widely used term outside of and within the post-disaster context. I stand by them flagging the idea of defining community participation in a 'project environment'. Rooted in Arnstein's original theory the following definition is given: "When a community is actively involved and empowered throughout several parts of decision-making processes throughout every phase of a project"

Participatory Design (P.D.)

In the light of this research, it is important however to direct the scope towards Participatory Design (P.D.) specifically. The term 'participatory design' as it has been used and developed since the sixties, stems

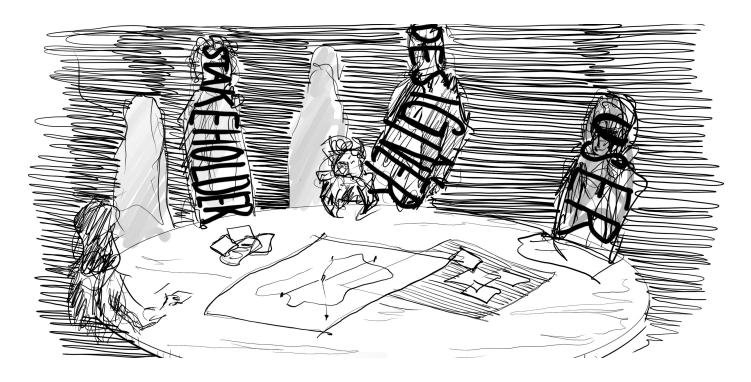


from Scandinavian researchers in the field of Human-Computing Interaction (HCI) research (IxDF, 2023), where a more democratic and worker-involved approach was desired. Along the last decennia it has been simultaneously redefined, reinterpreted and rearticulated throughout various fields of study and work (Celik, 2022). The field of architecture is one them, with an extensive body of literature on the subject spanning several decades (Luck, 2002; Sanoff, 1988, 1999, Hodson et al; 2023). The primary idea of participatory design can be seen as an approach in which the designer, user and stakeholders have an equal input to 'generate a design' (Hussain, Sanders & Steinert, 2012). As already briefly mentioned in the introduction, and also showing in the research of Ghezelloo et al. (2023), is the involvement of communities in post-disaster projects heavily underlined as being of vital importance to the success of such projects (Schilderman & Parker, 2014; Aquilino, 2011). A P.D. approach in a post-disaster context does come however with some extra hardships which should not underestimated. Here I talk for example about the vulnerability of certain groups within communities; the temporality of a project; resource constraints; communication; cultural sensitivity and often the matter of a certain urgency (Schilderman & Parker, 2014; Aquilino, 2011; Davidson et al. 2007). As many of the projects discussed in the bundles of Schilderman & Parker (2014) and Aquilino (2011) demonstrate, the involvement of a dedicated team, doing the proper research into local culture and

doing the proper research into local culture and aiming to activate local communities is vital to overcome such challenges. I argue that a certain humbleness from the role of the 'expert' (e.g. architect, designer) is most needed and arguably becomes more pedagogical in a way of activating communities in these difficult times instead of just blindly supplying solutions based on a three-day visit.

Critical notes on Participatory Design

While there is a plethora of literature praising, and demonstrating the possible qualities of Participatory Design, as becomes evident over the last paragraph, there are several pitfalls which cannot be left unmentioned. One of these critics is the German architect and writer, Markus Miessen. In his book The nightmare of participation, Miessen explores the challenges of participatory practices. One of his main arguments which becomes evident over the course of the book, is that participation which is not scrutinized can lead to tokenism (Miessen, 2011), and the involvement of a community becomes a mere symbolic gesture without genuine influence. Furthermore, is he being critical of the idea that everyone should have a say in the design process, and that this can result in a superficial democracy that does not necessarily lead to better outcomes. While I completely understand what Miessen is suggesting, I do propose that, at least in the post-disaster context, the active involvement of people in how their living



environment is being (re)shaped is rather necessary, and as the studied literature has shown, the most quality and long-lasting projects had communities actively involved. Moreover do I believe that in the case of these post-disaster projects, this participatory approach is also a way of activating a community, having them think about the way that their environment is shaped and how they see themselves sit within this environment. This is something which researches Rizzi & Porębska (2020) similarly touch upon. Nevertheless, is the critical view of writers in the likes of Miessen needed to maintain a sharp view of one's own participatory trajectory to avoid misusing it.

Participatory Design Tools

The shape in which P.D. manifest itself is mostly done in the form of "workshops" or "sessions" in which the aforementioned users, designers and stakeholders get together (Sanoff, 1988). Different strategies and with them different tools are used to reach certain goals set within these participatory sessions. In their research, renowned researchers in this field, Sanders, Brandt & Binder (2010) give clear definitions of the elements which make up these P.D. strategies. These are the following \mathbb{Z}

"TOOLS" - Materials and components which are used

"TOOLKIT" - Collection of Tools

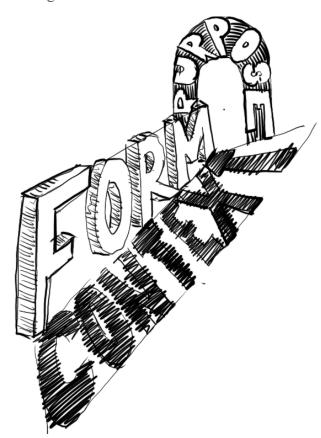
"TECHNIQUE" - Tools & Toolkit put into action

"STRATEGY"

Combination of tools, toolkit and techniques put together

Furthermore, do they establish a framework which consists of the Form, Purpose and Context (Sanders, Brandt & Binder, 2010). The following definitions will be followed throughout the research: *Form* - the "What"; kind of actions (e.g. used tools); *Purpose* or the "Why"; defines which tools are to be used. These are categorized in four: Probing (Investigate), Priming (Prepare), Getting idea of experiences & Generating ideas. And lastly there is the *Context* or the "Where" and "How". Defined by group(size),

venue and stakeholder relationships. I suggest the addition of a clear vocalization of local cultural setting (Hussain, Sanders & Steinert, 2012). So depending on the context and the purpose, different forms can be utilized to go about these P.D. sessions.



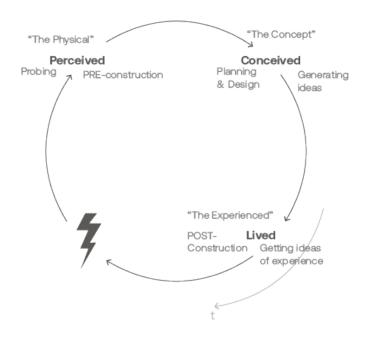
If we revert back to the triads of space, the context is clear and asks for the previous mentioned considerations. As Hussain, Sanders & Steindert (2012) state: "Participation and how to participate has to be negotiated and adopted to local setting". Besides that however, I find there to be a direct relation between the different triads and the different purposes as proposed by Sanders, Brandt & Binder (2010). In here I argue that the Perceived Space triad, dealing with the physical appearance, is most closely related to the Probing – investigation – purpose. Since here the context is being translated into a project by research done by the designers themselves. This can include literature, interviews or P.D. tools like asking people to create collages or diarize their thoughts and ideas, with which the designer is able to establish an initial framework. The Representation of spaces, I propose can be regarded as the spatial solutions and developed plans, or concept if you will, for such postdisaster spaces of gathering which are essential to be carefully worked out. If not, the problem of the supply

not meeting the demand is imminent (Aquilino, 2011). Lastly there is the Representational or "lived" spaces which I propose are to do with the way such spaces of gathering will be used. This is in end what is most vital, since the users, or disaster victims, will need to find their comfort in these spaces.

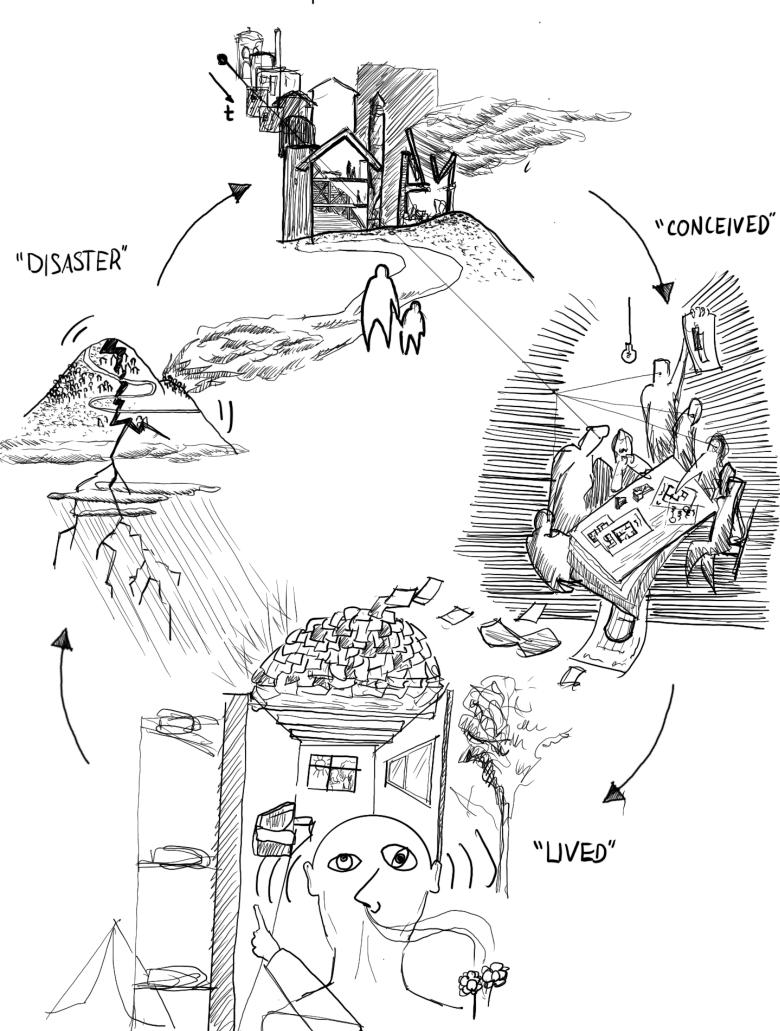


Production of Spaces of Gathering in a post-disaster setting along participatory design tools. Each triad holds serves an important purpose for the success of these spaces and can be achieved through different participatory design strategies.

Understanding when one would implement the different toolkits, asks for an apprehension of the temporal aspect of P.D. In the post-disaster context. Rizzi & Porębska (2020) propose such a revised 'timeline' on which I argue the three triads with their Participatory Design purposes can be projected. In their theory, Rizzi & Porebska (2020) argue that lessons learned from past disasters, regardless of their scale, should launch participatory processes involving all stakeholders (decision makers, citizens, experts etc.) and throughout the process the interdisciplinary blueprint should be subsequently scrutinized by all groups involved. The final version of the plan as they state: "is oriented towards the future of the system, and they all embrace potential future threats" (2020:13). The following image gives an impression of this timeline, in which the three triads are organized consecutively, with the P.D. Purposes embedded in these different phases.







Relief, Resilience and their manifestation in a Space of Gathering

Now that we have established a framework for the way Spaces of Gathering can be produced in a post-disaster context, it is important to understand how such a S.o.G. can provide in the relief and resilience as posed in the research question. For this is firstly necessary to construct a definition of these terms in the light of the post- (and pre-)disaster setting. From there it is possible to describe how a physical space could provide is these relief and resilience processes best.

Relief

"A feeling of reassurance and relaxation following release from anxiety or distress."

- is the definition of the term relief as given by dictionary (Merriam Webster, n.d.) And clearly has a relevancy in a post-disaster context, as this can be understood as the *anxiety or distress* - part within the definition. Besides this more general terminology, relief also has a more specific meaning in relation to disasters (also known as *disaster relief*). Disaster relief is described as "the immediate support provided to minimize suffering and provide human needs such as food, water and shelter" (FutureLearn, 2022). In any case, relief concerns the time frame after a disaster and rages from the very immediate to a longer time frame, arguably depending on the scope of the (disaster) event.

Resilience

"The ability and plan for absorbing and adapting more successful to adverse events".

"The ability to resist the onset and impact of a disaster"

- E. Combaz (2016).

Whereas relief seems to deal with the more immediate and short term coping within a disaster context, resilience can be described as its 'longer term' kin. As Vale (2013) points out, the term resilience is used in various manners within different fields of work. The most important distinction is that where some are regarding resilience as the ability to return to an equilibrium in the aftermath of distress, others



regard it as an ability which has an 'evolving' nature. A difficult part however, when looking for a way to generate this evolution from a state of distress, is the often found friction between the short term and the long term goals of the involved stakeholders and the multiplicity of settings which resilient practices much engage with. As Vale (2013) points out rightly, resilience-seeking processes will always entail a more continuous path rather than an achieved end-result. From my experience within the field of architecture and its studies, the term resilience has become a hot topic term which deals with the same hollowing as the terms 'Sustainability' and 'Placemaking'. Nevertheless, is the understanding of the idea of resilience as being a more longer-term evolving process which deals with the post- as well as the pre-disaster time frame in this context of crucial importance. From this I contend having stakeholders within a post-disaster project on board and making them aware of this concept is rather necessary.



Relief, Resilience & the Disaster Management Cycle

As a way to work towards tangible solutions which stem from the idea to provide relief and generate resilience by means of a physical space, I have projected these concepts over the disaster management (D.M.) cycle. The reason for this is because the workings of the D.M. cycle primarily aims to reduce or avoid the potential losses from hazards, assure prompt assistence to victims and acting rapidly and effectively (Khan et al., 2008); and this is essentialy the aims of the supposed S.o.G. (see p.14). The D.M. Cycle knows different renditions. They all nevertheless consist of four main phases.

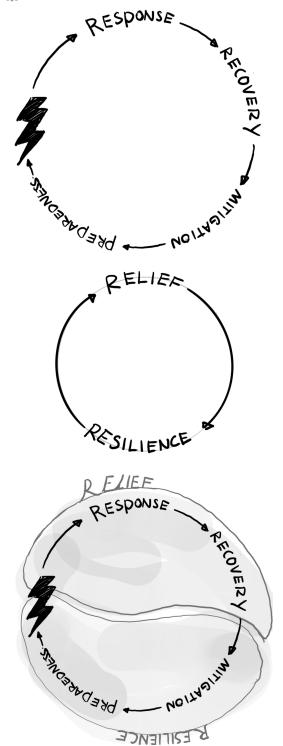
RESPONSE RECOVERY MITIGATION PREPAREDNESS

Response is described as the efforts to minimize the hazard created by a disaster (e.g. emergency shelter, first aid and search & rescue); Recovery is the process of returning to a state of non-emergency and safety (e.g. psychological support, medical care, temporary or permanent housing); Mitigation is seen as the minimizing of effects of (future) disasters (e.g. building codes, vulnerability analyses, public education) and Preparedness deals with the planning for response

(e.g. emergency training, warning systems). While the different phases are not strictly separated but can, and often should, overlap, they generally are organized as phases following up on each other.

I argue that the processes of searching relief and generating resilience can be described as phases similarly, constantly following up on each other. In and out, post- and pre-disaster.

I propose the parallel between the two cycles as follows: Ξ



The next step in the path towards the sought tangibility, is the acknowledgement of "functions". I argue that based on the previous, a functional distinction can be made. This distinction is between a 'Social function' and a 'Emergency function' which the S.o.G. should contain to adhere in the provision of relief as well resilience within a community. I propose this distinction runs cross-parallel over the relief/resilience projection when seen in the light of the D.M. cycle.}

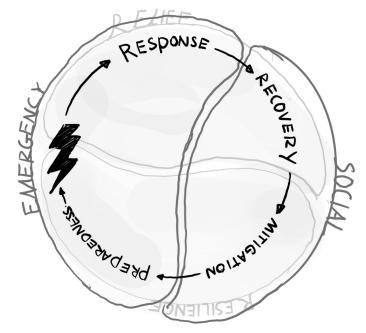
From here it starts to become possible to attribute requirements for the S.o.G. Per cycle phase. The scheme below shows how this can manifest. Important within this scheme is the note that these phases and their requirements are not strictly bound, but rather overlap and seeping through the permeable phase borders.

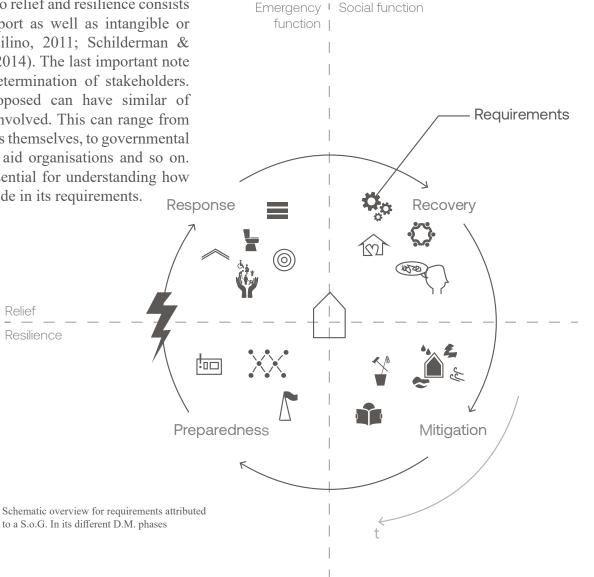
An important contrast which can be found between eligble requirements, is the *physical* versus the *social* requirements. As many of previous post-disaster projects show, the way to relief and resilience consists of physical aid or support as well as intangible or social constructs (Aquilino, 2011; Schilderman & Parker, 2014; Aldrich, 2014). The last important note to be heeded is the determination of stakeholders. Every requirement proposed can have similar of different stakeholders involved. This can range from the community members themselves, to governmental institutes, international aid organisations and so on. Pinpointing them is essential for understanding how to have the S.o.G. provide in its requirements.

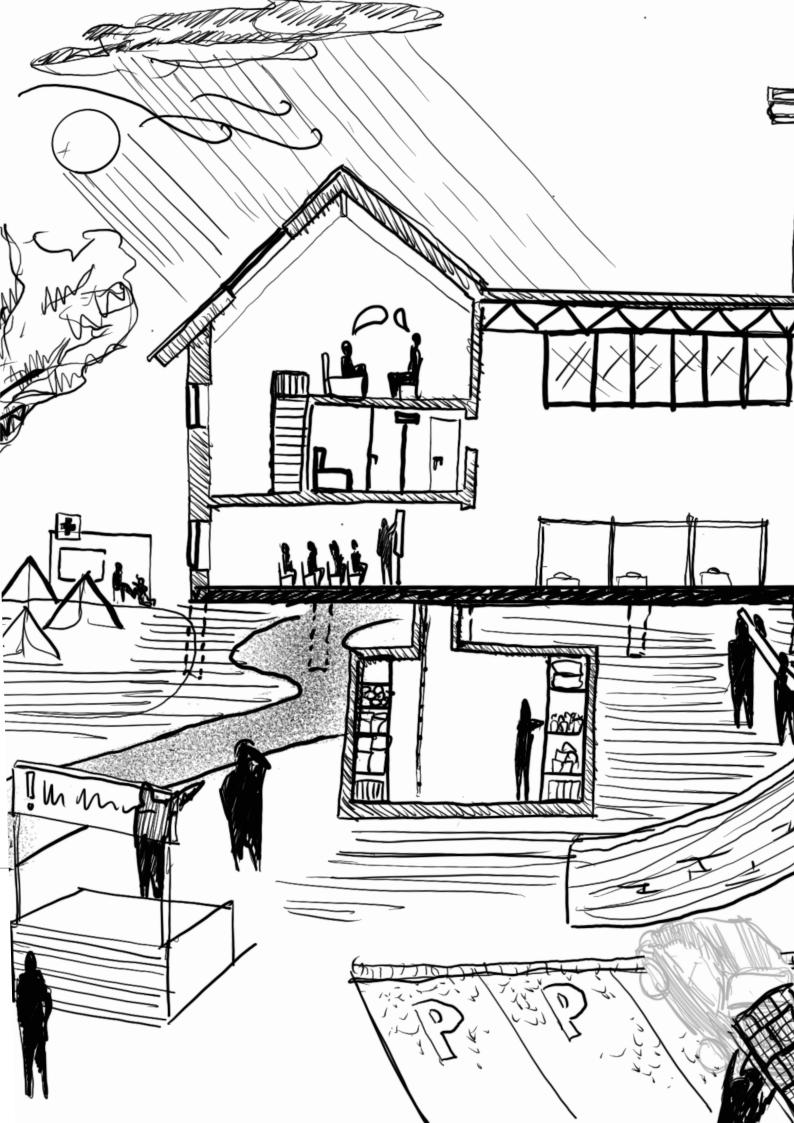
Relief

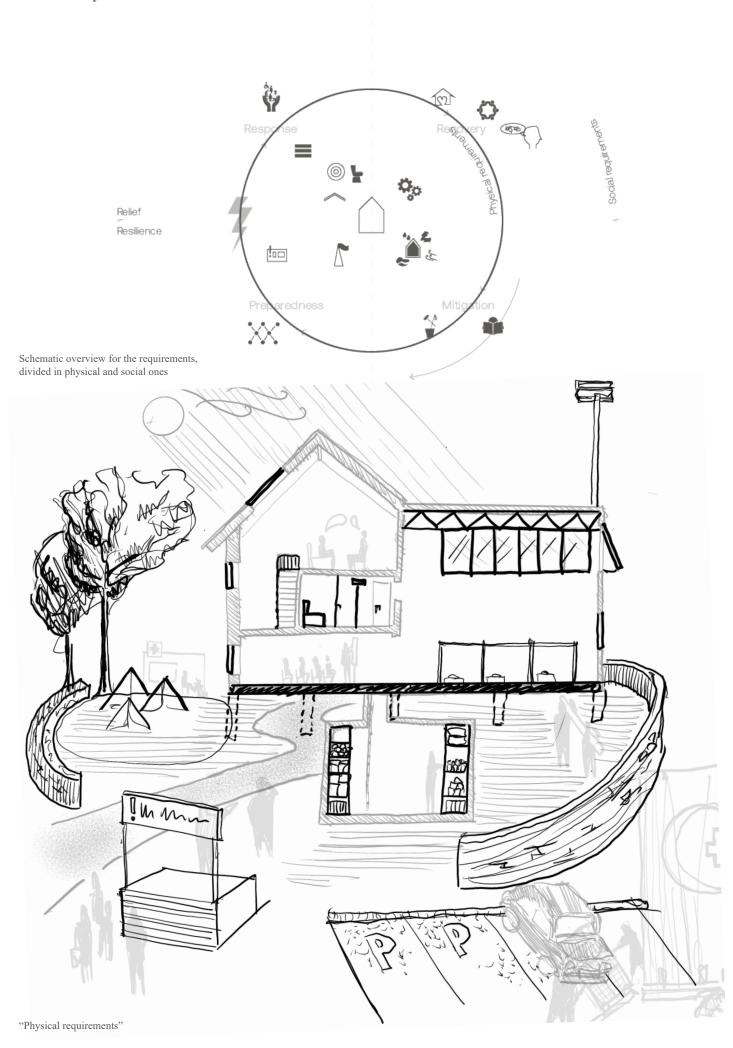
Resilience

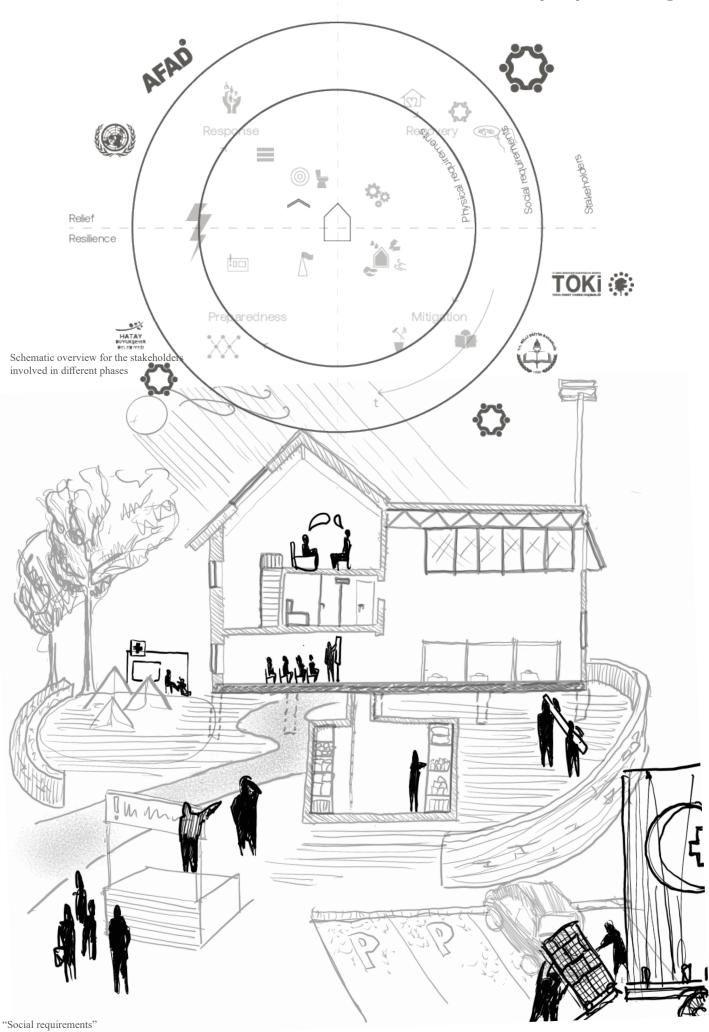
to a S.o.G. In its different D.M. phases

















'Kakikumori yuudatsu nami no arakereba ukitaru fune zo shizugokoro naki

'Clouds gather in darkness,
Waves rise angry in a sudden storm;
I am like this floating boat
Uncomfortable'

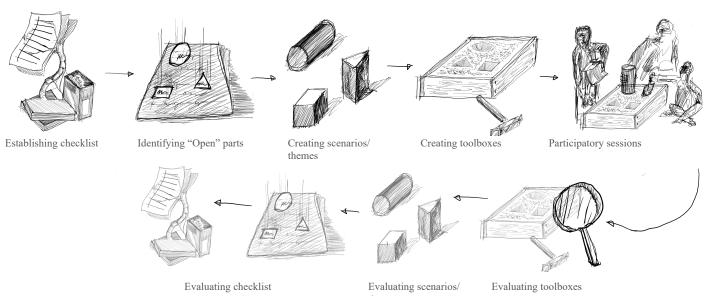
{Methodology}

Chapter exordium

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 (Hauberg, 2011). I argue that the exploration towards a 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 (see p.24-25) rely on the premises of researching and generating ideas along design tools (Sanders & Binder, 2010). 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 needs 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 (Katoppo & Sudradjat, 2015), which is exactly what the participatory design approach is all about.

Methodological structure

Within this research, this PARtD method has taken the shape of a multiple part structure. Herein, firstly a S.o.G.-checklist has been designed. Then, within the checklist, the parts which have been considered to be "open" in the way that they can be manifested, have been identified. From there, these open parts have been converted into scenarios. These first steps can be considered the 'probing' or investigatory phase which deals with past-present within the temporal cycle (see P.24-25) Continuing from there, several P.D. toolboxes, based on the research of Sanders & Binder (2010) have been developed to discuss these said scenarios with the sample groups from the Örnek Evler village during two participatory workshop sessions. This can be considered the 'priming' and 'generating ideas' phase and sits within the presentfuture on the temporal cycle. Eventually the validity of the P.D. toolboxes, the scenarios and the list of requirements will be discussed contraversim upon which an advice for the establishing of such Spaces of Gathering can be given.

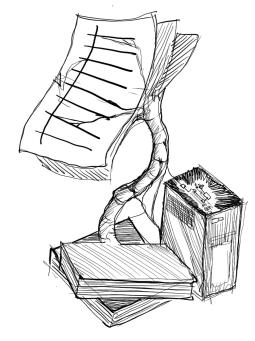


List of Requirements

This List of Requirements (LoR) can be seen as a 'relief/resilience' checklist, to which Spaces of Gathering in Antakya have to adhere in order to provide in their emergency and social function. Besides this, the theoretical framework discusses the predecessors of such 'checklists'. I argue that it is not necessary to re-invent the wheel, but rather build forth on the precedents, however extended along the ideas as proposed in the theoretical framework. This means not generating a mere evacuation centre providing mere response and preparedness, but also can offer recovery and mitigation for a community.

The composed list is based on the theory of the components of relief and resilience and their 'subcomponents', based on the disaster management phases: Response, Recovery, Mitigation Preparedness. These have been converted into chapters each containing requirements to which the S.o.G. should comply to in order to provide in each of these phases. The requirements or 'considerations' have all been divided into a physical or social category and are provided with a short explanation, the source of the consideration and how one might obtain additional information about them (see appendix A). the sources for the considerations mainly come from existing checklists, supplemented with considerations by myself (from the perspective of an architect) which are based on the ideas and literature on how to achieve relief and resilience. Furthermore are the chapters categorized into "Set" and "Open". The Open parts, as opposed to the Set parts, are more ambiguous and because of that, are in need for discussion for they can be designed in various ways. Within the checklist, the following chapters have been defined as "open" and thus converted into themes which have been investigated and prepared into a participatory workshop: Site, Function, Safety, Healing architecture, Building maintenance, Monumentality and recognizability. These chapters have then been distilled into 5 themes:

Location, Function, Safety & comfort, Organization and Recognizability



These themes have been worked out in several scenarios as a way to communicate them with the participants of the workshops. Interestingly enough, do these different themes all deal with different key questions which are at the base of research and architectural design simultaneously (Why, What, When, Where, Who and How). When projected on the aforementioned themes, the following connection can be made:

LOCATION - WHERE

FUNCTION - WHAT

SAFETY & COMFORT - HOW?

ORGANIZATION - WHO?

RECOGNIZABILITY - WHY?

I argue that this observation can be seen as a promising overarching quality embedded in the composed checklist and distilled themes.

Scenarios and Toolboxes

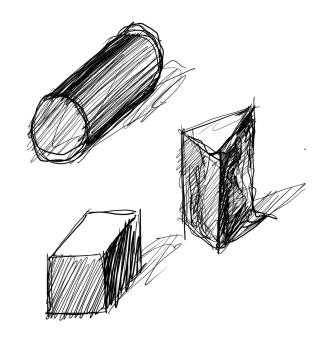
As a preparation for the participatory sessions, different scenarios for the aforementioned themes have been composed. Within this research, the scenarios can be described as a fruitful soil which is used in the participatory sessions. They consist of rudimentary ideas generated by the author for each of the Open parts, which are rooted in preliminary research on the cultural history of Antakya, site analysis, healing architecture, personal conversations and own experiences while having spent time there (part of the "probing"). It is important to mention that these scenarios are not results, but mere serve as a way to more easily open up discussion and spark ideas among the participants (priming and generating ideas).

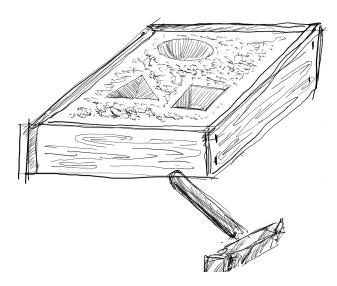
The reasoning for choosing this scenario-approach, is rooted in a conducted by Albadra and her fellow researchers back in 2020. Within their research, they tested two participatory methodologies within a refugee camp. This research focused on shelter housing structures. The two methodologies were baptised a Design-your-own and Adapt-a-design strategy. The results showed that the adapt-a-design, which let participants study, discuss and edit existing design proposals, resulted into more constructive ideas and more fruitful discussions (Albadra et al., 2020). The following paragraphs will discuss the preparatory research conducted and the scenarios in which this research resulted. Following from here, the P.D. Toolboxes which were composed to discuss these scenarios within the P.D. sessions are described.

Theme 1: Function

The establishment of different scenarios for the function of the Space of Gathering started with the necessary research on the cultural history of the city, region and country. In combination with conversations I've had with several people from the region and keeping in mind the requirements which are contained within the checklist, the following list of function-scenarios has been composed:

The Bazaar; The Tea garden; The Darüşşifa; The Sport complex and "Other functions"





Bazaar

"My cousin said he would give up everything if he can experience the fragrances of the Usun Çarşı one more time"

- Nuray Yildis

The bazaar holds an important function in Türkiye and is intertwined with its history (Atalan & Arel, 2017). Especially in Hatay, with its rich cultural diversity, the bazaar is the place where all these different social groups come together in harmony, also due to a codependency within this realm of trade (Dogruel, 2013).

The (now heavily damaged, but operating) bazaar in Antakya is of a naturally grown nature, deeply interwoven in the urban fabric and shows the city's relationship with its past and present (Karagel & Karagel, 2014). The later 'designed' bazaars from the Ottoman era and contemporary shopping malls, which in certain facets can be seen a more capitalistic manifestations of the idea of the bazaar, but are highly appreciated within Türkiye (Koran, 2019). In an emergency setting, the different types of bazaars have their advantages and disadvantages embedded within. This ranges from the inherent storage space within bazaars to a sense of ownership which is beneficial for the maintenance of the SoG. On the other hand however, is it harder to regulate the amount of people present in such a space nor are several necessary amenities like showers naturally present in bazaars. }

Tea Garden (Çay bahçesi)

"The tea garden in the parks of Antakya is were we always used to play as kids and everybody came to relax or take a break"

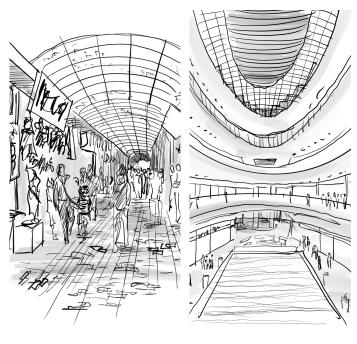
- Nuray Yildis

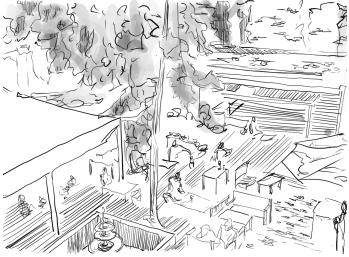
The tea gardens hold an important role in Turkish society. As Wohl (2016) elaborates on, these places can be defined as 'sacred' third spaces and function as "repositories of shared memory, mediating conflict that appears in other societal spheres" (Wohl, 2016; p.3). The tea gardens are often found either encapsulated in the dense urban tissues of the maternal parts of Turkish cities, but can however also be found as parts of parks in and around the city, making them arguably also eligible as spaces of gathering which can actually also serve their emergency function.}

Darüşşifa

"Dar = House, Sifa = Healing,"

The Darüşşifa can be considered the predecessor of psychiatric hospitals. They find their origin in the medieval times around the Seljuk empire. Ahead of its time, these places cared for mental patients through treatments which included light and sound therapy; pioneering the quality of today's clinics in terms of medicine, psychiatry and their relation to architecture (Benek et al., 2015; Benek et al. 2015(2))







While not existing, or at least operating, in this manner nowadays, this function is proposed as a mean to stimulate the participants to think about how such a place could perhaps provide them in the recovery they are looking for, as a more low-threshold kin of existing hospitals. Furthermore, can the lay-out of the darüşşifas studied, be considered to be eligible in an emergency function as well, with its alternation of smaller private spaces to bigger open courtyards, storage space for medicines and mostly enclosed typology.}

Sport complex

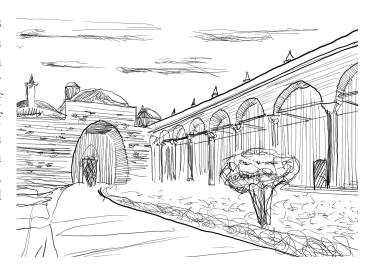
"I just knew I had to organize something for these kids to get their minds off and you know, everybody here loves soccer"

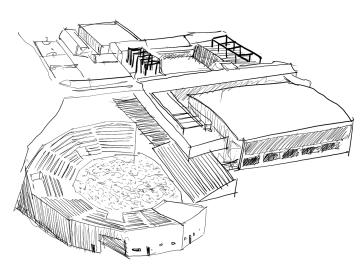
- Ahmet Iskendurun

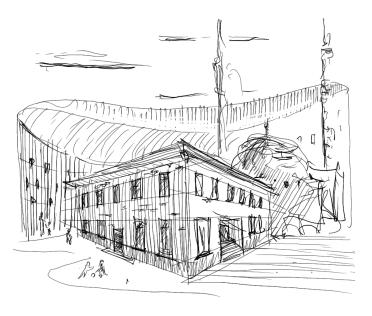
Within Türkiye, despite the recent economic setbacks and complex social issues, developmental actions are still prioritized and in this regard sport has received an increasing amount of attention. In the last two decades, there has been reinvigoration of nationbuilding through youth and sport development. This resulted in the opening of many youth (sport) centres throughout the country which are aimed to provide social, educational and sport activities for young people (Açıkgöz et al., 2021). When I was in Türkiye earlier this year, I experienced indeed that sport as means to distract from the harsh reality was welcomed. Local initiators organized sport events for the youth of Antakya stuck in the container camps. Providing such a space doesn't only fit into the S.o.G.'s social function, while many of the amenities which are present in a sport complex, like large fields, private changing rooms, but also proper climate control are desired in an emergency situation. }

Other functions

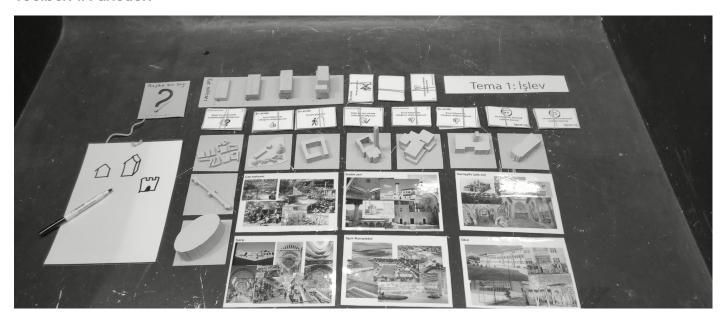
Besides the above discussed functions, are there other social and public spaces which are often designated emergency loci which have been brought up during the participatory workshops, for the sake of approaching the sought after discussions in way which allows for a broad perspective. Here, also functions which based on research and experience are deemed less suitable are offered. These functions include: school buildings, Religious houses and Stadiums (Norman, 2005). }







Toolbox 1: Function



These functions served as different scenarios which have been discussed and scrutinized during the P.D workshops. This have been done along the following tools. With reference images and typology models of several exemplary functions, the participants have been asked to place cards with different statements (*I would go here/would not go, I feel safe here/do not feel safe here*) on there which go for an emergency and regular scenario. Moreover have they been asked to propose other functions they might deem eligible.

Theme 2: Location

Within the second theme, the idea has been to investigate where such a Space of Gathering could potentially be situated, taking into consideration the terrain, distances and other site requirements.

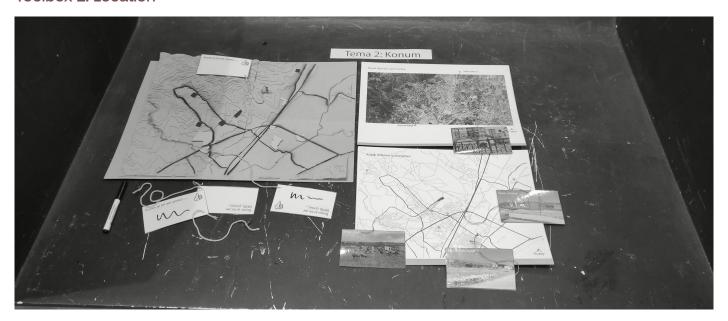
This research started by investigating existing policies for emergency gathering spaces and their requirements, which as mentioned concluded in the notion of absence of such policies. The Turkish government however does have a website where anyone could check where the three closest-by emergency gathering areas to a specific location can be found (Afet Ve Acil Durum Yönetimi Başkanlığı - Afet Ve Acil Durum Toplanma Alanı Sorgulama, 2023). While this sounds promising, and accumulative these areas could potentially provide for enough space in an emergency scenario (IOM & UNICEF, 2016), several problems arose when testing this for sites in and around Antakya: First of all, the sites assume an equal division of evacuees, which in reality will hardly ever be the case (Nagarajan & Shaw, 2021). Furthermore do I question the knowledge of people about this website. It is not necessarily easy to find online and only exists in Turkish, while many citizens of the city of Antakya are non-Turkish (Doğruel, 2013).

Then, several of the designated locations, upon closer investigation, turn out to contain functions which could jeopardize a safe situation (e.g. a hospital, army terrain or are situation right along a big arterial road (see appendix B, p.66)

So for the establishing of possible eligible sites, a study has been conducted along the "Set" site parts of the composed checklist (see appendix A). Through remote sensing, combined with personal experience in the surroundings, possible threats and hazards are identified and mapped (see appendix B). The Örnek Evler village served here as the reference point and the four-kilometer radius, identified in the existing website from the Turkish government was used as a referenced maximum distance to a possible site. From here, four eligible sites have been distilled (see appendix B).



Toolbox 2: Location



Within the participatory sessions, firstly, before touching upon the findings from the preliminary findings, the personal knowledge and instincts of the participants have been touched upon. This is done along a joint exercise in which with the visual aid of maps of the direct and greater environment of the village a joint mind map is created. This mind map is a response to the question: "If something were to happen, where do you go (if you're at home or if you're out) and how do you get there?". Then, the different hazards and proposed sites, identified through the preliminary research will be visually represented on the maps and the validity has been discussed as a group.

Theme 3: Safety & Comfort

The next theme combines the parts of Safety and Healing Architecture from the List of Requirement (see appendix A). It can be considered a bit more experimental and revolves mainly around the subjective question: "which physicial aspects and attributes does the S.o.G. needs to be experienced as safe and comfortable". The literary backbone of this part is a combination of social studies on how to promote fostering trust and building social capital (Aldrich & Meyer, 2014) and research on the effect of spatial elements to people's multi-sensory experience of safety and promoting recovery (Krokowska, 2021; Spence, 2020).

From this research, a number of topics have been identified to be discussed during the participatory workshops. These are:

"Structure & Size"; "Spatial qualities" & "Multi-sensory experience"

Structure

"I've been sleeping in my car ever since the earthquake happened. I do not feel safe sleeping in a building anymore, let alone a concrete one"

"Even though our house is still standing, my wife does not want to take the risk with our child and are staying in a container home instead."

- inhabitants of Kuyzetepe

From these personal conversations I have had earlier this year, it becomes evident that a lot of people in Antakya do not feel comfortable in the concrete structures which have caused so much trauma. This also translated into having seen a lot of new structures arising being built in steel frames, although the knowledge to properly and most effectively built with them is not embedded in the local building culture (Abrahamczyck et al., 2012, p. 691) and might raise issues for their durability and lifespan. This raises the question what kind of structure might be eligible to build with for people to feel safe in them and want to make use of it in the first place? For the participatory workshop, a variety of structures have been researched

in the context of Antakya as a means to open up this discussion with the participants:

Himis / Bagdadi

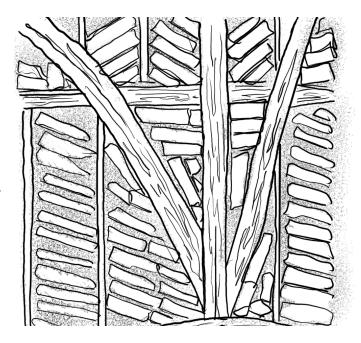
These traditional forms of construction are deeply rooted in the Turkish building culture, before they became replaced with the reinforced concrete-craze in the second half of the last century. In the case of *Himis*, which is similar to the Dutch and German *Fachwerk/Vakwerk* houses, the main structure consists of timber frame and has an infill of masonry, whereas *Bagdadi* has an infill of wood scraps which could not perform structurally, creating even lighter structures. Even though this way of constructing has been proven to be very earthquake resilient compared to the reinforced concrete structures, its application have not been picked up in response to the devastating earthquakes from the last decennial. (Gülkan & Langenbach, 2004).

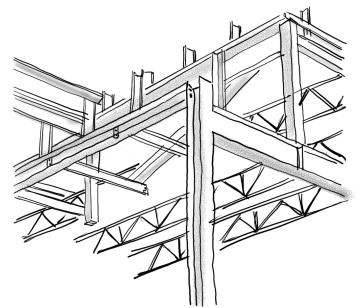
Steel structure

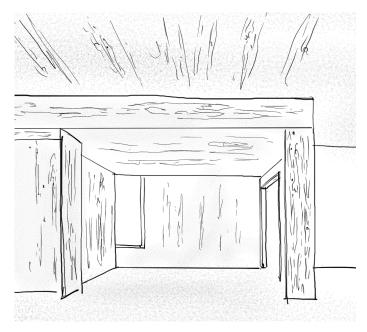
As mentioned, building in steel structures is not the standard in Hatay, or Türkiye for that matter. However, from what I've seen, in response to the earthquakes, Antakya is eagerly adopting this as a replacement for the reinforced concrete structures which has become a boogeyman amongst the construction materials. Adventages of steel structures are their industrial nature, their possibilty for a rather fast assembly on site and the elastic and ductile qualities of the material. Disadvantages however, consists of the susceptibility to buckling, higher initial costs and fireproofing costs (Structural Community, 2022).

Processed wooden structure

Processed wooden structures, like CLT and GLULAM, which enjoy a lot of attention throughout the world for its more 'sustainable and durable' character, is in Türkiye still a rather unknown and barely used material. This nearly non-existent wood construction culture is partly due to the dominant concrete culture and the expenses that come with importing structural wood, while the manufacturing of wooden structural elements is even more rare. Events like the recent earthquakes, do however open up the conversation again and might spark a demand for change.







Reinforced concrete / gabion steel cages & debris

As mentioned before, building with concrete has become the standard within Türkiye. This has also been the big problem in a lot of structures being heavily damaged or destroyed (Wang et al., 2023). Still, when executed properly, reinforced concrete can be trustworthy material in a seismic active locus. Furthermore, the amount of waste as a result of this many buildings is another problem very eminent, where as one drives in the area around the city, they will be presented with numerous landfills. So as a way to deal with this problem and saving costs, gabion steel cages filled with debris has also been conveyed as option of discussion, to see where the fear of the material lies exactly.

Size

Within the P.D workshop sessions, the size of structure has also been discussed. This to find out if multiple-story buildings can still be perceived as safe, and if so, what the structural and material requirements need to be in order to adhere to this feeling.

Visibility

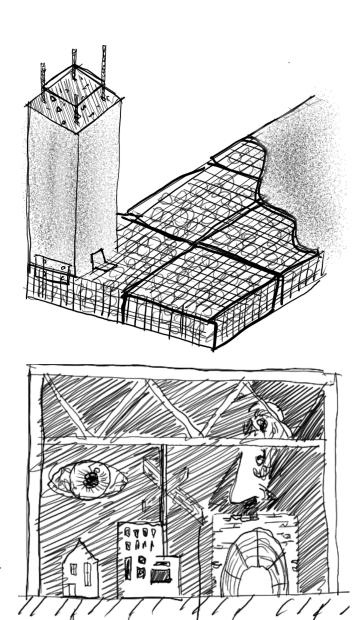
Moreover, will the appearance or visibility of the carrying structure be discussed. This to find out if people feel more comfortable in a structure which is visible, or actually the opposite. There another interesting incidental here which has to do to the ability of better controlling and maintaining the main structure.

Spatial qualities

With the help of reference images, the participants will be invited to respond to and discuss: the location and size of window placement; the shape and size of interior spaces; Finishing material; Colors used and which views are best to be framed in order to generate a feeling of safety and comfort.

Multi-sensory experience

The idea for testing this subject and its presence in the List or Requirements, stems from the acknowledgement of the importance of the multisensory experience embedded in architecture and how it can be designed for, in its 'promoting' a feeling of safety and comfort (Krokowska, 2021; Spence, 2020).



For example, the smell of spices and herbs which might evoke a feeling of home or a familiar place like the bazaar, while also having the benefit of covering unpleasant smells in a crowded emergency situation; the feeling of soft fabric or woods instead of hard stone and concrete as a means to comfort; or the sound of running water echoing through the space as had be implemented in the Darüşşifas to comfort its patients (*The Harmonic Healing Houses of Turkey* | BPS, 2020)

Toolbox 3: Safety & Comfort



For the P.D. toolbox for this part, I've decided another way of getting the participants to express their feeling about these topics, since they might be a bit more abstract or harder to grasp. For that exact reason, the part of the participatory session about Safety & Comfort, has been the puzzling together the qualities they seek for throughout the elements discussed above (Structure & Size, Spatial qualities and Multi-sensory experience). With simple color codes, which express a range from very comfortable/safe to very uncomfortable/unsafe, the participants will walk through the several parts which have been translated into sketch models, images and sketches for the sake of the participatory sessions.

Theme 4: Organization

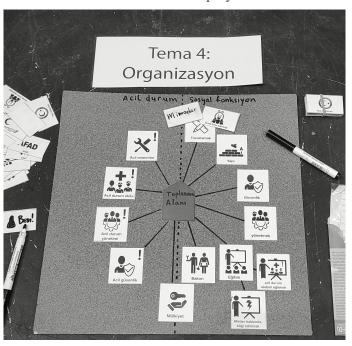
This theme can be find intertwined throughout the LoR and has to with the identification role division of stakeholders in the different phases. It is included into the participatory workshops to get an idea about people's view on their own expected involvement (personal, community) and what they expect (or don't) from (governmental) institutions and international aid organizations.

Within many literature about post-disaster projects, the active involvement of communities throughout all the phases comes forward as a key factor when it comes to the success of such projects (Schilderman & Parker, 2014). Besides, is the establishment of community-led structures mentioned multiple times as a way to generate more community capacity (Schilderman & Parker, 2014; Aquilino, 2011).

Toolbox 4: Organization

This part is done along a composed 'card' game, where each of the cards represent involved stakeholders. A mapping tree, which is partly filled as a set-up, has been put up with different scenarios, related to the S.o.G.

on there (e.g. construction of the S.o.G., maintenance, education on disasters, repairs after damage, training of emergency responders etc.). The participants were asked to pin down the different stakeholders to where they feel certain stakeholders have responsibilities and where their own come into play.



Theme 5: Recognizability

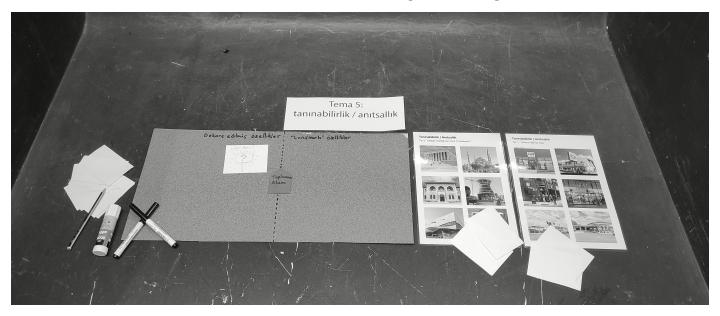
This is yet another bit more experimental part which invited the participants to think with about how we can create places which generate a certain 'monumentality' or 'recognizability in their double function, to prevent communities in Türkiye to forget again.

This idea is based on what Eyre (1999) describes about the longer term psycho-social and political significance of some disasters and the ideas of Scott Brown & Venturi (1972) about ways we perceive and register building functions from their appearance an how this can be used as a design tool. Eventually the aim should be to have such Spaces of Gathering embedded in the cultural DNA of a community and

society prone to disasters and for that they might need to be distinguished in their unique double function.

Toolbox 5: Recognizability

To discuss this theme, first it has been explored with the participants what makes certain structures recognizable for their function or are conceived as a monument. This is done with the help of reference images of Turkish buildings and structures. These are based on the 'decorated sheds' (simple, flexible structures, conveying meaning through signage and symbols) and 'ducks' (which overtly represent their function) as Scott Brown & Venturi make this distinction (1972). After the idea of this distinction had been conveyed, together with the participants a discussion and search for ways our SoG can obtain these qualities took place.



Workshop structure

Two separate workshops have been hosted on two different days within the week I spent in the village. They were hosted on Saturday with women (7) and children (8) and Sunday with men (7). Two boys (aged 13 and 15) who also were excited to join after they heard about it, attended the second workshop as well. The ages of the participants ranged from young children to the elderly.

The days were picked due to the availability of the participants. The choice to separate the women and children from the men followed a conversation held with Zulal prior to the workshops (my friend and initiator of the Örnek Evler project, who served as my translator during the workshops). We came

to the conclusion that in order for the women and children feeling most comfortable to speak their minds it was best to organize it this way. The days around the workshop days have been used preparing and processing the results of the workshops as well as getting familiar with the people in the village. Moreover had the second workshop been altered slightly here and there, depending on how the first one proceeded: In Theme 1(Function), instead of first letting people scrutinize the proposed scenarios, the participants were first asked to come up with other functions themselves, preventing being stuck in what is proposed. The second alteration was in Theme 4 (Organization), where instead of everyone just placing the cards with each occupation, a discussion was held

per occupation with the cards being kept as mere reference.

The workshop started with a short introductory presentation about who I am, my relation to the village and what I'm trying to uncover. Within this presentation, I also mentioned the important fact of my role as a student and managed expectations of the participants, as Albadra et al. (2020) express their concern about this in their research.

Hereafter, a short introduction round as a way of 'breaking the ice' and getting to know each other took place. Then, together we set out to walk through the different themes of the workshop, taking about half an hour more or less for each theme. Due to the time it took, not everyone was able to make it to the end, since people had other responsibilities to attend to. For this reason I decided to only discuss Theme 5 (Recognizability) in the first workshop and only having the children working on the collages. This choice was made upon realizing over start of the second workshop that the men approached the workshops' topics way more practical whereas the women and children easier tapped into their emotion and creativity which was most necessary for the last theme and the making of the collages. All themes were walked through with the whole group together.

INTRO → BREAKING → WORKSHOP → COLLAGES → DRINKS DUCTION THE ICE Theme X (Optional) &TALKS

Discussion







{Results}

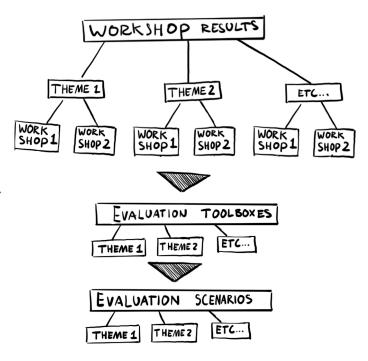
Chapter exordium

This chapter contains the results of the research. This is done by firstly walking through the results of the participatory workshops. The findings are described along notes and images taken during the workshops. Every theme is discussed per workshop after which the combined findings are elaborated on. Hereafter the toolboxes have been scrutinized following by a critical look towards the themes and belonging scenarios. Springing from the previous, the List of Requirements has been reviewed and edited where considered necessary. Any big changes are touched upon lastly.

Workshop Results

Theme 1 (Function) - Workshop 1

Due to the larger number of participants than planned, instead of everybody having their own stack with all different statements, the participants were invited to place cards from the stacks themselves. Interestingly enough, the participants also placed cards with the abstract models specifically even though this was not the initial intention. It helped however in making the



difference between functions more tangible. After the placement of the cards I opened up the discussion in response to the placement of the cards. Interestingly enough, many of the participants brought up several needs for the space to have (e.g. "an open structure" or "it should have enough water and supplies"). This showed that the participants did not necessarily were considering this theme of function standing on its own and were already looking for qualities the building should have. The most appreciated functions (combined approach of the current needs and in case of emergency) are shortly discussed below:

(Tea) garden / Park

Participants regarded this as a valuable option due to its natural character, often single floor lay-out, spaciousness and an often concrete-free construction.

Market (Bazaar-like, not a Mall)

This has been a function being missed by many of the female participants. When I however posed the issue of the lack of organizational structure in a bazaar like the one in the old city, they acknowledged this and proposed for example: "clear rules and management", "A structure resembling one bigger (open) building".

Sport complex

Another well-rated function was the Sport complex. Especially the children saw the potential in this and referenced the volleyball field which was being build right now in the village for which they were very excited. When continuing a the conversation on this idea another participant proposed that "the fields can be used to gather people in case of emergency" and the presence of toilets and showers was seen as a very important pro.

Functions like houses of prayer and schools were generally rated negatively. This had mostly to due with a fear of their construction in the aftermath of their experience. The Darussifa was not really rated at all. This had to with the participants not recognizing the function or understanding the need for them (as judged from the given images). After the discussion, I asked everybody to name one function they felt is most needed now. The following answers were given?

Interestingly enough I asked here for a Function and the participants in turn answered in amenities or qualities the space should have. This could have been due to a translation error, but I argue this can also showcase that the function itself is maybe less important than the necessary qualities (as they are also embedded in the L.o.R.). The general focus seemed to be towards an emergency situation throughout. In my observation I felt this had to due with a sort of lingering survival mode in which many people still reside.

Underground shelter; Wooden building; Enough clothes, water and food; Care supplies; Benzine and food; Toilets and first aid kits; Park; Sport field; Market; Sport park; A building like a very pleasant house; Transportation shuttles (also for disabled people); Sport arena; Pharmacy; Map (to know where a place of shelter is in case of emergency; Caravan (portable shelter; Asphalted road; Bicycle roads; Animal shelter area



Theme 1 (Function) - Workshop 2

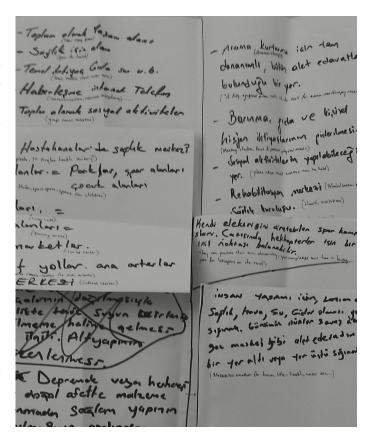
In order to try to get the participants to first think themselves without being "trapped" in the construct of the brought scenarios, I asked the participants to first write down their ideas about the kinds of function the Space of Gathering might gain.

In these written answers, a mixture of actual functions and amenities or qualities reappeared. And again, many of these amenities correspond largely with the elements already embedded in the initial L.o.R. (e.g. "telecommunication requirements", "basic needs like water and food" and "appropriate storage"). An interesting answer from one of the participants I found was: "A fully equipped place with all the tools necessary for aroma therapy". This relates in a sense to the Darussifa as a place which offer (alternative) healing methods which focusses on the senses and corresponds with ideas already embedded in the L.o.R. about a multi-sensory experience as a way to fiend relief.

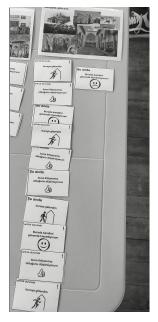
After this first assignment, the participants proceeded into placing the cards. As opposed to Workshop 1 in which everybody could grab cards from the stacks, I gave everyone a set of cards with all the different statements.

The (tea) garden was once again highly regarded. The natural environment is seen as an important factor. Several participants were unanimously discussing the quality of the Atatürk park; a riverside inner-city park within Antakya, which was much celebrated among the city inhabitants. As one of the participants stated: "If it was not for the city being in ruins, I would have spent probably most of days there". }

Whereas the park or garden environments enjoyed much verbal support, the participants were rather negative opinionated on the ideas of a market. This however focused mostly towards the concept of a mall. Furthermore, was the idea of a school function not regarded as a safe space in case of emergency, or being desired (as "there has been placed many (temporary) school buildings in the area over the last few months"). The sport complex was again rated positively a lot. As one participant put it: "Sport is distraction and becoming physically healthy again".









Contrary to Workshop 1, the men actually rated the Darüşşifa actively and positively. {{ Upon inquiring about it, one of the participants replied: "A house of healing in any shape or form is welcome now" and it could a place "which offers comfort mentally and physically". Some last notes worthy of mentioning are firstly the vocalized need for underground shelter (due to actual fear of nuclear war) according to two of the participants, and the practical or 'survivalist' stance with which the men approached the theme compared to the women and children.



Theme 2 (Location) - Workshop 1

As designed, the participants were asked to pin down on the map what they considered to be viable or deficient sites for the social space to be. The pins had cards attached to them for the participants to write down the reasoning behind their choice. Not unexpected, did most participants positively pinned the Örnek Evler village. It seems people regard the village's locality as being safe and pleasant. A couple of statements about their choice:

"It is a good (rain)water-proof place and a natural area"

"This place and its views are very nice"

"There is no danger around, no concrete around. The ground is solid and the houses are very safe"

Statements such as these reveal a certain amount of critical knowledge about the village's environment. Moreover, when comparing it to the site study done prior tot the workshops (see appendix B) it matches closely. So, besides participants choosing Örnek Evler for their personal experience reasoning, it actually seems they understand possible danger which a site like that of the village tackles. During the discussion two women successively brought up the issue of wetter soil closer to the river and a direct view towards the city from the higher ground of the village.

Other statements (from some of the children) are:

"There is a volleyball field"

"There is a library here"

"Because I'm very happy with the others"

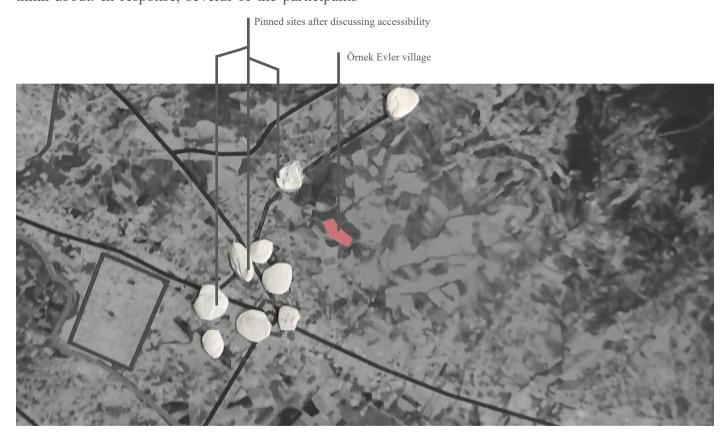
This shows again, similar to the first workshop, that people consider certain amenities or a social atmosphere as what can be make place to be pleasant or generate a feeling of safety and comfortability. I argue that the reciprocity which the S.o.G.'s function will hold with the environment in which it sits, will play an important factor to its successfulness.

After we discussed these positives, I asked what might be negative aspects about Örnek Evler as a location. Since nobody directly could think of anything, I brought up the idea of accessibility as something to think about. In response, several of the participants brought up the narrow access roads and the bad state in which they are.

After we discussed these positives, I asked what might be negative aspects about Örnek Evler as a location. Since nobody directly could think of anything, I brought up the idea of accessibility as something to think about. In response, several of the participants brought up the narrow access roads and the bad state in which they are.

So, from there I asked the participants to again look together and think of locations which might have the same site qualities which can be found in the village, but are better accessible in case of emergency. This led to the following Ξ . Interestingly enough, some of the participants (mostly the kids) pinned down locations below the highway even though we previously discussed the hazards of water and wet soil there. It looks like that especially for the kids, its hard to see posed discussion questions in relation to their predecessors, but are treating them one by one.

Two of the women however pinned sites along the asphalted road which connects the surrounding neighborhoods. When I asked them about it, one of them told that it would be a good choice to the higher grounds and the other said that there is simply more space when compared to sites closer to the main highways. Hereafter I told them that from my research I also found similar places to be eligible options. Still, I said that such sites are often already occupied. Either by farming ground or at the moment temporary shelters. So when proposing how we deal with that, the participants explained that "people will understand and cooperate if they see it will also benefit them"



Theme 2 (Location) - Workshop 2

The approach was the same as workshop 1, but instead of letting all the participants have a go at it simultaneously, I had them pin a site one by one. Again, were the most pins placed in or around the Örnek Evler village, joined by some of the following statements:

"It is open on all sides and gives people confidence"

"Everything here would be good for the social space except transport"

"It has a lot of trees around"

The open and natural character has once again been leading. A critical note is however also stated. And a fair one for that matter. The transport and accessibility is not up to par to the village area and it is interesting to see that the participants here also acknowledge that in the context of the S.o.G. production.

One of the men pinned a Container City site negatively, supplemented with the following comment:

"This city has recently been flooded which also damaged the structures (tents and containers)".

Another negative tag has been placed at one of the Container Cities close by. The statement reads:

"There are no emotional precautions taken here".

A third tag I found to be interesting was that of one pinned to the nearby industrial area. It said:

"The grace which industry brings reality is not too much". When I asked about it, the man in question explained about his view on how big industry around these parts has uglified the environment.

After all the pins were placed, which brought a similar result as workshop 1, I opened up the conversation, leading to an interesting discussion in which some important things were mentioned: The importance of the soil type (e.g. avoiding clay soil and distance from riverbeds), the advantage of being on higher ground, the absence of landslide risks and the low risk of spreading fires on the olive tree fields due them being well controlled.

Bringing up the problem of accessibility again, we together reached the same conclusions as in workshop 1, but the men also explained me that the asphalted roads around the area are of a bad quality in general and often erode away by the rain in a timespan of 2 years.



Theme 3 (Safety & Comfort) - Workshop 1

The third theme within the first workshop commenced as planned. The participants could place tags, ranging from 'very safe/comfortable' to 'very unsafe/ uncomfortable'. }

Construction

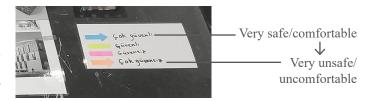
With the different proposed construction types, there was a clear preference for wooden constructions. Did did not go however for the Himis construction type. The participants association with masonry (embedded within the Himis construction) prevented them from it to generate a feeling of safety. As expected, was concrete rated as 'very unsafe', due to the participants' experiences during the earthquakes. Upon asking what we might do with all the waste material, the people felt it was a dangerous idea due to the dangers of toxic waste. Upon proposing if there is a way in which we can use it as foundation (so buried in the ground), they understood that there was something to say for that. Steel was rated with mixed feelings. Images which showcased a naked steel construction was rated positively, but images of large structures found negative response.

"What I see when I look outside" / Views

Ground floor views towards natural environments where rated best. Especially an image also displaying a pathway. Upon asking about this, the participants explained that the ability of seeing routing or "Clear ways to go" they consider important. One women explained that "After the earthquake, it was hard to orientate ourselves and we felt trapped". Contrary to these, were images of a higher-level city view rated worst. From the discussion, it became clear that the participants' experiences created an aversion against busy city environments and high story buildings.

"What I feel"/ Materialization

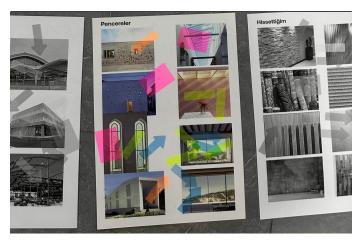
The images which contained calm and natural colour schemes were actively rated. Upon discussing, I asked about one of the images (a wooden detail) and why people rated it positively. It turned out that many people, due to their experience in the Örnek Evler village, grew a appreciation for the showing wooden construction. And not merely for its construction capacities, but also because "it feels warm and calming, especially during daytime with the sunlight coming in".















Windows

The different type of windows were rated with mixed input. Small windows were rated positively for the minimal risk of shattering glass, but negatively for the claustrophobic feeling and lack of overview they might generate. Big windows were basically rated vice versa: Positively for the connection towards outside and bringing in natural light, yet negatively due to the fear of breaking glass and "less strength in the wall". Ceiling or roof windows were generally rated negatively due to a fear of falling glass.

"When I look around" / Interior

The images containing living room-like interiors where rated best. One participant proposed that "the space should feel like a home". The interiors with visible wooden constructions were rated positively as well. Again was the workshop space in the village mentioned as a reference, with openness, natural light and visibility given as important factors. The spaces with a more darker palette or lacking windows were rated the worst.

Colours

Multiple participants rated black with the 'very safe/ comfortable' tag. Upon asking about this, it turned out that this was merely the favourite colour of these participants. Otherwise were lighter, colder colours rated highly and colours like red and orange rated lower.

Amount of floors

There was a clear preference towards lower buildings (single or two floors) and multiple people stated that they would not feel comfortable utilizing a higher building in case of emergency.



Theme 3 (Safety and Comfort) - Workshop 2

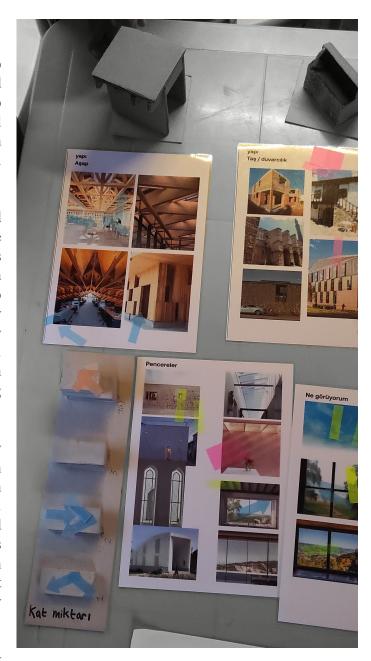
The approach went the same way as during workshop 1. The results of the second workshop generally did not differ much from the results of the first workshop as well. There was a clear preference towards natural colour- and material schemes, wooden construction and bigger windows with views on natural environments.

Because the results were rather similar, I decided to go a bit deeper into certain choices during the discussion. I asked the participants about this preference of a natural environment and to which degree this preference was already present prior to the earthquake. Most of the men expressed that they already did prefer the natural environment and many of their previous houses already had a view on nature. One of the participants stated however that for him this appreciation was born after his experience during the earthquakes.

Furthermore was I curious about the participants' view on wooden construction prior to their experiences in the village. Most of them stated that their appreciation for this started after them moving into the village. They explained that it was simply not the standard to build with wood here. One of the participants however lived in the wood-constructed top floor of an apartment building. He explained that due to the light weight of the wood, he and as family were the only survivors within the whole apartment building.

In regards to the Himis construction type and why they rated it as 'unsafe', one of the older participants could explain that "previously these buildings were constructed properly and contained loam as a strong adhesive in the mortar. Nowadays construction companies do not know how to build anything proper anymore"

When proposing waste material as a resource, similar to workshop 1 there was an initial adversity. When explaining on rudimentary ideas to utilize the rubble as a buried foundation, they could see that happening, provided that it is done properly and overseen by architects.

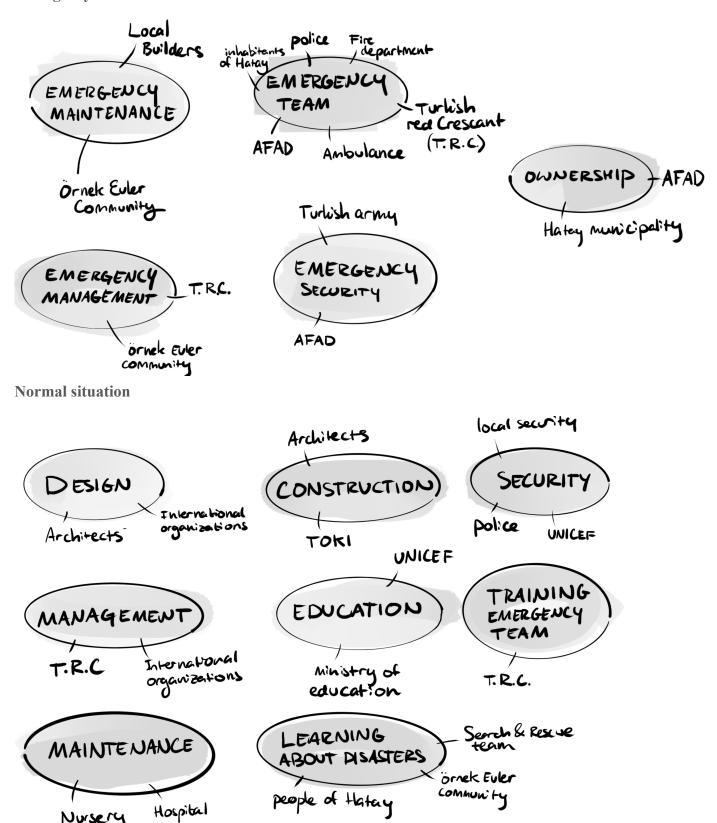




Theme 4 (Organization) - Workshop 1

The workshop commenced as planned. Everybody was free to place the cards with different stakeholders with the different tasks in an emergency or 'regular' situation. Moreover, were the participants invited to write down other stakeholders they deemed more fitting. It resulted in the following:

Emergency situation



Interestingly enough, the participants still 'trust' AFAD (the Turkish domestic emergency organization) with certain responsibilities. The reason for this interest is because the general consensus in the region is rather negative towards AFAD as the people felt neglected in the first response phase after the earthquake. When I asked about it, one of the participants stated that: "they are here and will not be going away, we are still depending on them largely and they will be involved no matter what". So it is not necessary because they really see it as the best choice, but rather the expression of a realistic point of view.

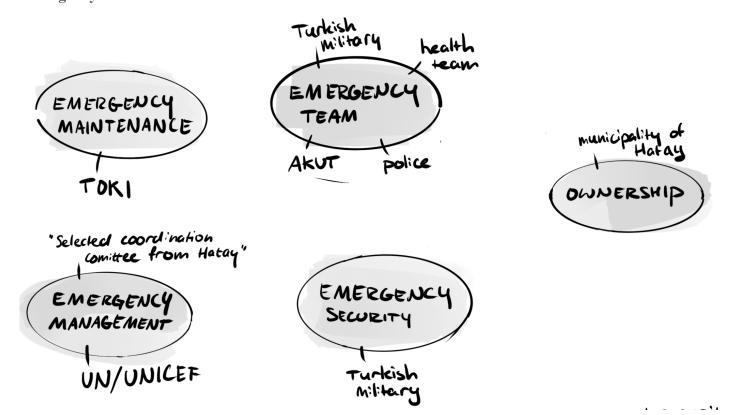
In terms of their own involvement as a community, it was interesting to see that they view themselves of capable for the emergency maintenance and -management, however not taking upon the role of management in a regular, non-emergency situation. Unfortunately due to a shortage in time, we were not able to go into this deeper.

The participants saw international coorporation as something positive. Especially when it came to the knowledge about good design instead of having to rely on institutions like TOKI (the Turkish governmental construction company). They did however emphasized the importance of having a strong organization in the province and city itself.

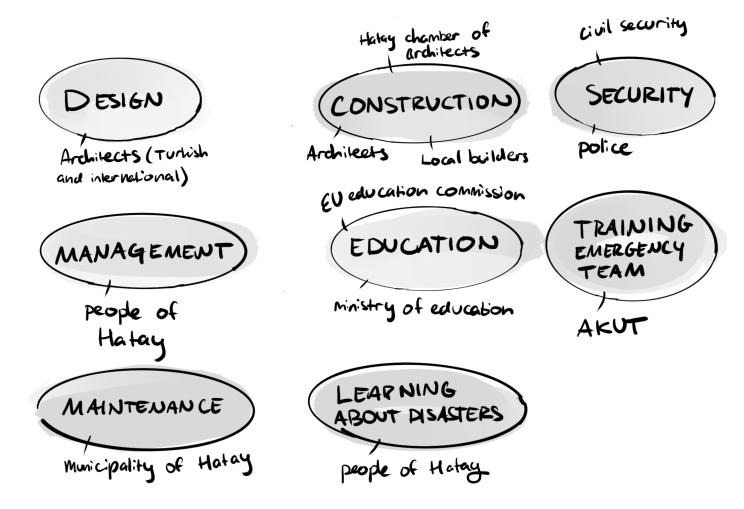
Theme 4 (Organization) - Workshop 2

Due to the fourth theme went about a bit chaotic during the first workshop which left little time for discussion, I decided to structure this theme during the second workshop a little different. We went along the functions one by one. Together the participants sought together to which stakeholders would fit each function best. This resulted in the following:

Emergency situation



Normal situation



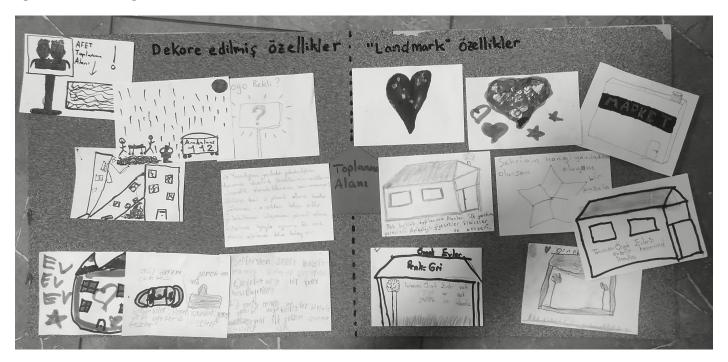
From all the themes, the results between the two workshops are most different within the fourth. The men in no way wanted to involve AFAD in any function and they were quite vocal about that. Instead they proposed AKUT, a non-governmental search and rescue organization to get a more important role in an emergency situation and in the training of emergency teams.

Another interesting stakeholder the men concocted was the "Selected coordination committee from Hatay" which could be in charge of the emergency management in collaboration with the UN and Unicef. Together with the response on ownership (municipality of Hatay), security (Civil security) and management (People of Hatay), it seems the men consider that much can and should be organized from the local community and municipality upwards.

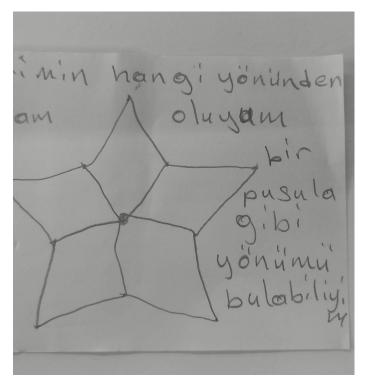
Interestingly enough, the men did not placed "The community of Örnek Evler" (so themselves) in any function. This raised the question how they see themselves in this whole picture. Upon here they argued that they saw themselves as being included in "The people of Hatay" stakeholder card. One of the participants however also noted that a lot of these tasks ask for professionalism (which he sees himself as not in any of the proposed fields) and that this is exactly what has been lacking around here during the aftermath of the earthquake.

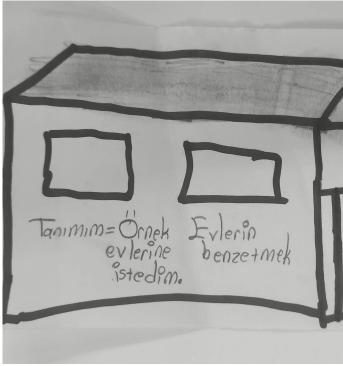
Theme 5 (Recognizability) - Workshop 1

As planned, after explaining the difference between the "decorated box" and the "landmark" as ways to generate recognizability for a function, the participants could think of ways how this could take shape in our Space of Gathering. The results look as follows:



By then there were mostly children left who clearly approached the exercise in a more expressive way. The "landmark" idea contained iconic drawings of heart shapes, an example of a milk carton shaped market an drawings of houses. Some additional writings are:





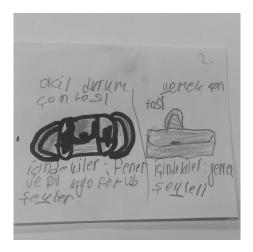
"No matter which side of my city from which I am, I can find my direction like a compass"

"My definition: I want to make the houses (Spaces of Gathering, ed.) look like houses"

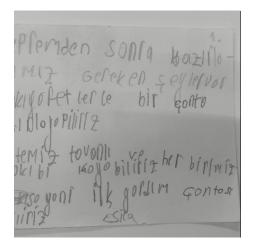
The "Decorated Box" concept sprouted the following images and writings:



"Disaster Gathering Area"

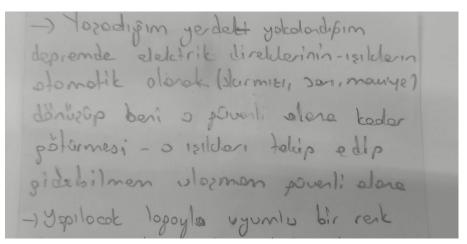


"Emergency bag contains:Light, Battery, Clothes etc., Food bag contains: Food and drinks"



"Things we should think about after the earthquake:

- 1) We can make back full of clothes
- 2) clean underwear and shoes

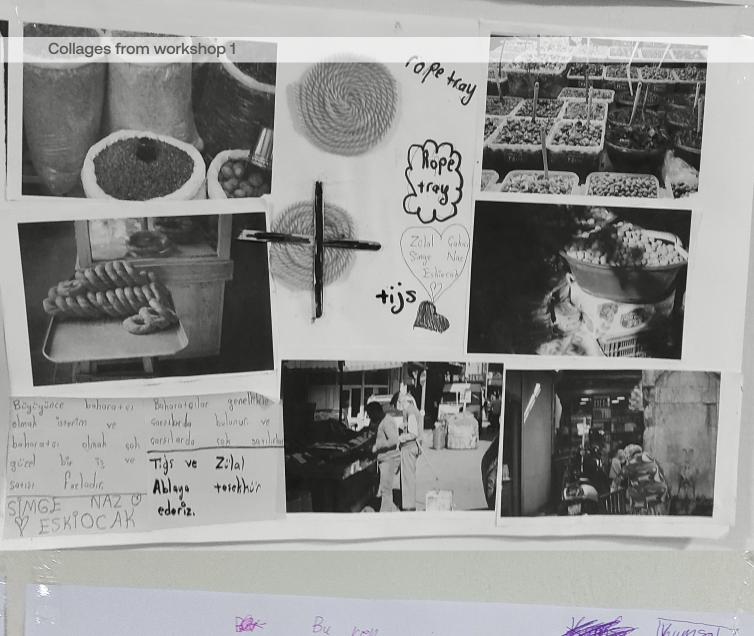


"During an earthquake, the electric poles automatically turn on (powered by generators) and if I follow the lights it will take me to a safe area. This light can be matching with the colours of the safe space's logo"

Some interesting suggestions came up while working on this theme. Due to the shortage in time however we did not discuss that long on them. I was still moved by some of the children's input and noticed an honesty from the heart.

The two images below were made during this theme by two of the boys. They apparently had something they felt the need to express via drawing.





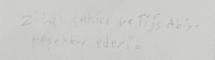
















Z4
Tijs

Evaluation of the Toolboxes and Themes Theme 1 (Function)

The toolbox generally worked well. The participants however were bound easily into their choice due to the scenario function proposed. Therefore I argue it might be better to first start with a *tabula rasa* in which participants are invited to draw up their own initial ideas. The approach in the second workshop affirmed the value of this. Yet, even during the second workshop, the scenario functions were already displayed before the participants. This made them still largely referencing these functions.

The theme itself is definitely an important one to discuss, as it gives a proper insight in peoples need and their ideas on what is important at the moment. By so, it helps prevent from producing unnecessary spaces.

Theme 2 (Location)

The abstraction of the maps with which the participants were asked to work was hard to overcome for some of them. The use of reference points did help on this occasion. Still, because of the most used ("pinning") map being also the most abstract, the participants tended to refer easily to the highlighted spaces on this map; the Örnek Evler village and the container cities. A map indicating more detail (like built environments, open fields, forest areas etc.) might prove to be more adequate. The cards on which participants could write their reasoning behind their choice was positive in the sense it forced people to think about "why?", But also created a messy, and rather disorganised table which did not help in the discussion. Therefore I would advice on having participants placing the cards one by one and immediately discuss their choice.

The theme of locality is of great importance. It did turn out though that most of important things coming forward were already found in the preliminary site study. Hence, do I argue that when does is done properly by the designing stakeholder, addressing this theme is less critical.

Theme 3 (Safety and Comfort)

The toolbox as invented worked well to tap into the participants' feeling, besides a mere rational approach. Some of the sub-themes (e.g. construction, views) were more fruitful then others (e.g. colour). The selection of images has also proven to be of great importance to how people read them within the sub-themes. For future executions I would argue to maybe go about the different sub-themes one by one. Yet, a limited time frame is to be taking into consideration in this case.

Generally I argue for the incorporation of this theme in future workshops where it is a good tool to tap into a more emotional level. Moreover do I believe it can provide directories which can be used along the design process of the Spaces of Gathering.

Theme 4 (Organization)

During the first workshop, the process of this theme became rather disorganized due to the small size of the pinning board and the freedom for the participants to place cards as much as they liked. The approach of the second workshop, in which we went through the different tasks one by one together while discussing them, turned out much more effective and this approach I would advice for future endeavours.

The incorporation of this theme within the workshop is rather important. It gives an idea on the local relations between stakeholders. This can be vital for the pinpointing of tension points which might need resolving. Besides, does the local community have ideas on local stakeholders who might be eligible to take upon tasks. Yet, how the results of the workshop on this theme can be translated into advices incoporated into a List of Requirements, is something which needs more reflection.

Theme 5 (Recognizability)

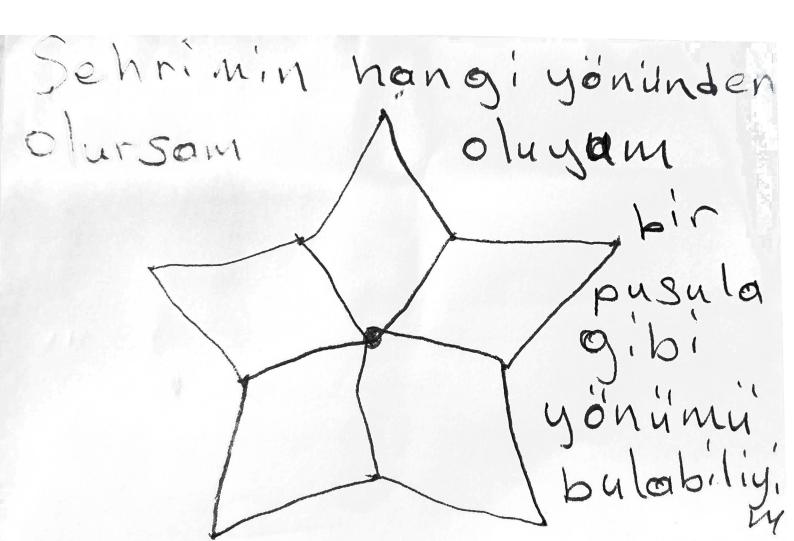
Properly explaining the idea behind the theme has been rather important. The way the toolbox was set up was working to a certain degree. Still, many of the participants still interpreted the assignment differently, showing this explanation might have been done better

I propose that even though this theme is valuable as a mean to activate a community to think about their environment, it is not as relevant as a tool to generate ideas to be incorporated into a List of Requirements. I believe this is something that should be the task of the designing actor.

{The Compass}

No matter which side
Of my city from which I am
I can find my direction
Like a compass

- Esra, 7 years old



{Conclusions and discussion}

Chapter exordium

This research has been aiming to give an answer to the question on how a space of gathering can offer relief on the short term and generate resilience within a community on the long term in the post-disaster context of Antakya. By establishing an initial checklist, based on the premising ideas of relief and resilience projected over the disaster management cycle and deliberating its ambiguous parts along a participatory approach, a final draft has been concocted. In this concluding chapter, I will firstly touch upon the conclusions from drawn from the workshops. Hereafter, the influence of these conclusions on the checklist and how it can be used in the future is discussed in the shape of a concluding advice.

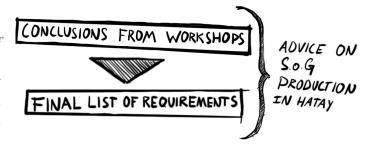
In the second part of this chapter, several parts of the research are critically scrutinized and reflected upon. The final recommendations for future studies derived from these reflections form the end of this research.

Conclusions workshops

Combined conclusion Theme 1 (Function)

From the previous, several directories can be put up for the decision on the (social) function of the S.o.G. Firstly, it needs to have a spacious character and a firm relation to a natural environment. This can be situated in actual nature or in a 'fabricated' natural environment (e,g, a city park). It should focus on a communal effort and offer space for social activities. An economic objective can be taken into account, but should not be leading. Rather, is the function focussed on healing, physical as well as mentally.

Appropriate social functions given to the space of gathering which fit the local cultural framework can be but are not limited to: The tea garden (sized up to a park environment), a modern interpretation of the Darüşşifa (healing house), which could offer for example alternative healing methods, a sport complex or marketplace with a primary focus on the social quality.



Combined conclusion Theme 2 (Location)

What came forward during both workshops most evidently, was the appreciation of an environment like that of the Örnek Evler village. This means that certain qualities could be used as directories for the site designation. These include: A natural environment, situated on higher ground on a solid (e.g. rocky) soil, away from riverbeds. Furthermore is the distance from olive tree fields of less significance in terms of fire hazards and the risk for landslides only becomes reality when designing into the more steeper mountainous area or closer towards the sea. Otherwise has the importance of good accessibility been understood by the participants upon which insight has been displayed on the general quality of roads. This issue asks for a look into infrastructural hardships to tackle within the area.

Combined conclusion Theme 3 (Safety and Comfort)

Combing the findings of the workshop and its discussion, there are a number of conclusions which can be drawn. First of all, is there the clear preference towards wooden construction types. Visible structures like those used in the communal spaces in the Örnek Evler village are highly appreciated. When it comes to the interior, calm interiors with a clear connection towards the outside environment, enabled by bigger windows is preferred. I propose the use of smart sight lines which facilitate views on (escape)routing. Furthermore does the S.o.G. ideally contain the qualities of a 'home'-environment or allows the users to shape it as such. Lastly is it recommended to keep the building to maximum of two floors above ground level.

Combined conclusion Theme 4 (Organization)

Different ideas were proposed in both workshops for which stakeholder could take on certain responsibilities in a regular or emergency situation. Some interesting proposal to be worked out further could be: the establishing of a local committee, linked to the municipality which can take on the management of the Space of Gathering and has direct contact with national as well as international organizations in case of emergency. Then, I would propose that this management, together with the Turkish Red Crescent and AKUT, could be in charge of the education of employers for emergency scenarios. The design could spring forth from a combined effort of local and international experts, scrutinized by the local community. Whereas the construction still can be done by TOKI, this should be under constant evaluation of the designers and experts to ensure quality. A last important issue which begs to be addressed, is the current lack of trust in governmental national institutions. A clear all-solving solution for this issue I unfortunately cannot provide.

Combined conclusion Theme 5 (Recognizability)

The conclusions for this theme are less elaborate as the previous ones. Still, there were some interesting things which could be taken from it: the idea for an emergency light plan on an urban scale, which direct people towards the Spaces of Gathering is something worth looking into. Otherwise was there again reaffirmation for people's desire to quality elements of "the house". I argue that this can be translated into designs which consider the human scale. This however already corresponds with many of the previous themes' findings.

Revised checklist

It turned out that initially composed checklist has been a large step in the right direction thusfar. The workshop and their results however, generated a couple of important edits in the list (see appendix a for the complete checklist)

From "Open" to "Set"

The themes *Location* and *Recognizability*, were both extracted one-on-one from the checklist's respective chapters 1.1.1 Site and 2.2.2. Recognizability. I found however that these themes are less relevant to be discussed in participatory workshops and can be researched by the designing actor in cooperation with more specific relevant stakeholders. In the case of the site this can be for example local building companies geologists and municipality employees. In the case of Recognizability, I argue this to be fitted for the designing actor.

Better specified ration stocks

From the workshops it became clear the participants held the presence of vital rations (clothing, food, emergency aid kits etc.) in high regard in case of emergency. Following from this, the checklist has been more specified in terms of what these stocks should contain and who is responsible for periodically inventory.

Miscellaneous specified advices

Lastly, have certain advices been more specified following from the results of the workshops. These are for example to be found in the function and organizational checklist proposals.

Final advices on the production of spaces of gathering

- The Checklist as it is now is a good starting point, but should be kept on updated.
- The participatory trajectory is important to continue during the development process, as proposed in the theoretical framework. So after generating initial ideas, a second round which includes discussing and developing design concept with multiple stakeholders should be instigated (see also p.24-25).
- As many stakeholders as possible should be involved and provided an equal platform for their imput.

Discussion

In this final part, some critical thoughts and ideas about this research and thesis are posed. This is in addition to the previous chapter: *Evaluation of toolboxes and themes*, which already touches upon some of these thoughts.

On my research

Even though I touch upon the dangers of participatory processes as way of working, I have still used it actively as way of getting out results which formed the foundation of my design project. I still kept raising the question within myself where the boundaries of such ways of working are. But I guess that by actually working like this in the realm of a graduation casus, these boundaries can be carefully explored. And in my case, it did felt like I could touch upon the benefits of this way of working, judging by the way it positively effected my design project which followed from this research.

On the Workshops

Firstly. for this research, the workshops were now only focussed on, and conducted with one of the stakeholders (the *user*). In following studies or implementation of the ideas and workshop structures posed in this research, I argue that it could be rather valuable to already involve different stakeholders as well. This would probably inform the results to a much better extend.

Then there was the matter of the language barrier, through which I was now fully reliant on my colleague who had to translate every reaction for me. Through this translations certain important parts could be missed or emotions embedded in spoken reactions could be lost in translation. In future endeavours, one could argue that a sound recording of the session could be useful when there is a language barrier. This of course comes with issues of consent which are not to be taken lightly.

Furthermore, has the personal connection between myself ("the researcher"), the study group and my colleagues and who helped me during the workshops been something which is interesting to be critical about. On first sight, it can be seen as something rather positive. Participants tended to be very open and trusting and there was a high willingness to join. This was probably have be a different situation, if it not were for my prior personal involvement in the village's construction and the trust and love they clearly feel towards Zülal, being the person who made this all possible. The problematic part which is unfortunately embedded there within, is that people will easily bend towards the opinion of Zülal (who also clearly expressed her ideas about certain topics during the workshops) and become biased or maybe uncomfortable to speak their actual minds.

Lastly, there has been a missed opportunity in the evaluation of the workshops. In preparation of the workshops I developed a short evaluation form which were intended for the participants to fill in to get a grip on their views of the workshops. These I however forgot to bring with me to Türkiye and in the moment forgot I had them prepared in the first place. This I reckon has been a big missed chance to shape further iterations of such workshops and research and has to be included into future research.

{Bibliography}

- 1.5 million now homeless in Türkiye after quake disaster, warn UN development experts. (2023, February 21). UN News. https://news.un.org/en/story/2023/02/1133717
- 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.
- Albadra, D., Elamin, Z., Adeyeye, K., Polychronaki, E., Coley, D., Holley, J. V., & Copping, A. (2020). Participatory design in refugee camps: comparison of different methods and visualization tools. Building Research and Information, 49(2), 248–264. https://doi.org/10.1080/09613218.2020.1740578
- Aldrich, D. P., & Meyer, M. A. (2014). Social capital and community resilience. American Behavioral Scientist, 59(2), 254–269. https://doi.org/10.1177/0002764214550299
- Aquilino, M. J. (2011). Beyond shelter: Architecture for Crisis.
- Atalan, Ö., & Arel, H. S. (2017). EVALUATION OF ARASTAS AND BAZAARS OF OTTOMAN CITIES WITHIN THE CONTEXT OF CONSTRUCTION MATERIALS AND ARCHITECTURAL TYPOLOGIES. The Online Journal of Science and Technology, 7(4), 64–73.
- 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
- Çelik, S. D. (2022). PARTICIPATORY DESIGN PROCESS IN POST-DISASTER HOUSING PRODUCTION: THE CASE OF OCTOBER 30, 2020 IZMIR EARTHQUAKE [Master thesis]. Izmir Institute of Technology.
- Chandani, K. C., Sadasivam, K., & Alpana, S. (2019). Importance of Cultural Heritage in a Post-Disaster Setting: Perspectives from the Kathmandu valley. Journal of Social and Political Sciences, 2(2), 429–442. https://doi.org/10.31014/aior.1991.02.02.82
- Combaz, E. (2016, March 22). What is disaster resilience? GSDRC Governance, Social Development, Conflict and Humanitarian Knowledge Services. Retrieved December 12, 2023, from https://gsdrc.org/topic-guides/disaster-resilience/concepts/what-is-disaster-resilience/
- Dalby, L., & De Heer, I. (2007). Het verhaal van Murasaki (4th ed.). Anthos.
- Davidson, C. H., Johnson, C., Lizarralde, G., Dikmen, N., & Sliwinski, A. (2007). Truths and myths about community participation in post-disaster housing projects. Habitat International, 31(1), 100–115. https://doi.org/10.1016/j. habitatint.2006.08.003
- Eyre, A. (1999). In Remembrance: Post-disaster Rituals and Symbols. The Australian Journal of Emergency Management, 14(3), 23. https://search.informit.com.au/fullText;dn=392074388428210;res=IELHSS
- 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
- FutureLearn. (2022, October 25). Updates, Insights, and News from FutureLearn | Online Learning for You. FutureLearn. https://www.futurelearn.com/info/courses/bushfires/0/steps/99256
- 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.
- Hauberg, J. (2011). Research by design: a research strategy. ResearchGate. https://www.researchgate.net/publication/279466514

- Research by design a research strategy
- Hodson, E., Svanda, A., & Dadashi, N. (2023). Whom do we include and when? participatory design with vulnerable groups. CoDesign, 1–18. https://doi.org/10.1080/15710882.2022.2160464
- Hussain, S., Sanders, E., & Steinert, M. (2012). Participatory Design with Marginalized People in Developing Countries:

 Challenges and Opportunities Experienced in a Field Study in Cambodia. International Journal of Design, 6(2). http://www.maketools.com/articles-papers/Hussain%20Sanders%20Steinert2012.pdf
- Interactive map of natural hazards worldwide. (2017, May 3). American Geosciences Institute. https://www.americangeosciences. org/critical-issues/maps/natural-hazards-worldwide
- Jha, A. K. (2010). Safer homes, stronger communities: A Handbook for Reconstructing after Natural Disasters. World Bank Publications.
- Karagel, D., & Karagel, H. (2014). Analysis of a Historical Commercial Centre in Terms of Marketing Geography: Uzun Çarşı/the Long Bazaar (Antakya/Turkey). European Journal of Research on Education, Special issue, 166–184. https://doi.org/10.15527/ejre.201426573
- Katoppo, M. L., & Sudradjat, I. (2015). Combining Participatory Action Research (PAR) and Design Thinking (DT) as an alternative research method in architecture. Procedia Social and Behavioral Sciences, 184, 118–125. https://doi.org/10.1016/j.sbspro.2015.05.069
- 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
- Klinenberg E (2018) Palaces for the people how social infrastructure can help fight inequality, polarization, and the decline of civic life (1st ed.). Crown.
- Koran, S. (2019). The Role of Emotions in Consumers' Preferences for Shopping Malls versus Traditional Bazaars in Turkey [Master Thesis]. University of Leicester.
- Krokowska, J. (2021). Healing Architecture [Master Thesis]. LTH.
- LaFleur, J. (2020). The race that space makes: the power of place in the colonial formation of social categorizations. Sociology of Race and Ethnicity, 7(4), 512–526. https://doi.org/10.1177/2332649220961516
- Luck, R. (2003). Dialogue in participatory design. Design Studies, 24(6), 523–535. https://doi.org/10.1016/s0142-694x(03)00040-1
- Miessen, M. (2011). The nightmare of participation. http://ci.nii.ac.jp/ncid/BB15827959
- 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
- Nelan, M.M., Schumann, R.L. (2018) Gathering places in the aftermath of Hurricane
 - Harvey. Disaster Prevent Manag Int J 27(5):508–522. https://doi.org/10.1108/dpm-05-2018-0169
- Norman, L. (2005). Health and Hygiene in Evacuation Centers. In Texas a&M AgriLife Extension Service (ER-0206-06). Texas A&M.
- relief. (2023). In Merriam-Webster Dictionary. https://www.merriam-webster.com/dictionary/relief
- Rizzi, P., & Porębska, A. (2020). Towards a revised framework for participatory planning in the context of risk. Sustainability, 12(14), 5539. https://doi.org/10.3390/su12145539
- 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
- Sadiqi, Z., Trigunarsyah, B., & Coffey, V. (2017). A framework for community participation in post-disaster housing reconstruction projects: A case of Afghanistan. International Journal of Project Management, 35(5), 900–912. https://doi.org/10.1016/j.ijproman.2016.11.008
- 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
- Sanoff, H. (1988). Participatory Design in Focus. Arch. & Comport. / Arch. Behav., 4(1), 27-42. https://www.researchgate.net/

- publication/254072812_Participatory_Design_in_Focus
- Sanoff, H. (1999). Community participation methods in design and planning. John Wiley & Sons.
- Schilderman, T., & Parker, E. (2014). Still standing?: Looking Back at Reconstruction and Disaster Risk Reduction in Housing. Open Access.
- 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
- Tokyay, M. (2022, June 29). Populist Turkish politicians stoke tensions over Syrian refugees as elections loom. Arab News. Retrieved December 5, 2023, from https://www.arabnews.com/node/2113401/middle-east
- UNICEF & IOM. (2016). Building safe spaces for the community: A Practical Guide for Constructing Disaster-Resilient Community Evacuation Centres in the Philippines.
- Vale, L. J. (2013). The politics of resilient cities: whose resilience and whose city? Building Research and Information, 42(2), 191–201. https://doi.org/10.1080/09613218.2014.850602
- 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