

MOMENTS IN SPACE

A retrospective exploration of post-traumatic
spaces in places of conflict

Sally Loutfy

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Prof. Philipp Heidkamp, Interface Design

*I dedicate this work to every person who feels
scared in their safest of places.*

*To my mom Lina and dad Hassan, to my sisters
Diana and Lana, to Sary and Layla, for making
me feel safe in my most feared moments.*

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00

Inspiration

It is said that when you live through trauma, your mind intentionally allows you to forget. For humans to cope with the unrated events that they experience, some things are forgotten while others are recalled. In a spiraling and un-stable world, destruction occurs through various forms. It has both a physical and mental effect on the people who experience it. Destruction can occur through natural and unnatural ways. I have been living in a place of conflict for most of my life. Although stable and safe at times, my country has imposed a sense of anxiety on me. I carry that anxiety with me everywhere and even in my profession as an architect. I live with the knowledge and experience that safety is very relative and uncontrollable. Conflict results in suddenly witnessing or experience violence which inevitably produces trauma. In conflict Trauma, the feelings of safety and fear are linked to specific events that occur in specific spaces. Being in those spaces often ignite the same feelings. Therefore, some spaces become recollections of fear and safety and regular experiences become reminders of traumatic events. Conflict can occur anywhere in the world but our reaction to it is different based on our experience. Working as an architect, I have been trained to observe my surroundings very intensely. My job is to create. But living with conflict for most of my life, everything created around me was vulnerable and susceptible to destruction. My profession negated the reality I lived in and so I seek for an alternative purpose for my passion of architecture. Despite all the destruction and unfortunate conflicts, I seek for the feeling of safety in my built environment. In order to create, I need to create something that reflects safety in the hardest of places. A moment of safety in the traumatic space around me.



Figure 1: A collage of the port explosion visible from my Bedroom window

The moment of change
from safety to fear

The space of
ultimate safety

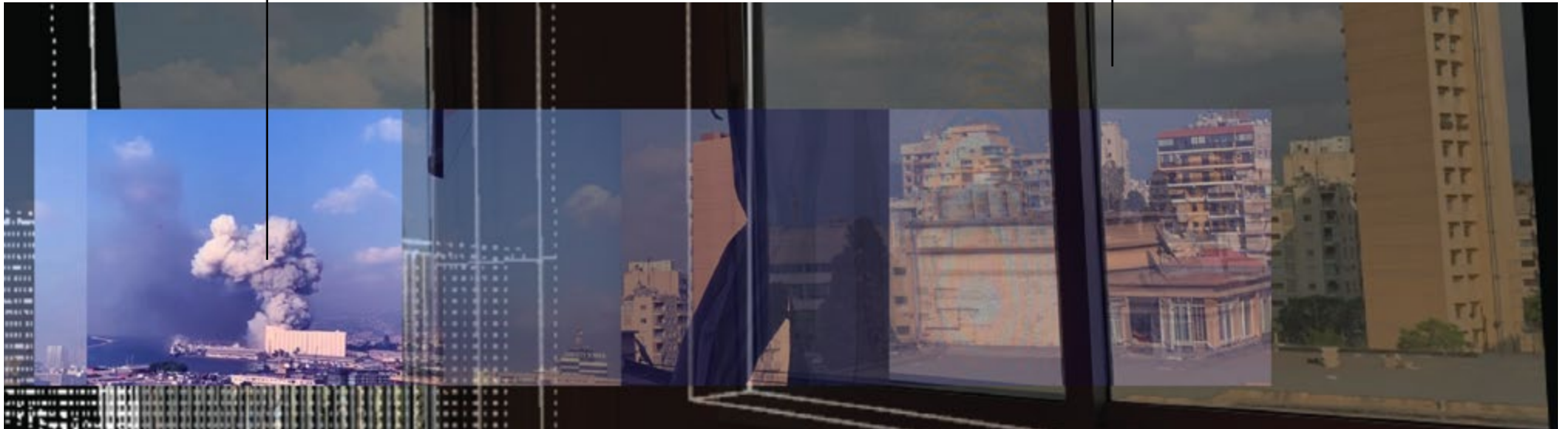


Figure 2
A picture of Beirut Port explosion taken from the author's bedroom window
overlaid with images of the context and a line drawing of the room window.

01

Abstract

Space is everything around us, the hidden and the visible, the silent and the noisy, the clear and the blurred. In places of conflict, we design for physical protection but we neglect to acknowledge the effect of conflict on our post-traumatic experiences. Space holds a powerful reminder to the events that we experience. Through different aesthetical sensations, space can trigger our senses and remind us of past feelings and sensations; our traumas. As designers, we have a responsibility towards our environment. The built environment around us is a host to our daily experiences. How we navigate and design for the world requires a level of awareness. The majority of the world is passing through moments of conflict that are often not visible to everyone. The absurdity of world politics in our time now has directed the narrative towards hate rather than acknowledgement and acceptance. In our Modern age, time is a valuable commodity that is often fought after. In designing for our built environment, we are focusing towards creating the most sustainable future that we often neglect the causes of the effects we are living in. Moments in Space is a research narrative and embodied exploration of different moments that decipher the way we understand a post-traumatic space in places of conflict. This thesis argues that all spaces are traumatic spaces but we experience them in different conditions and times. In places of conflict, post-traumatic spaces can be explored through different layers and ways of architectural representation, urban mapping and spatial design. This thesis acknowledges the hidden manifestations of trauma in the built environment and their implications on our spatial experience. Through the embodied and sensorial experience that trauma has on our mind and body, moments in space magnifies the un-visible effects of war, destruction and conflict on surrounding.



Figure 3: Looking outside the window in Beirut.
Photograph by: Sally Loufy

02

Introduction

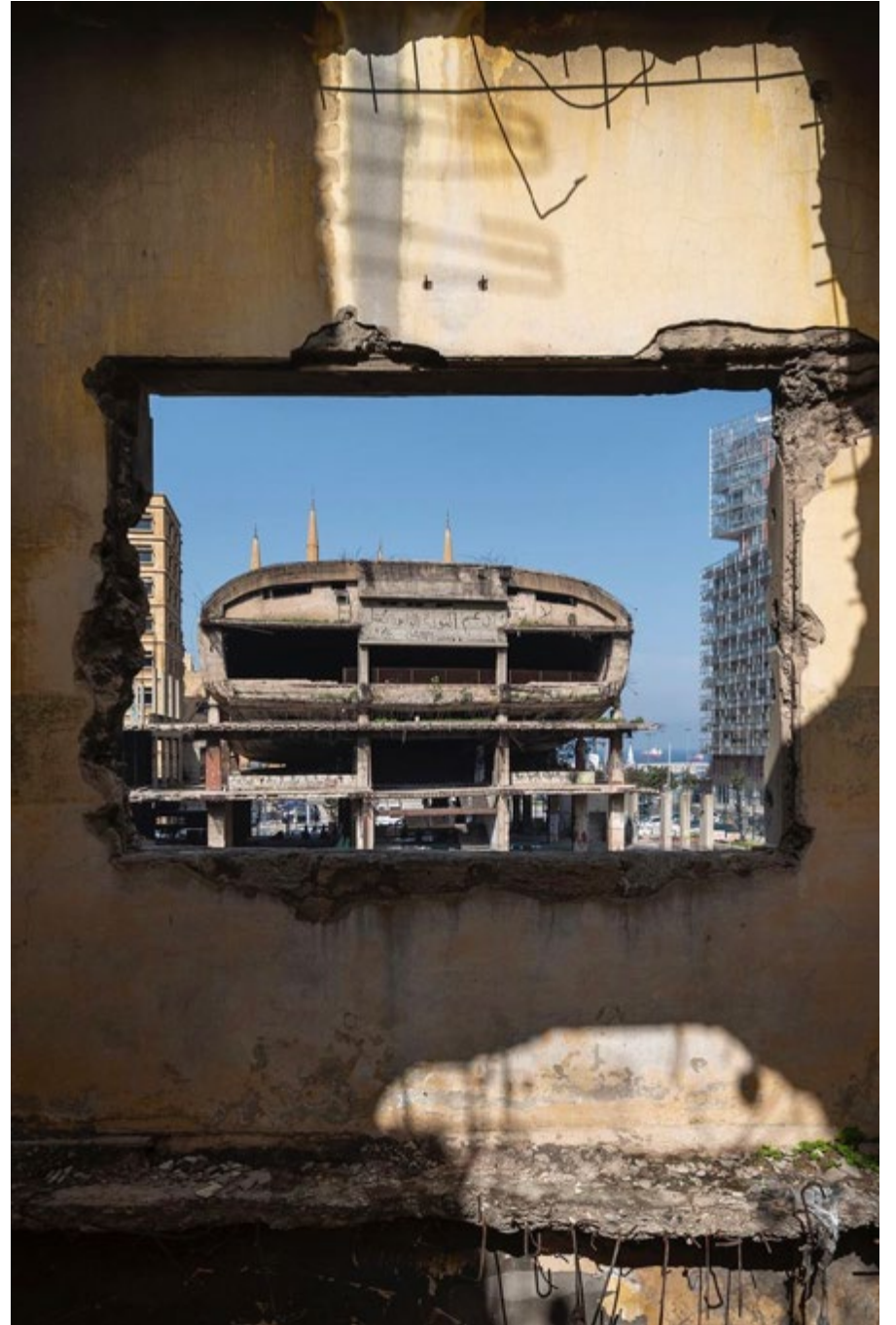
The foundation of space production relies on social interactions that occur in a moment in time in a specific location. Social interactions and human behaviors are affected deeply by the psychology of a human being and their past experiences. Post-traumatic spaces in places of conflict are produced in relation to five key factors/layers: Space, Time, Memory, Trauma and People. Throughout history, urban development and control of land were tools to govern people. As the struggle and need for power grew, war and destruction were the main method of control over land. And so, in a historic line of urban and space development, trauma from conflict has always been present. Space was therefore inhabited and produced by a series of traumatic behaviors and interactions. Traumatic events shape the production of space and allow for a community to alter space through different feelings of safety and fear. In that instant moment of a traumatic event; the turning point (referred to by Adrian Lahoud), a social process occurs which leads to a change in spatial understanding (Norkus and Bauer, 2020 as cited in Million et al, 2022). Influenced by Henri Lefebvre, these social interactions allow for a new space to be produced; a traumatic space which is a product of trauma. This traumatic space becomes relative to the people who experienced it. As people navigate their surroundings, the city becomes affected by the traumas of the people who inhabit it and therefore the urbanity of a city evolves over time in reference to that trauma. Once the behavior of those people is stemmed out of trauma, the city evolves into a city of trauma. A society then, shares a collective experience to a collective trauma. This collective trauma defines the behavior of the inhabitants since trauma often manifests in the body strongly and spontaneously. The embodied sensorial experience of a traumatic event is magnified through the sensations and perceptions that a space illudes. Space becomes a silent trigger of trauma, only by experiencing it or even existing in it. The

power of the mind and body in absorbing the senses and sensations of trauma is controlled by the qualities of that space. In order to experience a space and design for it as well, we must allow the physical qualities to intertwine with the mental affects that they have on our humane experience. "What is missing from our dwellings today are the potential transactions between body, imagination, and environment. — Bloomer K and Moore, C. *Body, Memory and Architecture*. (1977). While designing for space, designers must be aware of this potential transaction between all aspects of our spatial experience and acknowledge the affect that space has on our embodied narratives. In the mind of a traumatic person, a simple sensation can trigger different reminders, alternate realities and various moments in space. These moments continuously play in the imagination of the mind entangling the reality with dreams. As designers, the acknowledgment of this un-visible impact that traumatic spaces have on different people is very crucial. Traumatic spaces exist in all places. We acknowledge the status of the trauma depending on our experience of it. This thesis argues that all spaces are traumatic; a space is either pre-traumatic, traumatic or post-traumatic depending on our viewpoint of that space. The aim of this research is to amplify the power trauma on space and vice versa, to represent trauma in spatial design and to allow the designer to acknowledge the power of conflict on both a violent and non-violent surrounding. Through different methods of spatial and architectural representation, this thesis experiments with different moments in space through acknowledging the existence of all layers a post-traumatic space. By combining different mediums of representation, the post-traumatic space of the city of Beirut is explored through 3D and 2D drawings, photographic overlays, moments of audio-visual explorations and different narratives of navigating spaces in places of conflict.

Figure 4: Lebanese Triple Arch Facade
Photograph by: Dia Mrad



Figure 5: The Egg
Photograph by: Dia Mrad



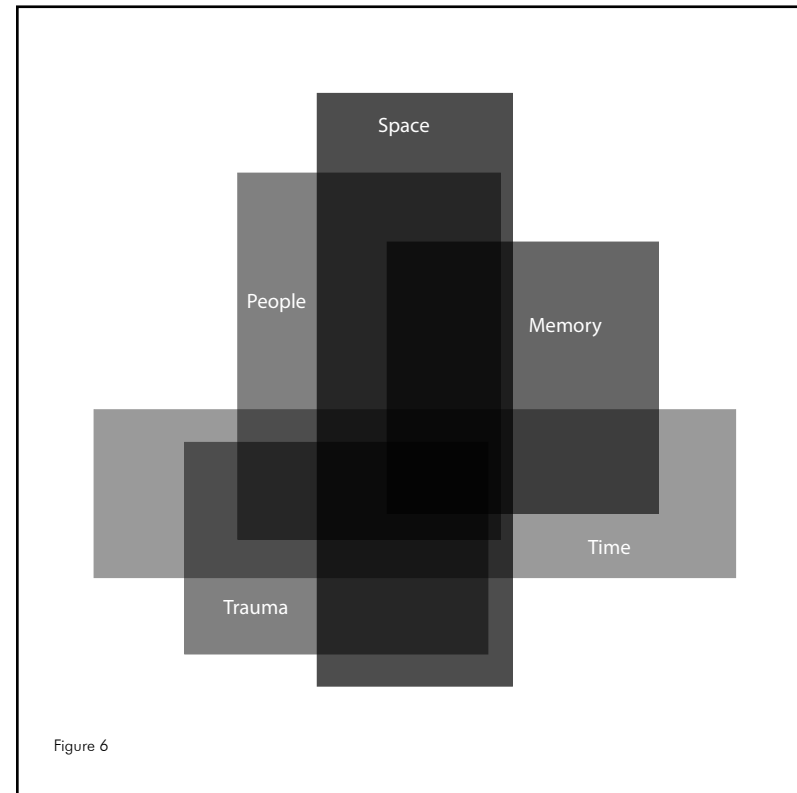
03

Post Traumatic Spaces in Places of Conflict

The production of post-traumatic spaces is affected by many factors. There are five key factors or layers in the production of post-traumatic spaces in places of conflict: space, people, time, trauma, and memory. The focus relies on two major theories of space understanding; by Henri Lefebvre, and Martina Low. According to Lefebvre, space is produced in relation to the practices that occur within it. By inhabiting and living in space, people become part of its being (Lefebvre 1991, as cited in Million et al, 2022). Space and People are interconnected; one cannot exist without the influence of the other. So therefore, human behavior causes a change in space over time. This change in space, is a turning point in time. The moment a trauma occurs (blind spot as referred to by Adrian Lahoud), it causes a shift in space production transforming a pre-traumatic space into a post-traumatic space. Post-Traumatic Stress Disorder (PTSD) is a disorder that results from people experiencing a massive influx of fear after they go through an event they were not prepared for. (National Institute of Mental Health Information Resource Center). The body manifests fear through multi sensorial experiences. This manifestation is often referred to as an embodiment experience. (Csordas, 1994 as cited in Komarova and Svašek, 2018). People suffering from war PTSD are often triggered by sudden sensation: a door closing reminds them of a bomb explosion or the smell of smoke reminds them of gun powder. "Violent conflict can be smelled, heard, tasted, touched and seen." (Komarova and Svašek, 2018, p. 17). Martina Löw discusses the production of space through an operation called synthesis. Synthesizing is the process where people and objects are combined together to produce spaces through perception, imagination and memory (Low, 2016). The memory of a trauma creates a specific social process. And in memory recollection, both space and social encounters are significant. Scientifically, the more we remember the actual space we were in when the event happened, the stronger the memory retrieval is (Robins et al, 2018).

"The term 'post-traumatic' refers to the evidence of the aftermath - the remains of an event that are missing, the spaces around this blind spot record the impression of the event like a scar."

- Adrian Lahoud
(Lahoud et al, 2010, p18)



03

Post Traumatic Spaces in Places of Conflict

The production of post-traumatic spaces is affected by many factors. There are five key factors or layers in the production of post-traumatic spaces in places of conflict: space, people, time, trauma, and memory. The focus relies on two authors, Henri Lefebvre and Martina Löw, and their theories on space and its production. Lefebvre's theory is based on the practice of space, where people become part of its being (Lefebvre 1991, as cited in Million et al, 2022). Space is a social product or a series of social constructions (Lefebvre, 1991). Similar in urban space, social interactions are fundamental traits to the production of a society. Martina Löw discusses spatiality as relational. She derives two social processes of understanding space; "spacing and the operation of synthesis" (Low, 2016, p.135). These social processes are practices that affect the way a space is formed. Spacing is the practice of positioning objects and people in a specific place. Synthesizing is the process where people and objects are combined together to produce spaces through perception, imagination and memory (Low, 2016). The memory of a trauma creates a specific social process. This traumatic social process allows a space to be perceived as a traumatic space. When people of trauma navigate spaces, they inform the way in which those spaces are transformed. Trauma becomes a core trait in the production of that space.

"The term 'post-traumatic' refers to the evidence of the aftermath - the remains of an event that are missing, the spaces around this blind spot record the impression of the event like a scar."

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Space // Understanding Post-Traumatic Spaces

Architecturally, the simplest explanation for space is the void in which we build around. The first reaction to space is a sense of abstraction; a feel of limitlessness. The foundation to how we understand space is based off of Henri Lefebvre's "Production of Space". According to Lefebvre, space is produced in relation to the practices that occur within it. By inhabiting and living in space, people become part of its being (Lefebvre 1991, as cited in Million et al, 2022). Space is a social product or a series of social constructions (Lefebvre, 1991). Similar in urban space, social interactions are fundamental traits to the production of a society. Martina Löw discusses spatiality as relational. She derives two social processes of understanding space; "spacing and the operation of synthesis" (Low, 2016, p.135). These social processes are practices that affect the way a space is formed. Spacing is the practice of positioning objects and people in a specific place. Synthesizing is the process where people and objects are combined together to produce spaces through perception, imagination and memory (Low, 2016). The memory of a trauma creates a specific social process. This traumatic social process allows a space to be perceived as a traumatic space. When people of trauma navigate spaces, they inform the way in which those spaces are transformed. Trauma becomes a core trait in the production of that space.



Figure 6.1

03

Post Traumatic Spaces in Places of Conflict

The production of post-traumatic spaces is affected by many factors. There are five key factors or layers in the production of post-traumatic spaces in places of conflict: space, people, time, trauma, and memory. The focus relies on two main factors: space and people (Lahoud et al, 2010, p.18).

and Martin (2002) refer to the practice of people becoming a space (Lahoud et al, 2010, p.18). Space is influenced by the influence of space over time and moment a space is created, it causes a space to be formed into a post-traumatic space that they go through of Mental Health through multiple factors to as an emotional and Svašek (2018) by sudden spaces or the smell of a space (Lahoud et al, 2018, p.17) operation of objects are imagination of a specific social environment the actual space memory retention

People // A space stemmed out of Behavior

“Man is never encountered independent of the situation through which he acts, nor is the environment ever encountered independent of the encountering individual” (Ittelson, 1973 p.18). Space and People are interconnected; one is only encountered through the presence of the other. Space is a production of what is happening inside it. If by inhabiting and living in space, people become part of its being (Lefebvre, 1991 as cited in Million et al, 2022) then the human behavior of a person experiencing trauma changes how that space is formed. Behavior is an action or a reaction. The specific behavior that is referred to here is the reaction to a traumatic event. The way we engage with our surrounding effects that exact space. Social interactions cause social processes. These social processes inform the way we understand space (Low, 2018). As these processes unfold in different moments in time, they cause a change in the way that space evolves (Norkus and Bauer, 2020 as cited in Million et al, 2022).

“Everything happens somewhere”; this phrase indicates a space (somewhere) which allows for a social practice (everything) to happen. We therefore, deduce an ultimate connection between behavior and space.

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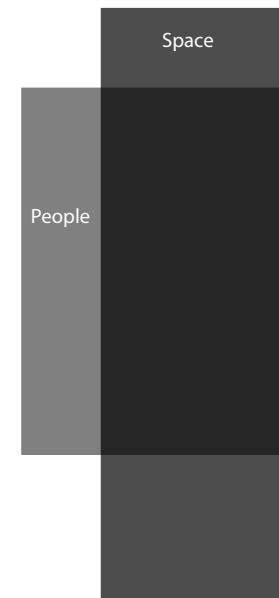


Figure 6.2

03

Post Traumatic Spaces in Places of Conflict

The production of post-traumatic spaces is affected by many factors. There are five key factors or layers in the production of post-traumatic spaces in places of conflict: space, people, time, trauma, and memory. The focus relies on two factors: space and time (Lahoud et al., 2010, p.18).

and Martin (2022). Space is not just a container for people but a product of their practices (Lahoud et al., 2010, p.18). People become part of the space they inhabit (Lahoud et al., 2010, p.18). Space is produced through the influence of people (Lahoud et al., 2010, p.18). In space over time, a moment of change occurs (Lahoud et al., 2010, p.18). It causes a shift into a post-disorder that they go through (Lahoud et al., 2010, p.18). of Mental Health through music (Lahoud et al., 2010, p.18). to as an emotion (Lahoud et al., 2010, p.18). and Svašek (2022) by sudden smells or the smell be smelled (Lahoud et al., 2010, p.18). 2018, p.17 operation of objects are imagination a specific social enclosure the actual space memory retention

Time // The moment of change in space

When we set the foundation of space understanding on the notion of space production, we are looking at space in reference to a change over time. Building on the social processes of Low's understanding of space, both spacing and synthesizing work as a function of time. Time here becomes a container of the previously mentioned factors: space, people, memories, and traumas. These factors are all temporal traits that develop over time. Therefore, it is important to highlight two key concepts in relation to time.

According to Maria Norkus and Nina Bauer, these two concepts are duration and temporal pattern.

There are three types of temporal durations and three types of temporal patterns: Temporal Durations: 1) Short term/moments, hours or days. 2) Medium term/Years or decades. 3) Long term/Centuries or Millennia.

Temporal Patterns: 1) Trajectories /events following an order or path. 2) Turning points / instances that take place at different times or as a result of a sudden change. 3) Cycles / events that are repetitive. (Norkus and Bauer, 2020 as cited in Million et al, 2022)

Time acts as a key component in Moments of space. Factors that affect the production of traumatic spaces all work as a function of both time and space.

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- Adrian Lahoud
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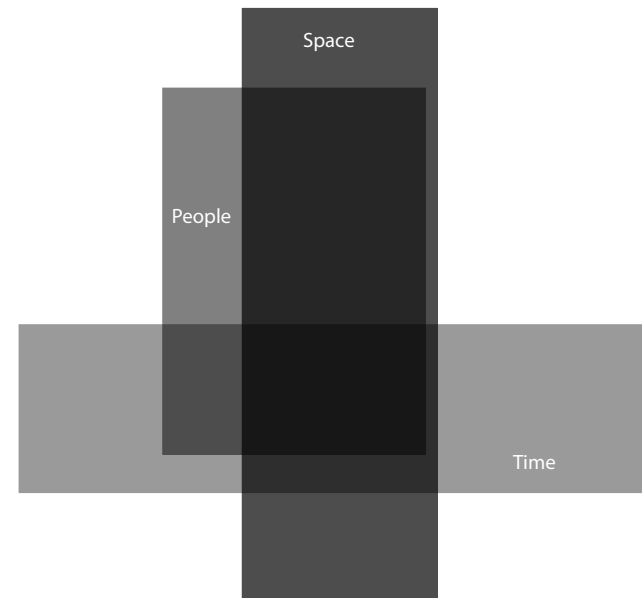


Figure 6.3

03

Post Traumatic Spaces in Places of Conflict

The production of post-traumatic spaces is affected by many factors. There are five key factors or layers in the production of post-traumatic spaces in places of conflict: space, people, time, trauma, and memory. The focus relies on two... and Martin... to the prac... people bec... (2022). Spa... the influen... in space ov... moment a... it causes a... into a post... disorder th... they go thro... of Mental H... through mu... to as an em... and Svašek... by sudden s... or the smell... be smelled... 2018, p. 17... operation o... objects are... imagination... a specific s... social enco... the actual s... memory ret...

Trauma // Trauma and the feelings of PTSD

In order to discuss trauma in relation to space, we look at the human mind as a function of experience. In situations of Trauma or fear, our mind tackles experiences in a different way. Post-Traumatic Stress Disorder (PTSD) is a disorder that results from people experiencing a massive influx of fear after they go through an event they were not prepared for (National Institute of Mental Health Information Resource Center). The body reacts with the feeling of fear which acts a defense mechanism against danger (National Institute of Mental Health Information Resource Center). The reaction to Trauma often occurs in different moments. There isn't a common reaction to trauma. The way in which Trauma affects a human's daily behavior changes the way a person reacts to their environment. As a primary cause of Trauma, fear invades the body in a very assertive way. The reaction to fear is often manifested in different ways. In trauma, fear strikes in spontaneous instances. Our multi-sensorial experience determines at times the way we react to our bottled-up fear (our traumas). The way our multi-sensorial experiences manifest in our bodies is called embodiment (Csordas, 1994 as cited in Komarova and Svašek, 2018). Our embodiment of fear affects the way we behave. People suffering from war PTSD are often triggered by sudden sensation: a door closing reminds them of a bomb explosion or the smell of smoke of gun powder. "Violent conflict can be smelled, heard, tasted, touched and seen." (Komarova and Svašek, 2018, p. 17).

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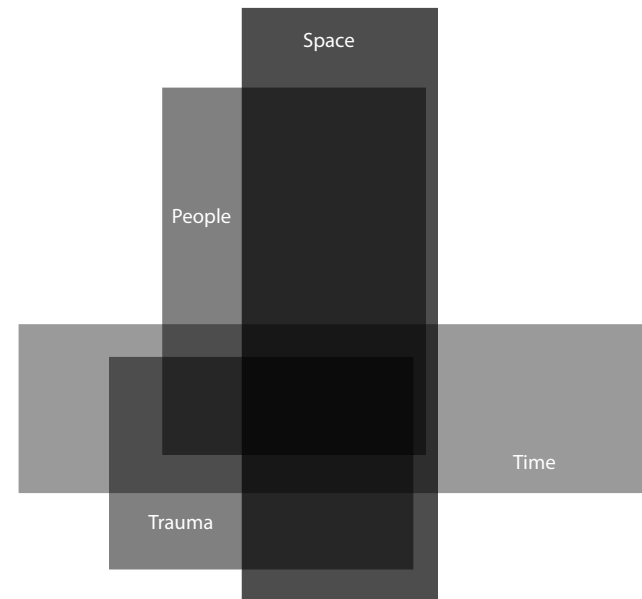


Figure 6.4

03

Post Traumatic Spaces in Places of Conflict

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Memory // Recalling Trauma through space

Memory can transform the experienced spaces into places with social importance. Place is constructed through encounters and relationships in person's minds (Relph, 1985 as cited in Tang et al, 2020). When people discuss their memories, they set a context to what they are recalling. It might be almost impossible to recall a memory without setting a place for that memory. With Trauma, space helps in recalling the memory of an incident or a feared experience. When discussing past wars or conflict experience, it is often that people recall specific and detailed instances of that time. They recall what they were wearing, where they were sitting or what they were doing. In addition to space, the practices that you engage with play an important role in your memories. Social interactions are often the main practices that are remembered. Aside from the space in which these interactions occur, our mind recalls what we were doing and who we were doing it with more coherently. They recall the specific conversations or detailed engagements with specific people. Scientifically, a detail-rich representation of environments and surroundings results in changes in the neural representations. There is a spatial and temporal spectral structure present during successful memory retrievals (Robins et al, 2018). The more a person spatially and temporally remembers the context of their past experiences, the more successful their memories are to be found.

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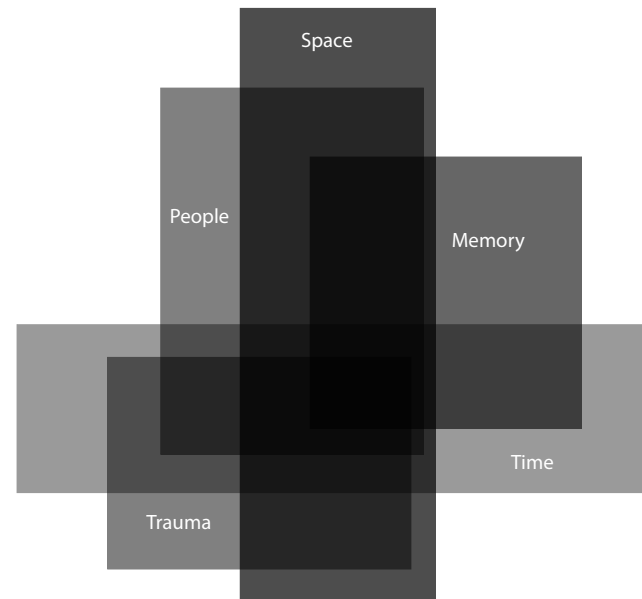


Figure 6

03

Post Traumatic Spaces in Places of Conflict

The production of post-traumatic spaces is affected by many factors. There are five key factors or layers in the production of post-traumatic spaces in places of conflict: space, people, time, trauma, and memory. The focus relies on two main theories of space understanding, by Henri Lefebvre and Martin Heidegger, which relate to the practical use of space by people (Lefebvre, 1991; Heidegger, 2002). Space is not just a container, but it has an influence on the people in space over time. A traumatic event at a moment in time can cause a person to develop a post-traumatic stress disorder that they go through. The DSM-5 (Diagnostic and Statistical Manual of Mental Disorders) defines PTSD through multiple criteria, such as exposure to a traumatic event, as an emotional response, and Svašek (2018) discusses how trauma is often triggered by sudden sensory experiences, such as the smell of gunpowder or the sight of blood. Svašek (2018, p. 17) states that the operation of memory and the objects are often linked to a specific social environment, and the actual sensory memory reflects the social context.

“The term ‘post-traumatic’ refers to the evidence of the aftermath - the remains of an event that are missing, the spaces around this blind spot record the impression of the event like a scar.”

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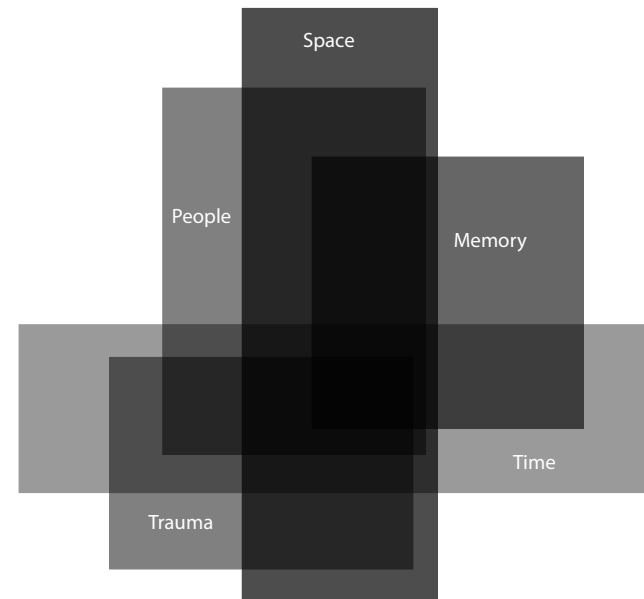


Figure 6

04

All Spaces are Traumatic



Post traumatic spaces can only be understood after the recollection and acknowledgment of the five layers that produce them; space, time, memory, people and trauma.

Looking back at the history of societies and urban development, people resided together in different locations and created systems for dwelling. As communities grew bigger, more land was needed. The bigger the land was, the stronger the community was. In order to obtain land, leaders resorted to violence and war. Governing land and appropriating space became tools of power over people and communities. Power over people requires, at time, inflicting fear among them. Influenced by Michel Foucault, sociologists began to unravel the relation between space, time, and power. They studied the ability of space to act as a useful medium for power and control. Foucault proposes that space is a “fundamental [factor] in any exercise of power” (Foucault, 1986 as cited in Sawalha, 2010 p11). Aseel Sawalha discusses the transformation of urban identity in colonized cities. “Although colonial cities are often viewed as socially, radically and culturally diverse, these cities are spatially segregated because the colonizers dominate the natives through urban planning” (Sawalha, 2011, p.11). It is seldom that we find colonized spaces that recover truthfully to their own culture and history. So therefore, Trauma from power has always existed. Even if we do not experience a space directly after a trauma, this space was, during a moment in time, stemmed out of trauma. Traumatic spaces are the description of most spaces in places of conflict, if not everywhere. If we look at our modern urban cities, the majority of the countries we know passed through moments of conflict, violence and war over political or economic problems. When we experience space now, we are living in a specific moment in that space. The difference between these moments in space are the four other layers of post-traumatic space production. They are relative to the

time, memory, trauma and the person who is experiencing it. Trauma is manifested or triggered through space spontaneously and relatively. So, therefore one can argue that all space production is a result of trauma. Time is a sensitive factor in understanding any space production. The process that allows for space to be altered relies on external factors that affect the line of space production. If we look at the five layers of post-traumatic space production, space is not produced linearly. In the realm of space production that we live in now, we navigate our lives in reference to time moving from present to future. Post-traumatic spaces describe a space in the aftermath. The use of post- refers to a past that affected the present space we are describing. And therefore, we obstruct the forward moving trait of time in space production. As space moves forward in its production, it heavily relies on the events that occurred in the past which make up its own production. Space production therefore exist in a loop. They become either post-traumatic, traumatic or pre-traumatic spaces. Although at times, space can be seen as completely non-traumatic, this relies on the people who are describing it as such. Memory, Time and Trauma are significant layers that decide when people are in space. A person recalls their own experience in space and situates themselves in a specific moment in that space. Trauma becomes an endless loop of existence. Therefore, all spaces become traumatic spaces but experienced in different moments.

The Cycle of Space

Space is experienced in different moments. These moments exist in a continuous loop.

1/ The moment of forgotten Trauma

This moment in space can be considered to some as non-traumatic, whereas in the cycle of traumatic space production, the people experiencing this space have not experienced the trauma that occurred in it. This space is a pre-traumatic space.

2/ The moment of Trauma

This moment in space is the exact moment of trauma which allows for the production of a traumatic space.

3/ The moment of remembered Trauma

This moment in space is the moment of the aftermath. It is the post-traumatic space where trauma is remembered and was experienced.

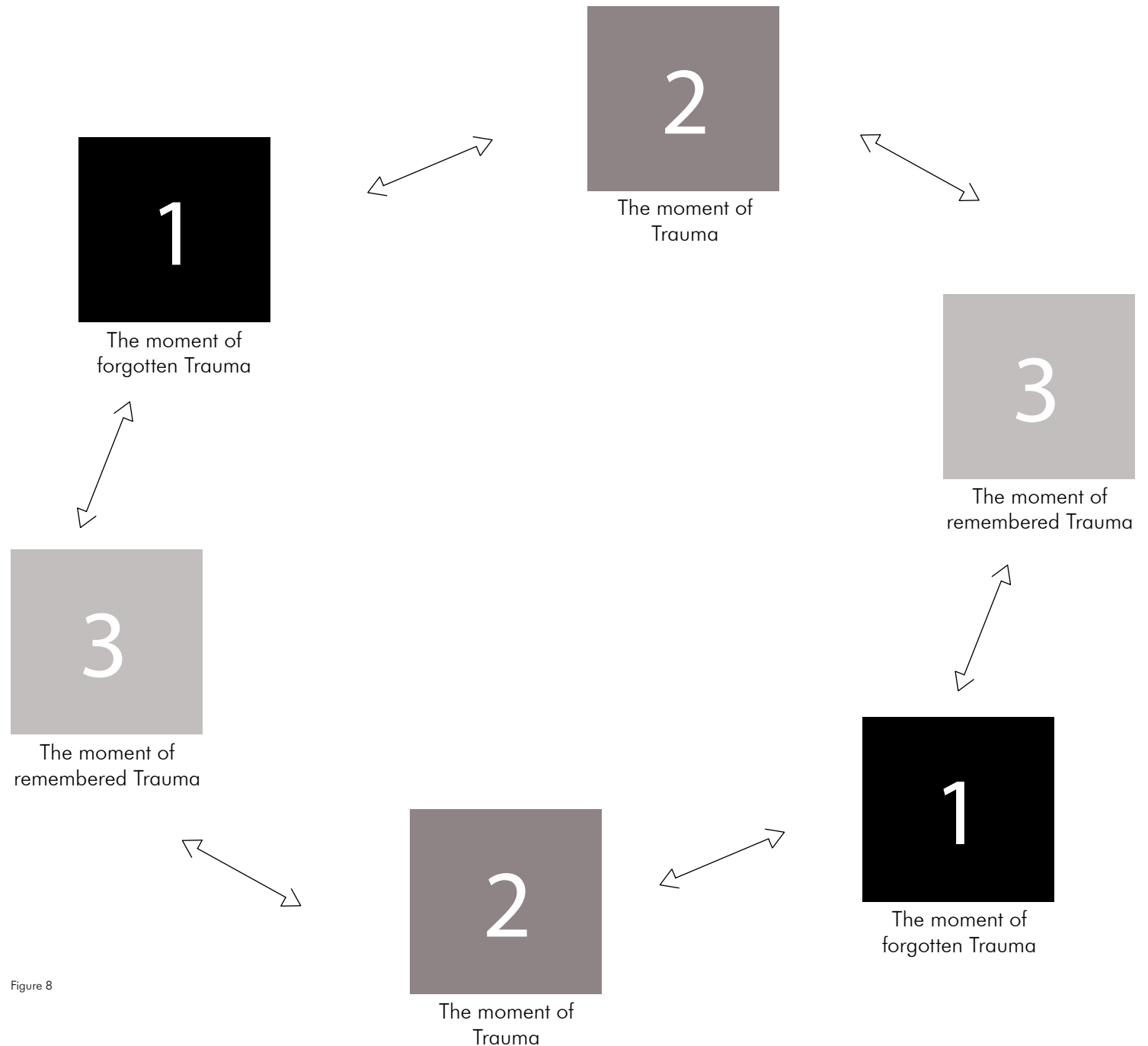


Figure 8



05

**The Shared Collectives of Trauma,
Memory and Experience**

- * A Collective Expression of Trauma**
/ Selim Mawad / Dia Mrad
/ Jad el Khoury / Yazan Halwani



05

The Shared Collectives of Trauma, Memory and Experience

Understanding the evolution of a society in a place of conflict clarifies the existence of a post-traumatic space. War and conflict occur on a nationwide level. A country or a city experiences Trauma from war on a macro level. Even though trauma affects every individual differently, a society shares a collective trauma to a collective destructive memory. Collective trauma relates directly to a traumatic event that is shared by a group of people; ranging from a small group to a whole society. (Amy Morin, 2020) A collective trauma relies heavily on a collective memory of a traumatic event that a whole society endured. At times of war, the collective experience of this society transforms into a collective memory that shapes the entire history of its own people. This shared memory of trauma becomes a collective trauma. According to König & Reimann, 2018, when the so-called collective identity markers are shared by a group of people, it becomes a collective trauma. They refer to four collective identity markers (1) collective narratives and memories of loss and despair; (2) collective victimhood; (3) collective angst; and (4) exclusive values, norms and mental models. (Reimann & König, 2017)

As an example, to this collective trauma, we look at the city of Beirut in Lebanon. In attempts to reclaim back the public and private spaces in Beirut after conflict, communal social interactions played a key role such as those during the 2019 Revolution and after the 2020 Beirut Port Explosion. After surviving several wars (international and civil), internal conflicts and explosions, the Lebanese people share an intergenerational trauma that is rooted in the core of the society. This trauma has been passed down from generation to generation. Common traditions and customs acted as coping mechanisms to the lack of stability. A common spirit of resistance and anger was also spread among the society which became part of the every-day life of a person living in conflict. Living with



Figure 11: Anti-government protesters wave a Lebanese flag, on the Dome City Center "The Egg".
Photograph by: Hussein Malla

instability both locally and internationally, the Lebanese people resorted to vocal and spatial resistances. As a shared experience, a collective trauma shapes the evolution of a city. Social interactions and reactions after a trauma differ and therefore the urban development. The urban space becomes a platform of resistance to both hidden and visible wounds of its inhabitants.



Figure 12: Reclaim your public space "2019 Uprising"
Photograph by: Farah Salame

05

The Shared Collectives of Trauma, Memory and Experience

A Collective Expression of Trauma

The reality of the Lebanese society is based off of several historic events and foreign control that developed the country into what it is today.

- Lebanon was colonized by the Ottoman Empire until 1918.
- The French Mandate on Lebanon began in 1920.
- Lebanon gained its independence from the French Mandate in 1948.
- The Lebanese civil war broke out in 1975 and lasted until 1991.
- From 1991 until the present day, Lebanon suffers from economic, political, and geographic instability.

Lebanon has long witnessed foreign control and power over its land. The main history of Lebanon mostly contains moments of war, destruction and political conflict. This collective trauma is rooted into the foundation of the entire society whether having lived any sort of war or not. But in contrast to this dangerous cycle of trauma, the collective experience of the people has allowed many to be spatially and politically conscious of their surroundings. The 2019 Revolution speaks as one example to the awareness that people have concerning their collective intergenerational trauma. By fighting to reclaim back their own public spaces, the Lebanese people fought back against the common realities that exist in the city and took back ownership of their public space.

Another form of resistance that was commonly practiced among the Lebanese society was through art and public expression. An artistic and vocal reaction to the Lebanese collective trauma was witnessed through the works of many Lebanese artist. Art in Lebanon is considered as a hidden tool of resistance. Different designers, architects, musicians and artists have experimented with their works on a public platform. By using the city and streets as their canvas, they expressed their resistance and



Figure 13: The word Revolution written on a construction site
Photograph by: Vincent Bababoutilabo und Massimo Perinelli

reaction to a collective trauma. Some are publicly known while others often prefer to remain anonymous. On the streets of Beirut, there exists a massive influx of visual representation and expression carrying different messages.



Figure 14: Photograph by: Joseph Eid/AFP



Figure 16: Artist Mohammad Abrashh
Photograph by: Joseph Eid/AFP



Figure 15: Photograph by: Joseph Eid/AFP



Figure 17: Photograph by: Joseph Eid/AFP



Figure 18: Drawing by Selim Mawad

05

The Shared Collectives of Trauma, Memory and Experience

A Collective Expression of Trauma // Selim Mawad

"People say, 'I can't touch this building, I can't live there', so I'll leave my mark on it."

-Selim Mawad (Mawad, 2019 as cited in A.F.P, 2019)

During the 2019 revolution, the artist drew this piece on one of the walls that was built to "protect" a heritage building in the center of the city from its own people. The text translates: Express yourself! Collective Psychological Session for the First after the Civil War.



Figure 19: 'Oil on Water', Port or Beirut by Dia Mrad

05

The Shared Collectives of Trauma, Memory and Experience

A Collective Expression of Trauma // Dia Mrad

"Architecture represents many things... It fosters a sense of community, the sense of belonging to a place, to a people, to a history."

-Dia Mrad (Mrad, 2022 as cited in Eid, M, 2022)

Through photography and capturing moments in space, Dia aims at preserving the "national treasure" of Lebanon's architecture through documentation. (Mrad, 2022). After the August 04, 2020 Port Explosion, Dia Mrad took different photographs of Gemmayze and Mar Mikhael (damaged areas in Beirut). He captured the effect and damages of the historical urban fabric of the city.



Figure 20: Drawings on Building by Jad El Khoury

05

The Shared Collectives of Trauma, Memory and Experience

A Collective Expression of Trauma // Jad el Khoury

“Growing up in Beirut, as part of the first post-war generation, meant it was impossible to escape politics,” “[And so] doodles became my ticket to new cities and spaces.”

-Jad Khoury (Khoury 2020, as cited in Yen, Y, 2020)

Jad el Khoury is known around the city of Beirut to doodle this “potato Nose character” on facades of war-torn buildings. His drawings are inspired around the decayed, bullet-ridden and scared building facades.



Figure 21: Drawing of Fairouz on the Walls of Gemmayze by Yazan Halwani

05

The Shared Collectives of Trauma, Memory and Experience

A Collective Expression of Trauma // Yazan Halwani

“In Beirut, the civil war was the biggest act of vandalism that the city has ever seen.”

-Yazan Halwani (Halwani, 2016 as cited in Dickinson, E et al., 2016)

Yazan Halawani is a Lebanese artist that is known for many cultural murals around the streets and buildings of Beirut. Instead of political slogans and campaign pictures, he insists that the streets of Beirut be filled with icons of Arabic culture and heritage.



06

Representing Trauma in Architecture, Urbanity and Space

* Traumatic Mapping of Moments

- / The Lebanese Civil War
- / Un-public Public Spaces and the 2019 Revolution
- / The 2020 Beirut Port Explosion
- / The Traumatic Overlay

* Capturing space with different Mediums

- / Visualizing different Vantage Points
- / The Exact Moments Replayed
- / Layering Still Moments



Figure 23

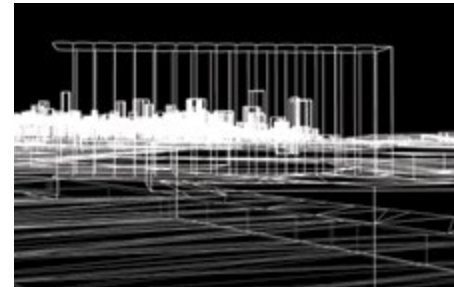


Figure 24



Figure 25

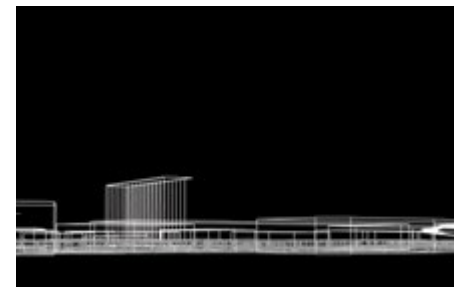


Figure 26

06

Representing Trauma in Architecture, Urbanity and Space

Traumatic Mapping of Moments

Architectural representation and Urban mapping are tools to communicate the built environment. Post-traumatic spaces are dynamic spaces that share both a hidden and visible reality. Trauma is a very fluid topic that can't be easily visualized or represented. In order to study the evolution of the built space through time, we analyze different moments of architectural drawings, recordings, urban mappings and photographic findings. There exists a visual power in the knowledge that different layers exist behind a specific moment in space. As discussed previously, post-traumatic spaces are a combination of different factors that make up a space. By visualizing space in different times and through different memories, traumas and people, we can start to produce a coherent representation of trauma in space.

The common collective trauma shared by the Lebanese people has altered the dynamic of urban development in the city of Beirut. The three main events represented are examples of traumatic events that occurred in the city which feed into the identity of traumatic spaces. Architects and urban planners are able to represent different moments in space by collecting data from different references. These mappings are representations of specific instances that occurred in time. They express an instant moment in time and its effect on the urban and architectural representation of the space.

* The Lebanese Civil war

The Lebanese civil divided the city of Beirut into 2 parts, the east and the west (Map 1). During the war, many displacements, shootings, and shelling occurred in Beirut (Map 2). Map 3 records the percentages of building damages that were recorded after the end of the war.



Figure 27

* The Un-public public spaces and the 2019 reclamation of public space

The reality of public spaces in Lebanon does not exist. Although physical space is available (Map 4), they are un-accessible. Because of the mentality of the civil war, the Lebanese people are socially divided in relation to politics and religion. This division stemmed geographically out of the civil war (Map 1) and continued to affect the urban life of the people. Whereas, during the 2019 revolution, people attempted to reclaim back their public spaces and buildings (Map 5).

* The 2020 Port Explosion and the social recovery

After the 2020 Port Explosion, the damaged city (Map 6) was not recovered and reconstructed by the government but by the social and communal power of the people of Lebanon. This social recovery became both a physical and mental healing journey.

The overlap of these six maps is a visual collage of traumatic moments in Beirut.

06

Representing Trauma in Architecture, Urbanity and Space

Traumatic Mapping of Moments // The Lebanese Civil War (1975-1991)

Understanding the ontological, social and geographic framework of Lebanon is intense. This land is home to 18 officially recognized religious groups. (These include four Muslim groups (ex: Shia, Sunni, Alawites and Ismaili), 12 Christian groups (ex: Maronite and Greek Orthodox), and 10 smaller groups (ex: Druze, Jews, ...)). Over time, these religious groups were infused into the governmental system of the country by representing different sectarian political parties. As a result of the 1975 Civil war, these parties became part of the official governmental system.

At an urban level, cities are un-officially allocated to different sectarian groups. Different cities carry an affiliation to a political/religious group based on the majority of its inhabitants' religion. This urban situation was un-officially developed over time. Although a huge rise of secular groups has been surfacing, people still feel allocated to different regions of the country based on their religious status. There is a common social practice in Lebanon where people can directly know the religious status of a person through their last name or through the city they came from. Being a country that has always been in the middle of political and religious conflict, the religious status that a person inherits plays a dominant role in their classification in society.

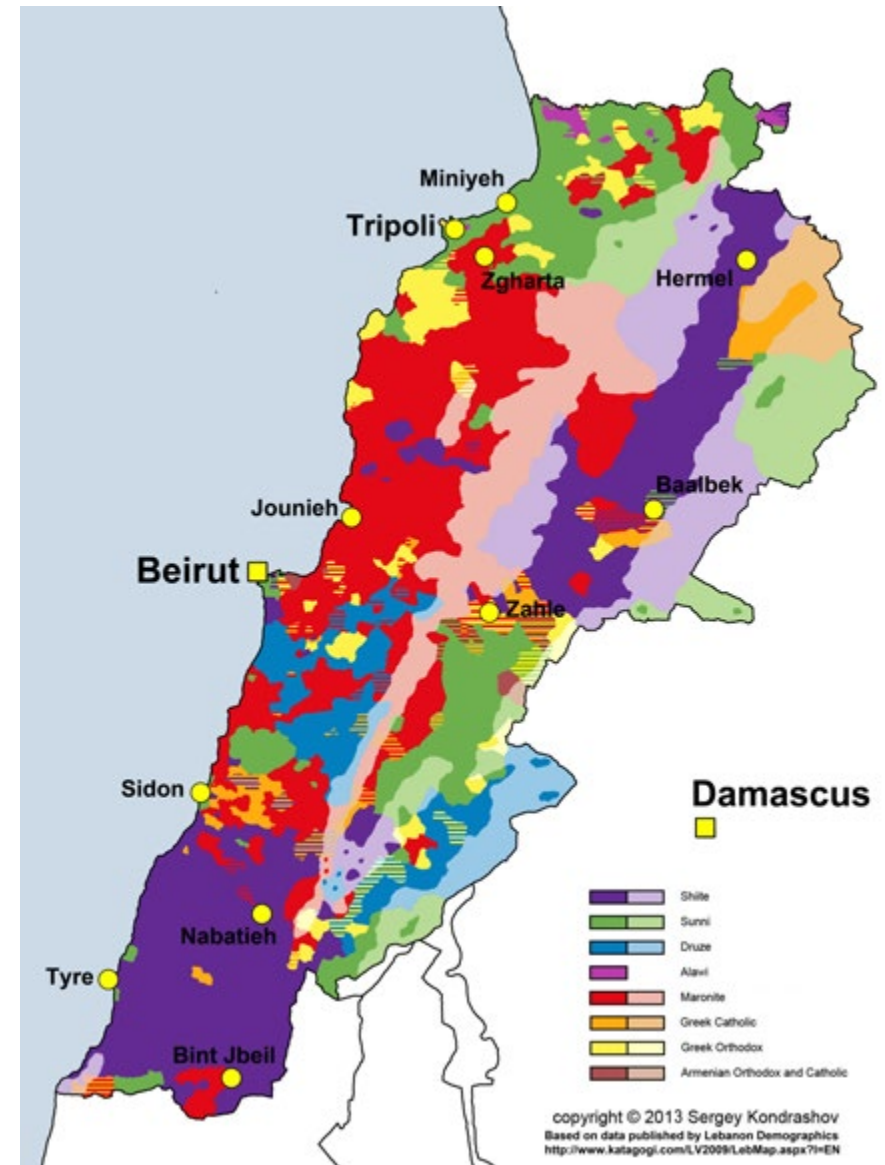


Figure 28



Figure 29: People cross a checkpoint on the "Green Line" during Lebanon's 1975-1990 civil war, in Beirut, Lebanon, 1989.
 Photograph by: Aziz Taher



Figure 50: Image of Downtown Beirut before and after the civil war reconstruction
 Photograph by: Unknown photographer

The Lebanese civil war (1975 – 1991) has a huge repercussion on both the urban and social life of the city of Beirut. During the civil war, Beirut was divided into West and East by the green line (Map 1). The Western part of the green line was allocated to the Muslim population whereas the Eastern part was allocated to the Christians. This green line was the forefront of the battles during the civil war. This division was dissolved after the end of the war but the urban reality of the space still belonged to that same notion.

The city of Beirut was a primary site to many conflicts and clashes during the war. Map 2 highlights different international violations that took place around the city of Beirut during the war. This map showcases locations of mass killings, forced displacement, partial or complete destruction of areas, intense shelling and location of sniper shootings. These traumatic events are scattered almost fully around the city of Beirut and they make up a visualization of how violence was present in all spaces in the city in a specific moment in time.

After the civil war ended, an analysis of the reality of the built urban fabric was recorded and collected. Map 3 shows the affected buildings during the civil war ranging from percentages of damages caused to the built environment.

After the civil war, Solidere; a major development company was formed to rebuild Beirut. Although the need for reconstruction was crucial at that point, it was considered to be a failure by many architects and urban planners.

The reconstruction process appropriated design solutions without taking into consideration local needs and traditions (Abou Merhi, 2018, as cited in Salame, 2020). While trying to create a space that was not religiously affiliated after the civil war, this appropriation of foreign design and architecture was void of belongingness. "By removing sectarianism and many of the memories of the war, it almost created this artificial place that has no memory and no essence" (Bollens, as cited in Ferro, 2014, para.4).

06

Representing Trauma in Architecture, Urbanity and Space

Traumatic Mapping of Moments // Un-public Public Spaces and the 2019 Reclamation of public space

As a result of the sectarian and religious segregation of the civil war, the ontological and geographic framework of the Lebanese society had a strong effect on the urban life of the city. Although public spaces in Beirut exist in a reasonable amount (Map 4), these spaces are not accessible to everyone in the city. As Beirut inherits the mindset of “the other” from the war, each neighborhood was allocated to a different religious and political sect.

Public space is still allocated to different sects in the country and therefore the term public space cannot be used with its entirety in Lebanon. Accessibility to public space is a problem. It is not officially un-accessible but there exists a sense of fear which was generated after the civil war. Public space relies on freedom for all to enter, but sectarianism has changed the dynamic of what an accessible public space is. The problem in Beirut is not the lack of urban space or availability of space but rather the allocation of space according to sectarianism. This creates a sense of fear among the people, being the other among their own.

Considering that the civil war ended almost 30 years ago, the country still suffers from civil disputes based on religion and politics. With a glimpse of a second, what was considered to be a safe place suddenly becomes allocated to the other in times of conflict. The other is a direct effect of the different wars that Lebanon has endured. Surviving a civil war has its traumatic effects and these effects are passed on from generation to generation. With the allocation of the urban space to different sects, these locations became un-inviting to the others. Therefore, this public space was no longer public, but it was only safe to those who came from it. These spaces became Un-public public spaces.



Figure 34: Barriers on the Beirut Waterfront “Cornish”
Photograph by: Joseph Eid



Figure 35: Protestors sitting outside the fortified entrance of the downtown public area “Place d’etoile” on June 2020.
Photograph by: Arabobserver

Navigating space in a city heavily relied on your social background. The war inflicted a sense of fear from “the other” and created different groups of people coming from the same country.

This mindset was challenged during the 2019 October Revolution. As one of the main causes, the people revolted against a governing system that was still ruling since the beginning of the civil war in an attempt to “reclaim public spaces”. Architectural heritage sites were reclaimed back by the people such as the Egg, the Grand Theatre, the Zaytuna Bay and the Martyr Square (Map 5). They arranged for public and open spaces of discussion, celebrations and meetings points. People also reclaimed back significant roads that divided the city during the civil war. They transformed them into communal spaces of protest. People exaggerated the notion of fear and safety by creating layouts of homes, living rooms, and kitchens in the middle of roads.

The people wanted to send out a message of love and safety in a location that was always referred to as dangerous. The trauma that caused a separation was magnified into resistance. The uprising removed the feeling of fear from the people. Safety in space was created through communities and the lack of fear resulted in the feeling of safety. Practicing social activities among people brought back that feeling of safety within a place of fear.



Figure 36: Informal talks and debates in the egg - 2019 Uprising
Photograph by: Hrag Avedanian



Figure 37: Protesting on public roads playing backgammon - 2019 Uprising
Photograph by: Hussein Malla



Figure 38: Demonstrators sit in the middle of a highway during ongoing anti-government protests.
Photograph by: Hussein Malla



Figure 39: Lebanese anti-government protesters practice yoga on a blocked avenue in the center of the capital Beirut, on October 28, 2019.
Photograph by: Patrick Baz



06

Representing Trauma in Architecture, Urbanity and Space

Traumatic Mapping of Moments // The 2020 Port Explosion

The 2020 Beirut Port explosion plays a major inspiration in the work of this entire project. On August 4, 2020, Lebanon witnessed a massive explosion known to be the 3rd biggest non-nuclear explosion in the world. It destroyed a big part of the capital city Beirut. Known to have many causes, the neglect of the ruling government is a major cause. Map 6 records the levels of damages that the city of Beirut endured on its urban fabric. This traumatic event carried both physical and mental damages on the city and its people. The city witnessed the lack of governmental aid and support after the explosion but was widely receptive to a social and communal recovery of its people (not only from Beirut but from the entire country).

A wave of support and help was witnessed on the streets of damaged Beirut in attempts to clean the streets of broken glass and concrete. There were attempts at supporting the local inhabitants in the recovery of their own homes. In contrast to the precedent of the civil war, the people of Beirut held on to pressure against “international support and foreign appropriation” and persisted on keeping their own lands and homes. After a long struggle both financially and logistically, different communities and local NGOs aided in the reconstruction of the city through the support of its own inhabitants. People resisted their traumas and preferred to keep their destructed homes rather than selling them for another failed reconstruction. Banners all over the streets of Gemmayze and Mar Mkhail were raised with the sentence “We are staying”.



Figure 43: Footage from an office building as a massive explosion hit Beirut. Photograph by: Gaby Salem



Figure 44: Volunteers begin to clean the streets on Wednesday, after Tuesday's blast in Beirut's port area. Photograph by: Mohamed Azakir

Figure 45: Banners on the streets of Beirut "We are staying" after the 2020 Beirut Port Explosion.
Photograph by: DWJ. Neumann



06

Representing Trauma in Architecture, Urbanity and Space

Traumatic Mapping of Moments // The Traumatic Overlay

Representing trauma physically in space is very relative. Trauma brings forth memories and emotions to a human who is experiencing or has experienced it. The architectural representation of space in urban mapping relies heavily on different moments recorded in a specific time. The overlay of these traumatic moments in the space of Beirut brings forth both a physical as well as an emotional representation of a city that passed through trauma.

Map 1: Division during the Civil War

Map 2: Violations of International Law during the civil war

Map 3: Affected Buildings from the civil war

Map 4: Public Space

Map 5: Reclaiming Public Space

Map 6: Damage after Beirut Port Explosion

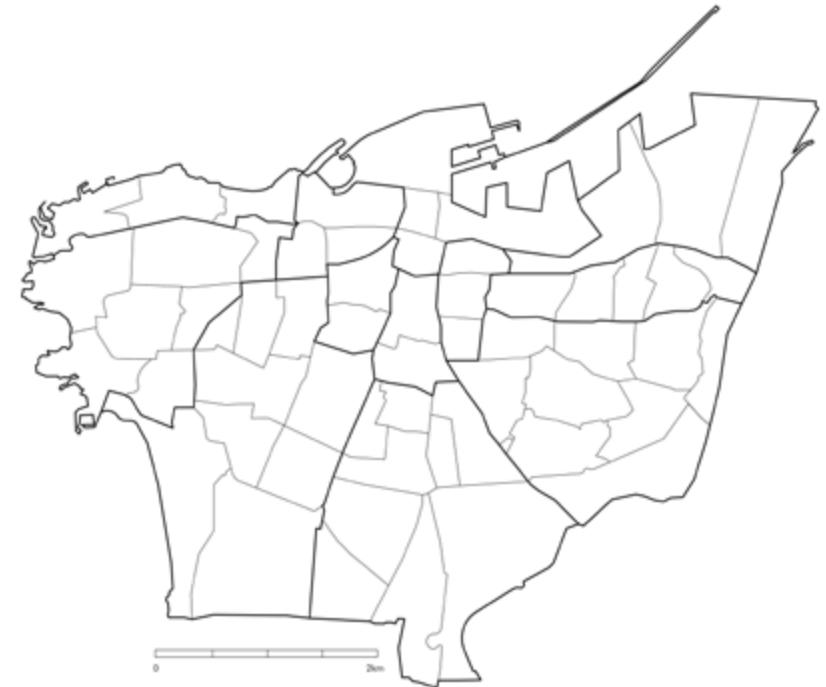


Figure 47

Map of Beirut (The Map of Trauma)

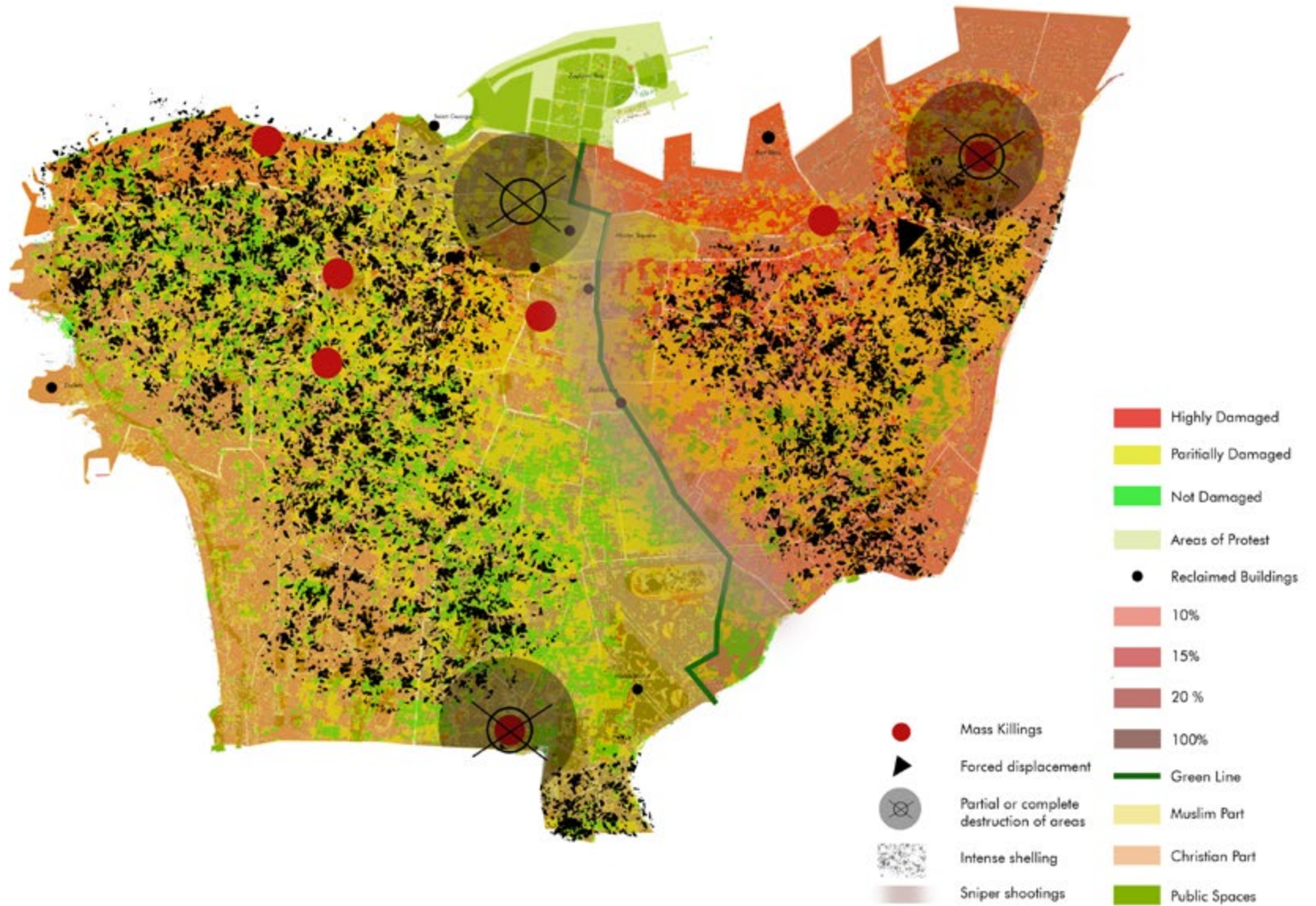


Figure 48

06

Representing Trauma in Architecture, Urbanity and Space

Capturing space with different Mediums // Visualizing different vantage points

This moment in space visualizes a traumatic event across a portion of the city. Designing space requires a well-rounded overview of all sides of the surrounding. Using computer-aided software, urban space and architecture can be simultaneously viewed from all angles. Similar to understanding a traumatic space, it is important to be able to look at space from all vantage points. Architectural representation often relies on a visual explanation of space. The overlay of images both in 2D and 3D format gives the space a moment of clarity and truth. The Beirut Port explosion is represented in this exploration from a top, side and perspective view. This collage represents the exact moment the explosion occurred and shows the frozen image of the explosion on a rendered view of the city of Beirut. By capturing the moment of trauma in a photo, and overlaying it onto the drafted visualization of the city, this representation of a moment in space localizes the trauma and gives room for it to be seen in respect to a city from all sides.



Figure 50



Figure 51



Figure 49



06

Representing Trauma in Architecture, Urbanity and Space

Capturing space with different Mediums // The Exact Moments Replayed

This aim of this exploration is to showcase a series of events that constantly occur in a place of conflict. Scattered along the entire city of Beirut, different events of protest, violence, bombardments, explosions and conflicts occur in the city at different moments. In architectural and urban representation, these events are only represented by text or by the effects that they cause. The damages and locations of the events are mapped out and represented visually. This exploration exhibits the moments of trauma that occur in space visually. It represents a truthful visual of the trauma during its actual moment. By placing the “video” layer on the 3D modeled render of the city, we are able to highlight the location of that trauma and experience what happened in that moment. In order to design for post-traumatic spaces at any given moment in time, we should be able to visualize what has already occurred in that space in reference to trauma, memory, and social behavior in conflict.

Exploration



Figure 53

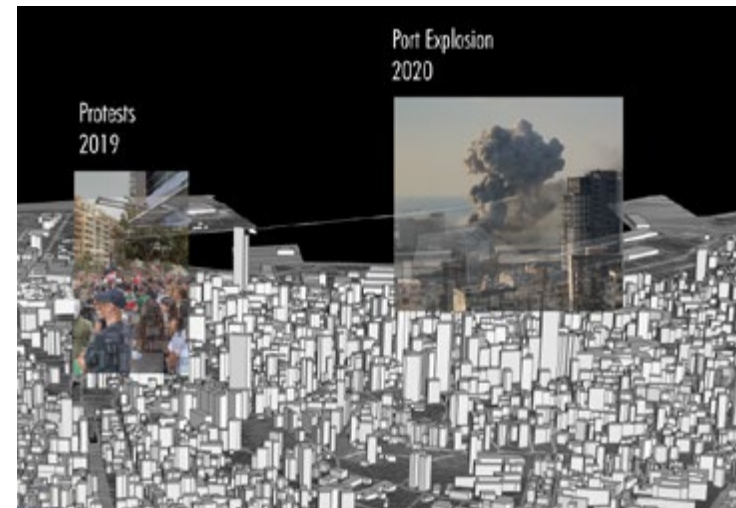


Figure 54



Figure 55

The Exact Moments Replayed

Lebanese Civil War
1975

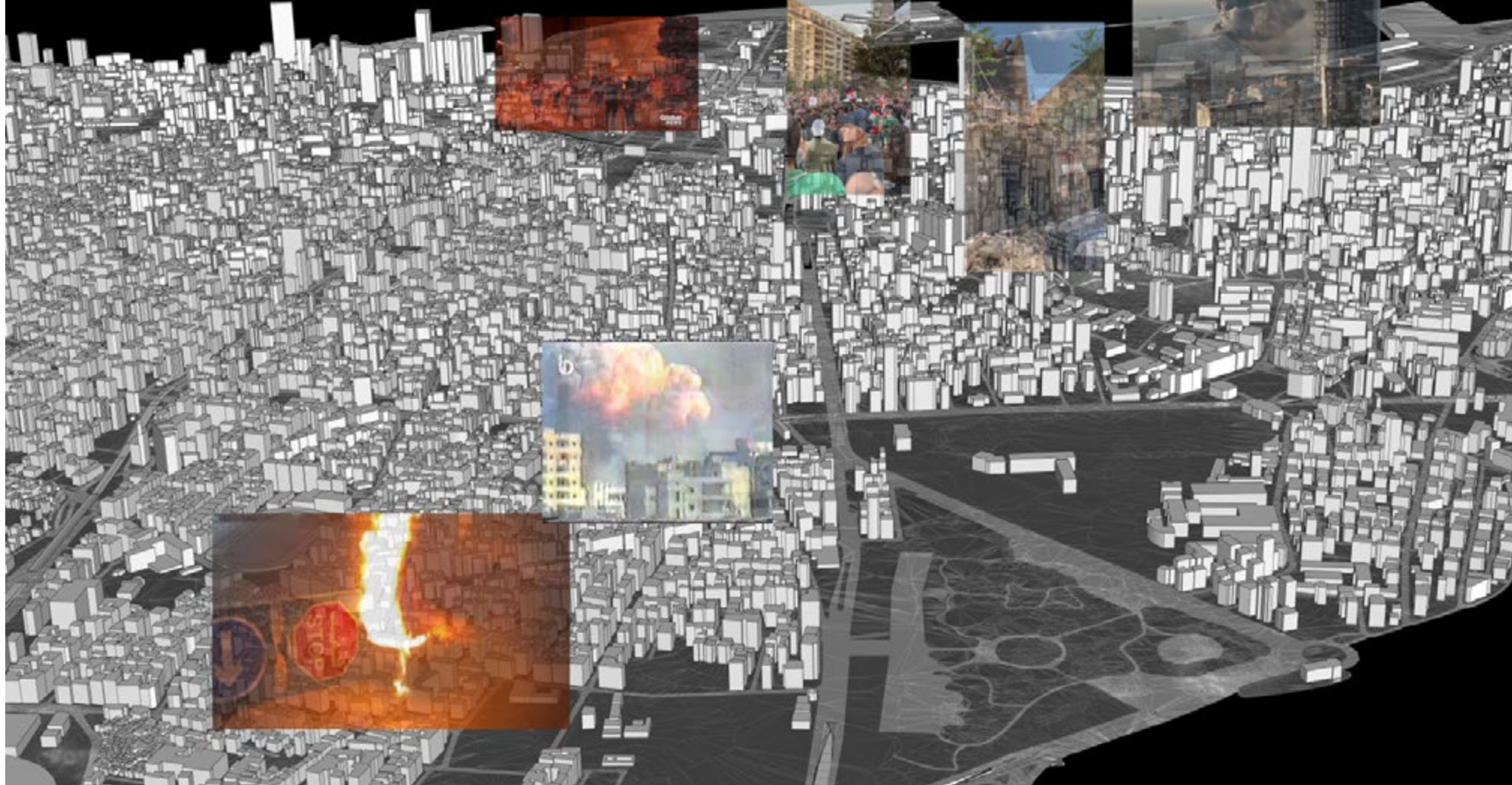
Port Explosion
2020

Road Closure Protests
2020

Protests after
Beirut Explosion
2020

Protests
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Social City
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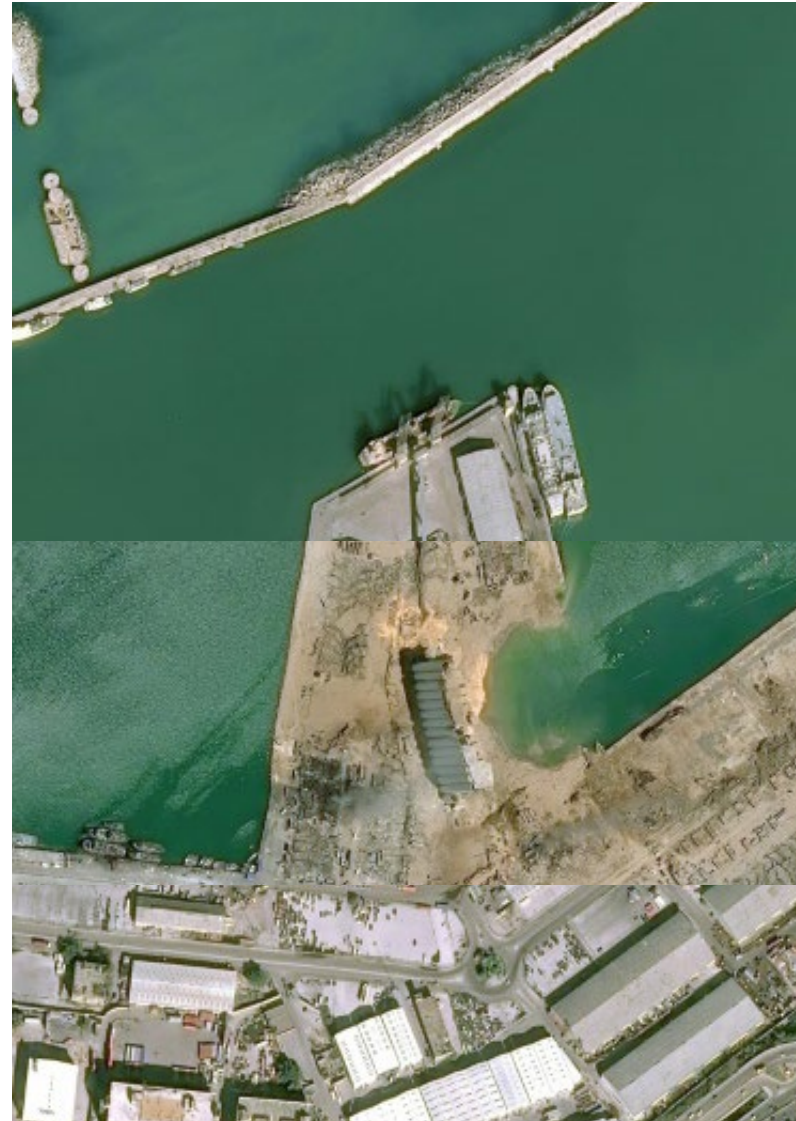
Representing Trauma in Architecture, Urbanity and Space

Capturing space with different Mediums // Layering Still Moments

Layering still moments is a photographic exploration of the different conditions of the built environment in a traumatic space. The photographic analysis captures different moments of destruction that represent only one moment in the identity of that space. After a traumatic conflict, the architecture of a place in conflict suffers from destruction, decay and deterioration. The process of reconstruction erases the visual existence of a trauma and returns the space back to its original conditions. The physical trauma that a space suffers from presents a visual and obvious representation of conflict and destruction.

Through a series of overlapping photographs, this exploration highlights the conditions of a single space in its pre and post traumatic reality. Photographs capture moments that cannot be described or represented in any other way.

The documentation of the architecture of a country is a form of archive to the history and identity of a place. In places of conflict, architecture and the built environment are rarely protected, so therefore by documenting these spaces in all their moments, this exploration allows for post-traumatic spaces in places of conflict to be visually preserved.



06

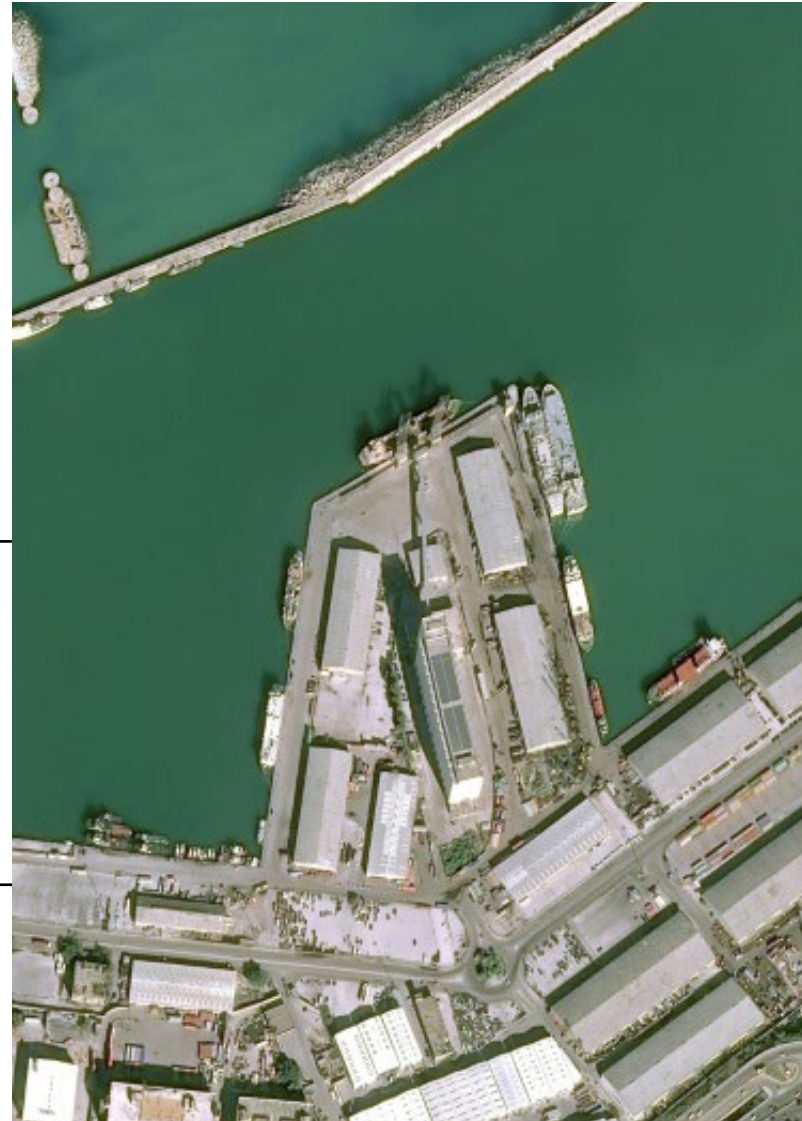
Representing Trauma in Architecture, Urbanity and Space

Capturing space with different Mediums // Layering Still Moments

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Through a series of photographs, the conditions of the built environment are captured in any other way.

The documentation of the history of the built environment in these spaces is presented in a series of photographs.



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Figure 65

07

Manifesting Trauma through the Body and Mind

- * **The Sensorial Embodiement of Traumatic Experience**
- * **The Entanglement of Dream and Reality**
- * **Narratives of an un-safe home**
 - // Lina Dabbous and Hassan Loutfy
 - // Sally Loutfy
 - // Nour Tannir
- * **Moments of the traumatic mind (An audio-visual moment)**
 - // Minutes of Traumatic Thinking



07

Manifesting Trauma through the Body and Mind

The Sensorial Embodiment of Traumatic Experience

According to Kenya Hara, the mind exists everywhere in the body. The sensations that we feel are linked to what we are thinking and imagining. This embodied experience affects how trauma manifests in our bodies, our minds and our experiences. The traumatic mind experiencing a post-traumatic space will explore different alternate realities of both the present and the future by recalling the past.

In his book, *The Eyes of the Skin: Architecture of the Senses*, Juhani Pallasmaa affirms “the way space feels, the sound and smell of these places, has equal weight of the way things look.” The power of the senses in recalling traumatic memories is very significant in design. When dealing with post-traumatic spaces everything is triggered by un-reasonable effects.

Trauma manifests in our body by feeling fear from a sudden moment or event we were not prepared for. (National Institute of Mental Health Information Resource Center) The body manifests fear through multi sensorial experiences (embodiment) (Csordas, 1994 as cited in Komarova and Svašek, 2018). And therefore, when the same sensations of fear are experienced, the body reminds the mind of a specific trauma. The way a space is designed feeds into the overall feel of that space. It affects the sensorial journey we experience in it and hence can at times be a reminder of trauma.

“What is missing from our dwellings today are the potential transactions between body, imagination, and environment.”

- Bloomer K and Moore, C. *Body, Memory and Architecture*. (1977)

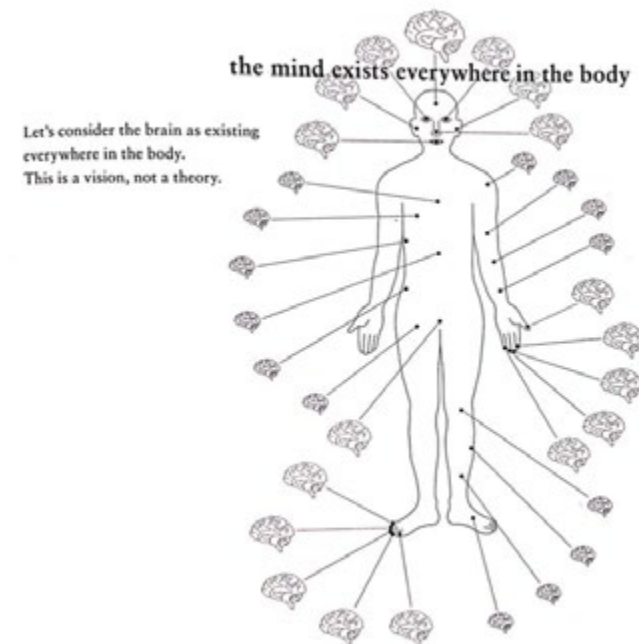


Figure 67: The mind and the body by Hara, K.

07

Manifesting Trauma through the Body and Mind

The Entanglement of Dream and Reality

In a mind that has experienced trauma, the value of time and memory in space are different. The power of a hidden reality that is only visible to that individual affects the entire experience of a space. Similar to a dream, a specific sensation or perception of a space can trigger moments of both imaginary possibilities and past experiences. Combined together they will create an entanglement between a dream and reality. The embodied experience of traumatic memory is one of the most significant tools that a designer must understand when designing for post-traumatic spaces. In order to explore the power of this entanglement between a dream and reality, a designer must step inside this hidden layer and understand its implications before designing for anything in conflict. Looking at a space in only one moment does not allow for a consist space understanding. A space can only be understood through its layers. In a mind that knows trauma, there exists a chaos of moments from different spaces. These moments are remembered through the manifestation of different senses in the body. Things that are heard, smelled, touched, seen or tasted often ignite a recollection of moments in the mind which create an entanglement of a dream with a reality.

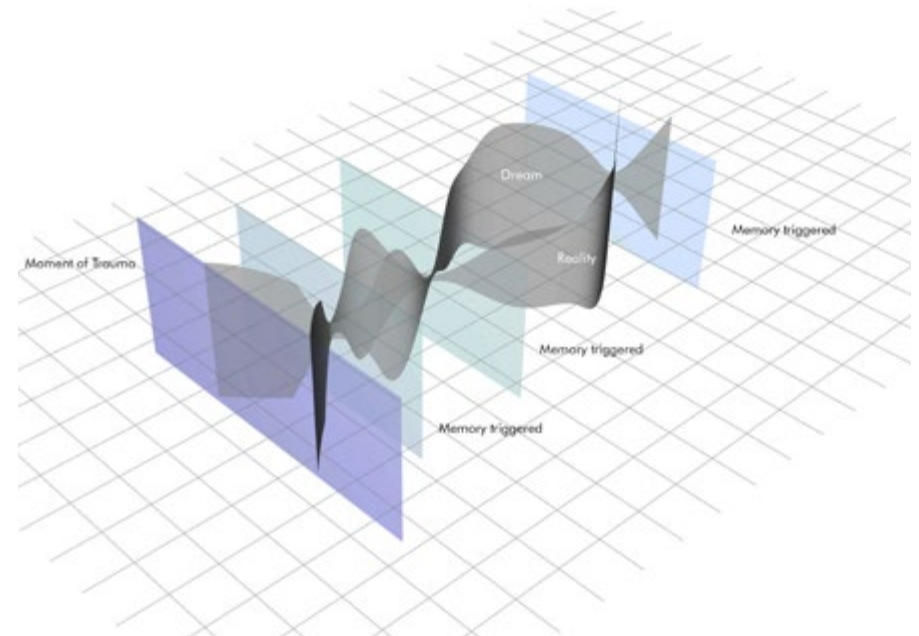


Figure 69: Entanglement of a Dream and a Reality

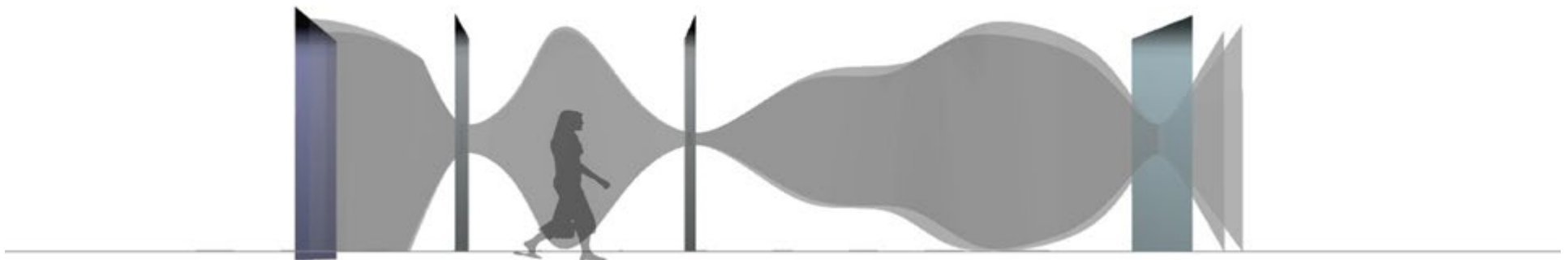


Figure 68: Walking through a Dream and a Reality

07

Manifesting Trauma through the Body and Mind

Narratives of an un-safe home // Survey Phase 1

During December 2021 and January 2022, I conducted a survey among a group of Lebanese people in an attempt to gather information about the experience of trauma in Beirut. The title of this survey was "Safety in Architecture – Lebanon post-conflict". A sum of 29 people participated. The survey conducted was comprised of around 35 questions. They varied from multiple choice, short answers to paragraphs. One part of this survey was asking people to draw their home plans and indicate different rooms where they felt fear or safety. People shared examples and stories of their experiences in conflict in relation to how they navigate their homes.

Phase 1: Survey

Your Space in Lebanon


1. Have you changed your home during your time in Lebanon? Yes

2. If yes, what was the reason for your residence change?

3. Which residence reminds you the most of the conflict you've faced in Lebanon?

If you had many residences, choose one home that you would like to describe (type in which home that is)

4. Draw a rough sketch of your home plan in Lebanon. (Where is the living room, your bedroom, kitchen, bathrooms, balcony, doors, windows, etc...) This sketch will be a reference for several questions later on. If possible try and indicate which room is which (My Bedroom: MB - Kitchen: K - Bathroom: B - Bedroom: BR - Terrace: T - Doors: D - Windows: W - Living Room: LR - Dining room: DR) - You can upload a picture of your sketch in Question 9. if it is easier to draw on paper)



5. Where do you go in your house when there is conflict or violence nearby?

6. Which room do you avoid in your house when there is conflict or violence nearby?

Figure 70: Survey response by Anonymous

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Key highlights and findings of the survey conducted:

Participants Age Group

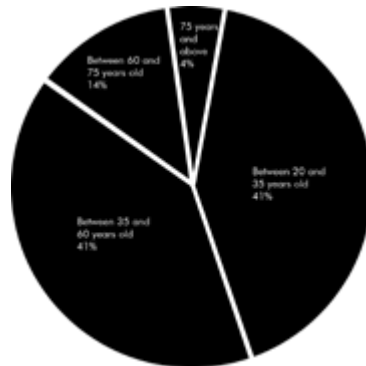


Figure 71: Participants Age Group in Survey

Home and Safety:

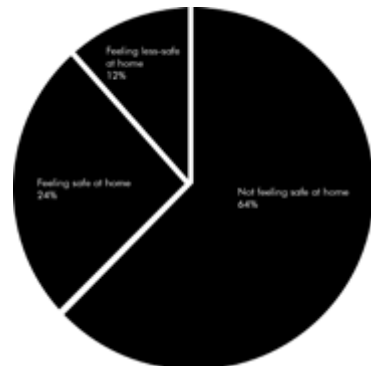


Figure 72: Feeling safe at home

45% of people related a home to = safety and family

Witnessing Traumatic Events in Lebanon:

26 out of 29 people witnessed more than 50% of the 12 destructive events in Lebanon since 1958.



Figure 73: Graph of people witnessing traumatic events in Lebanon

Trauma:

The concept of Trauma was familiar to all the responders. Although the majority were “self-diagnosed”, the familiarity with Trauma was noticed. People confirmed their traumas because of Lebanon. People beautifully defined trauma in their own words, allocating it to fear, safety and conflict.

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Safety at home:

The next few pages exhibit responses for safety at home. People were asked to draw their home plan and highlight the space of safety and the space they avoid in times of conflict.

✗ un-safe ✓ Safe

Your Space in Lebanon

1. Have you changed your home during your time in Lebanon? No

3. Which residence reminds you the most of the conflict you've faced in Lebanon? My house

If you had many residences, choose one home that you would like to describe (type in which home that is) My current house

4. Draw a rough sketch of your home plan in Lebanon. (Where is the living room, your bedroom, kitchen, bathrooms, balcony, doors, windows, etc...) This sketch will be a reference for several questions later on. If possible try and indicate which room is which (My Bedroom: MB - Kitchen: K - Bathroom: B - Bedroom: BR - Terrace: T - Doors: D - Windows: W - Living Room: LR - Dining room: DR) - You can upload a picture of your sketch in Question 9. if it is easier to draw on paper)



5. Where do you go in your house when there is conflict or violence nearby? To the middle living room

6. Which room do you avoid in your house when there is conflict or violence nearby? The salon and the bedroom

Figure 74: Survey response by Lina Dabbous

Your Space in Lebanon

1. Have you changed your home during your time in Lebanon? No

3. Which residence reminds you the most of the conflict you've faced in Lebanon? My home

If you had many residences, choose one home that you would like to describe (type in which home that is) My other house in the mountains but the bridges to get ther where bombed

4. Draw a rough sketch of your home plan in Lebanon. (Where is the living room, your bedroom, kitchen, bathrooms, balcony, doors, windows, etc...) This sketch will be a reference for several questions later on. If possible try and indicate which room is which (My Bedroom: MB - Kitchen: K - Bathroom: B - Bedroom: BR - Terrace: T - Doors: D - Windows: W - Living Room: LR - Dining room: DR) - You can upload a picture of your sketch in Question 9. if it is easier to draw on paper)



5. Where do you go in your house when there is conflict or violence nearby? At the entrance

6. Which room do you avoid in your house when there is conflict or violence nearby? The salons

Figure 75: Survey response by May Dabbous

During December 2019, a group of 100 participants shared their experiences of the conflict in Lebanon. The title of the survey was 'Your Space in Lebanon'. A sum of 29 responses were received, of around 300 words each, to paragraph 4 of the survey. People shared their relation to the conflict in their homes.

Your Space in Lebanon

1. Have you changed your home during your time in Lebanon? No

3. Which residence reminds you the most of the conflict you've faced in Lebanon? My family's residence in Beirut

4. Draw a rough sketch of your home plan in Lebanon. (Where is the living room, your bedroom, kitchen, bathrooms, balcony, doors, windows, etc...) This sketch will be a reference for several questions later on. If possible try and indicate which room is which (My Bedroom: MB - Kitchen: K - Bathroom: B - Bedroom: BR - Terrace: T - Doors: D - Windows: W - Living Room: LR - Dining room: DR) - You can upload a picture of your sketch in Question 9. If it is easier to draw on paper)

5. Where do you go in your house when there is conflict or violence nearby? Corridor

6. Which room do you avoid in your house when there is conflict or violence nearby? Living room, salon, dining room (open space with windows)

Figure 76: Survey response by Anonymous

Your Space in Lebanon

1. Have you changed your home during your time in Lebanon? Yes

2. If yes, what was the reason for your residence change? Marriage

3. Which residence reminds you the most of the conflict you've faced in Lebanon? Old home

If you had many residences, choose one home that you would like to describe (type in which home that is) New home

4. Draw a rough sketch of your home plan in Lebanon. (Where is the living room, your bedroom, kitchen, bathrooms, balcony, doors, windows, etc...) This sketch will be a reference for several questions later on. If possible try and indicate which room is which (My Bedroom: MB - Kitchen: K - Bathroom: B - Bedroom: BR - Terrace: T - Doors: D - Windows: W - Living Room: LR - Dining room: DR) - You can upload a picture of your sketch in Question 9. If it is easier to draw on paper)

5. Where do you go in your house when there is conflict or violence nearby? Living room corner

6. Which room do you avoid in your house when there is conflict or violence nearby? Entrance and Bedrooms

Figure 77: Survey response by Anonymous

During December 2014, a group of 10 participants shared their experiences of displacement. The title of the survey was 'Your Space in Lebanon'. A sum of 29 responses were received, of around 300 words each, to paragraphs 1 to 6 of the survey. People shared their relation to their

Your Space in Lebanon

1. Have you changed your home during your time in Lebanon?

No

3. Which residence reminds you the most of the conflict you've faced in Lebanon?

My parents' house

4. Draw a rough sketch of your home plan in Lebanon. (Where is the living room, your bedroom, kitchen, bathrooms, balcony, doors, windows, etc...) This sketch will be a reference for several questions later on. If possible try and indicate which room is which (My Bedroom: MB - Kitchen: K - Bathroom: B - Bedroom: BR - Terrace: T - Doors: D - Windows: W - Living Room: LR - Dining room: DR) - You can upload a picture of your sketch in Question 9. if it is easier to draw on paper)



5. Where do you go in your house when there is conflict or violence nearby?

Sitting Room or building entrance

6. Which room do you avoid in your house when there is conflict or violence nearby?

Living Room

Figure 78: Survey response by Anonymous

Your Space in Lebanon

1. Have you changed your home during your time in Lebanon?

Yes

2. If yes, what was the reason for your residence change?

Larger space

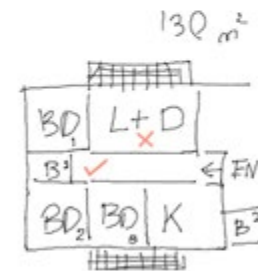
3. Which residence reminds you the most of the conflict you've faced in Lebanon?

Neither. There are no more traces of the destruction from that time.

If you had many residences, choose one home that you would like to describe (type in which home that is)

First home of 24 yrs

4. Draw a rough sketch of your home plan in Lebanon. (Where is the living room, your bedroom, kitchen, bathrooms, balcony, doors, windows, etc...) This sketch will be a reference for several questions later on. If possible try and indicate which room is which (My Bedroom: MB - Kitchen: K - Bathroom: B - Bedroom: BR - Terrace: T - Doors: D - Windows: W - Living Room: LR - Dining room: DR) - You can upload a picture of your sketch in Question 9. if it is easier to draw on paper)



5. Where do you go in your house when there is conflict or violence nearby?

Corridor, away from glass

6. Which room do you avoid in your house when there is conflict or violence nearby?

Living/dining room

Figure 79: Survey response by Ali W.

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One question in the survey asked people if they wanted to share any stories during their time of conflict. The answers ranged from detailed to descriptive to vague responses. I share here specific responses that express feelings of fear and safety in space.

8. Is there a specific incident you want to share that happened in your house during a time of conflict?

"Many times we used to run down the stairs to lower floors to have shelter . Gunshots passed near my daughter while crossing the salon. Glass was broken several times from bombardment. That is why we do not stay in open places near windows when fire shooting starts. Even the stairs going down are not safe. They are facing an empty space and glass windows. The school beside our house made us feel a little bit safe because during the Israeli invasion the school playground was marked with the redcross sign so israeli planes would not bomb it."

- Lina Dabbous

"I wasn't worried about myself I was worried about my loved ones. Traumatic experience that i can never forget."

- Anonymous

"My sister was craving a dessert while we were all in the corridor hiding from the 2008 3 day civil war. I remember her and my mother crawling on the floor to reach the kitchen to be able to get the dessert my sister wanted and some water for us. The next day we saw bullet holes in the windowpane near where they crawled the night before."

- Anonymous

"During the 2006 war, a drone fell in the forest a couple miles away from of our building on the side of the living room. We saw it fall from there. That night There were bombings around the area where I live (Jamhour power station) and we had to hide in the underground parking all night."

- Anonymous

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"There are many incident during the many hardships that we had in Lebanon over the last 40 years. To mention one; as we had no water and electricity e had to wait for the water truck to come and we stood in line to fill some 20 Liter galloons. I used to stand with my mother so we can fill two of them." During that period shelling started and we had to run and could not manage to go into the house so we had to hide for 1 hour under the stairs to our old house. We then jumped quickly up the stairs and had to stand outside the door for 15 minutes for the shelling to stop and then run inside and into the dining room. This is one of many hundreds of times we faced such situations."

- Hassan Loutfy

"Once a bomb exploded near our house and the blzing shrapnels entered through the Salon window and burned through the furniture we frequently sit on"

- Camille Abou Nasr

"It means never living your life the same way because of a sudden tragic event that affected you in a physical or mental way."

- Anonymous Participant

07

Manifesting Trauma through the Body and Mind

Narratives of an un-safe home // Survey Phase 2

A second phase of detailed interviews took place during the month of May 2022. I explored further with a few engaging participants about their experience of “home in conflict”.

The aim of this exploration was to provide an auditory explanation of a memory in their homes in conflict while referring to a physical representation of their space. Collecting data about traumatic spaces is a struggle. It is a very critical task to ask people to talk about their trauma and it often resulted in unclear data. A key factor of recording these findings was to allow for a narrative experience to be shared. These recordings act as representations of the layer of “people” in post-traumatic spaces. People allow for space to be remembered and produced.

These narratives showcase the importance of people’s spaces in their memory recollection. Often when sharing stories about their times in conflict, people describe the spaces they were in with detail. There was a notable awareness of how a house should be designed or planned for maximum safety. People expressed their unconscious ways of navigated a home for safety.

Four participants are exhibited from the interview process:

Narrative 1: Lina Dabbous
Narrative 2: Hassan Loutfy
Narrative 3: Sally Loutfy
Narrative 4: Nour Tannir

Building on the previous surveys, the participants were asked to draw their house plans again and allocate room numbers to each space. They referred to these numbers while talking. The participants were asked about their notions of safety in a home. The focus of these auditory responses were the stories they shared about an event or conflict that they remember in their homes. They were asked to describe that experience mentioning who was there and how they navigated their space.

07

Manifesting Trauma through the Body and Mind

Narratives of an un-safe home // Lina Dabbous and Hassan Louffy

Lina and Hassan are a married couple living in Beirut. They have experienced all the conflicts and wars that occurred in Beirut since the 1960s. They both used the same drawing of their house plan (drawn together) but they were each interviewed individually.

Narrative 1: Lina's story: *"One of the incidents or events that I would remember the most was during the 2007 3-day war that happened in Beirut. I remember we were sitting in the living room (which is room number 2, me my husband, 2 daughters and my mom. My 3rd daughter was in the bathroom at that time and she was coming back to the living room. We heard some noises, some bullets. We told her to run quickly through the first living room because as you see there are a lot of exposed windows on both sides on the room. Once she passed, I remember we heard a very loud sound. we all jumped to the floor. Then we got up and saw that a bullet had passed through the windows of the living room just where my daughter was just walking. I remembered the whole glass of the window broke down on the floor and the glass door on the other side had a huge crack where the bullet went out.*

At that moment my husband and I said that we should get up and go down to my brother's house. We live on the 7th floor and he lives on the 4th floor so it would have been much safer.

We got out with our 3 kids and my mom and we crawled in until we reached the entrance. We ran down the stair case. It was very hard to walk because all of the windows in the stairwell, there were windows in the stairwell, it was not safe at all. And my kids were young so we had to help them walk down and carry the youngest. Once we got to my brother's house, we sat in the corridors until the next day. That incident I will never forget in my whole life."

Lina's Audio:



Figure 80: Bullets that entered the home of Lina Dabbous

Narrative 2: Hassan's story: *"The one that was a like let's say has a high memory for me was like the first or second year I moved into the house after I got married. We didn't have children at the time. I was living with my wife and my in-laws; my father-in-law and mother-in-law. I was I think working or sitting in the living room number 6, or no actually I was in bedroom number 10. And all of a sudden, shelling started and at that instant, the shelling was not just one bomb, one large sound happened which we were always expecting to happen during that period. So shelling was happening and of course I was scared and dropped down to the ground in the bedroom. And then walked, actually ran quickly to the living room number 6 which I could see the living room 2 and dining room through the hallways number 7. And I saw my wife and my father-in law and mother-in-law sitting in that area and they were just looking for me, where I was. so, while the shelling was happening, I was immobilized, I stopped in the living room number 6, I couldn't move I sat on the ground looking at them. I waited a little bit until the shelling stopped because I mean shelling when it happens you don't know when the second shelling comes. So, in a brief instance there was silence, definitely it wasn't a secure silence, so I wanted to go to that room and if you look at the living room, we have exposed windows and doors facing the west side which makes you like as if a sniper or somebody can see you. So, I had crawl from living room 6 to 7 and quickly crawled to living room number 2 and just put my back on the wall and shelling continued. that was like a very scary moment which I mean just having to crawl and the sound was frightening. So, I just went to living room 2 because we thought it was safe and all of us were there. and as i remember we then waited and went down the stairs to the 4th floor where my brother in-law lives."*

Hassan' Audio



07

Manifesting Trauma through the Body and Mind

Narratives of an un-safe home // Sally Loufy

I have lived in Beirut, Lebanon from 1994 till 2021. I moved to Germany in 2021 after the Beirut port explosion on August 4, 2020.

Narrative 3: Sally's story: *"So, the event that I would remember the most I would say is the port explosion that happened in 2020. So, I was alone in our apartment in Beirut and my mom was in the mountains and my father was not in Lebanon he was on a business trip in Cyprus. So, I got home after work and I went out to terrace number 1 just to do a bit of gardening and water the plants on the balcony. I heard a very loud sound coming from the other side so I rushed in to living room number 1 and stood by the window to see what was happening and I saw like a white cloud coming from one side of the city, so I took a picture and sent it, or wanted to send it to a few people just to know if anyone knew what was happening, but I didn't get a chance to because like seconds after I saw a red cloud exploding from the same location and a very big sound exploded seconds after and I was thrown away from the side of the room to the other side of the room. I gathered myself up I stood and went into living room number 2 and sat on the floor in the corner and clenched to protect in a way my head in case something else was going to happen. The phone directly rang, it was beside me so I picked it up and it was my cousin telling me to come down stairs to their apartment. So, I grabbed the phone and grabbed my shoes for some reason and went out to entrance room number 13. And down the staircase to my uncle's house. As I was going down, I called my mom to tell her that everything was okay. And when I got to my uncle's house, I managed to get a hold of my sister who was somewhere in Beirut and was on her way*

Sally's Audio:



Figure 81: Picture before the Beirut port explosion by Sally Loufy

home. Then I went back up to my apartment and I called my dad, video called my dad and my sister who lives in Germany just to show them that everything was okay. And they kept me company just because I didn't want to be alone in that house at some point. I went into my bedroom which was bedroom number 4, everything was shattered and broken on the floor. I waited for my sister to come back home and when she did, we managed to close the entrance door because it was broken, so we closed it up and locked it in the safest way we could manage to do so and then we drove up to the mountains to my mothers. Yeah, I think that that event was one of the scariest moments that I had in my house and for a long time afterwards I was not able to stay in the house alone and it no longer felt safe for me to be there, maybe that was one of the reasons why I moved out and moved to a completely different country."



Figure 82: Sally's room after Beirut Port Explosion

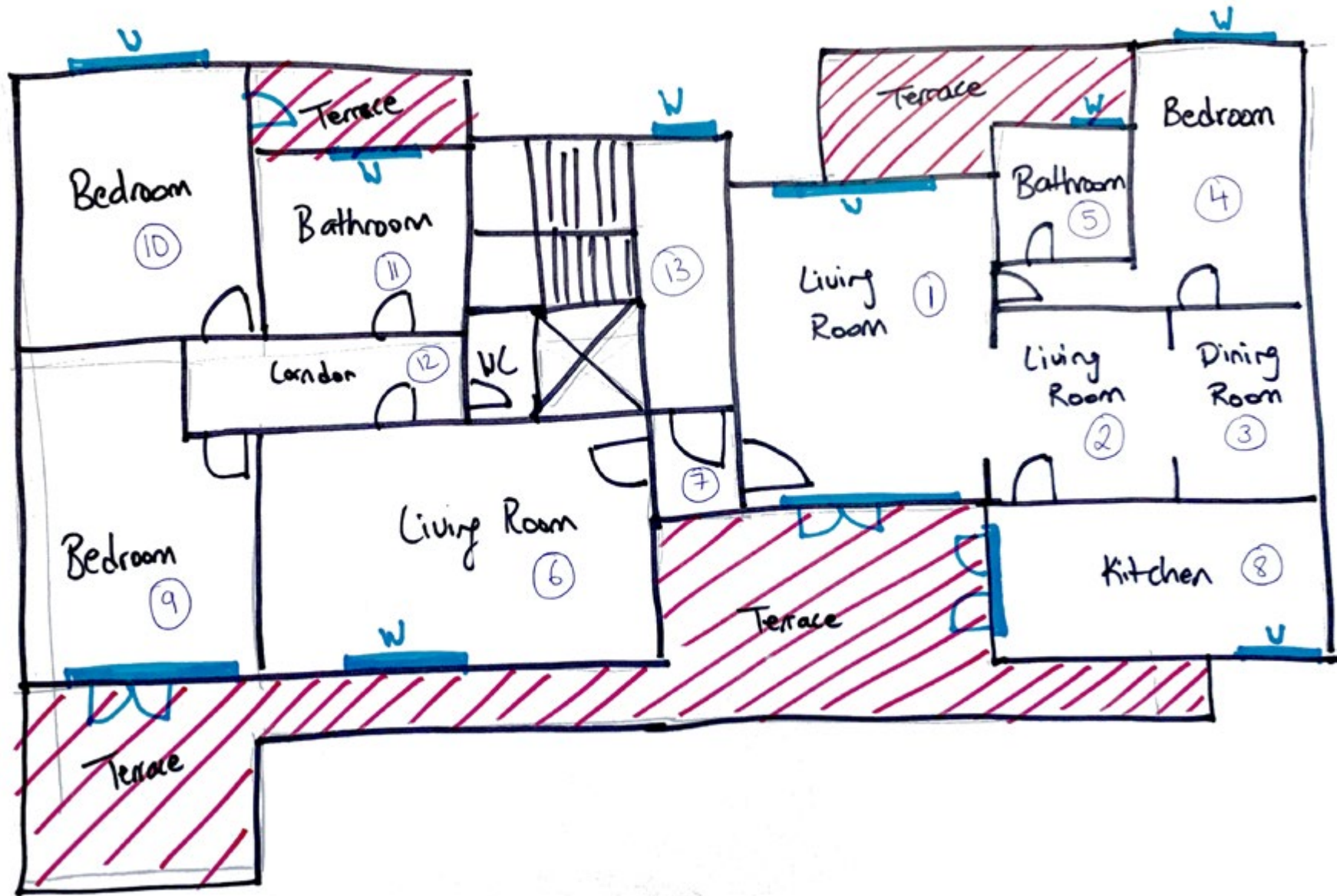


Figure 83

07

Manifesting Trauma through the Body and Mind

Narratives of an un-safe home // Nour Tannir

Nour lives in Beirut. She has experienced all the conflicts and wars that occurred in Beirut since the 1991. Nour does not live in Beirut, she moved to the UAE.

Narrative 4: Nour's story: *"I used to feel safe in this house as a child growing up until the memory I have of the war, the 3-day war that happened in 2007 or 2008, where I felt like windows or any open door or any open window, is a way for me to feel unsafe. So, we were trapped in a corridor for these 3 days because it was the only room in the house that does not have glass. And I remember when we were there, my sister came up with the idea that maybe every house in Lebanon should have a room that has no windows and that is completely made of concrete and is safe, just in case anything happens. And it's not very nice for a child, I was 8 years old at the time, or a bit older, but at the time it wasn't that comforting for a child to not know why they can't see a window right now or not know why they can't approach a window right now. Or see the outside world or the sky or how things look like outside. That's one story I think of or that's one incident I think of when I think of my house and its safety I think of the corridor as my emergency if something happens, I leave the room I'm in and it's in the middle of the house I can leave any room I'm in and go to the corridor and make sure I am okay, so yeah."*



Figure 84: Corridor in Nour's House

Nour's Audio:



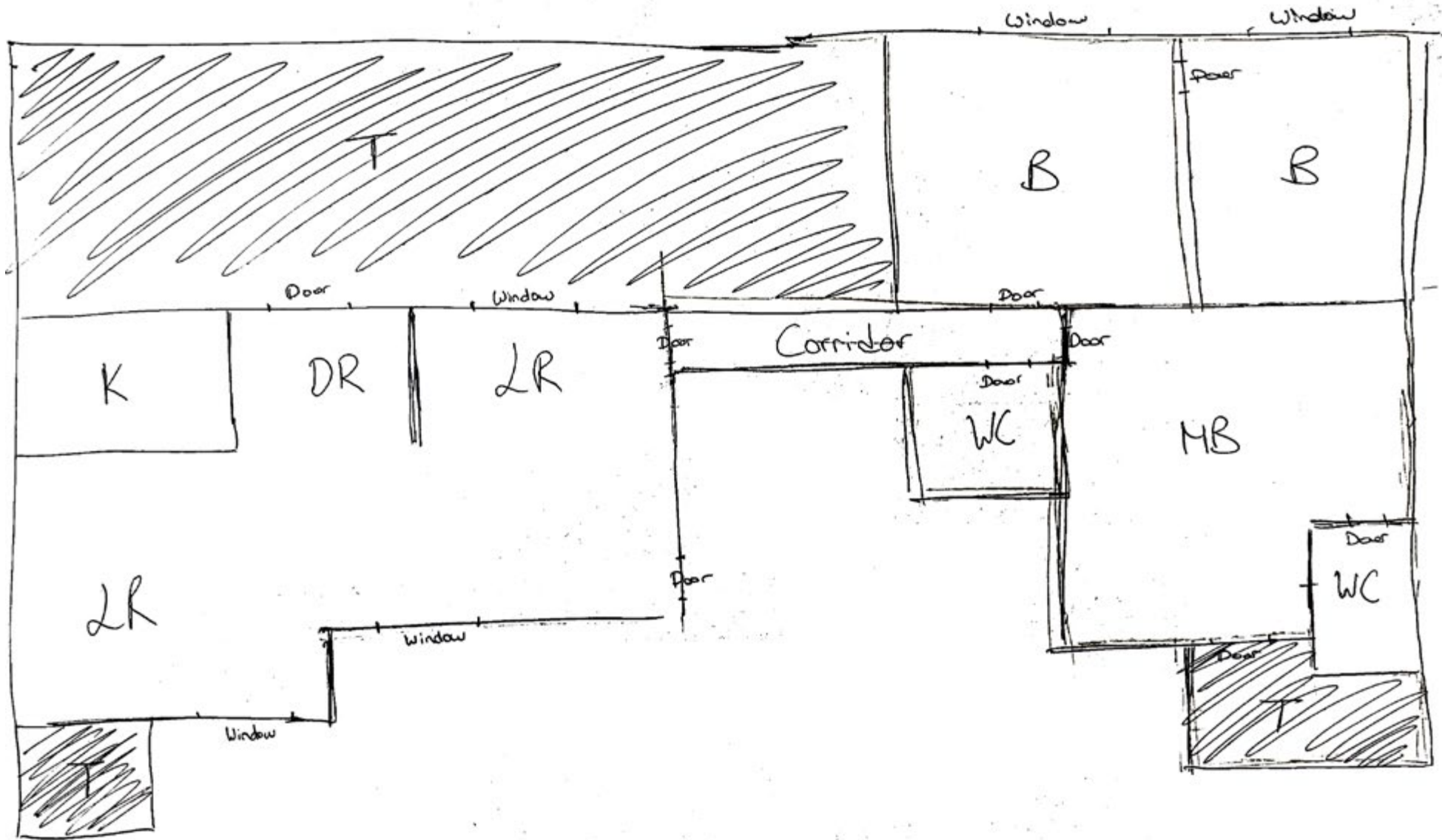


Figure 85

07

Manifesting Trauma through the Body and Mind

Moments of the traumatic mind (an audio-visual moment) // Minutes of Traumatic Thinking

There are overlapping moments that pass through the mind which create a chaotic scene in the imagination. Passing through traumatic moments in specific spaces often replay in your head during un-expected instances. Over the past couple of years and while living in a place of conflict, I have often found myself contemplating small moments that occur during my daily life. I sit and record these instances as I experience them. I find myself frozen in a specific moment in time and observing it from afar. The struggle of suffering from PTSD is the awareness that your traumatic experiences often shape the way you see and think of your surroundings. This audio-visual exploration showcases daily moments with striking traumatic events as equals in the mind of a person suffering from trauma. The aim of this moment is to allow the designer or viewer to acknowledge the hidden noise that trauma carries in our daily life. Short recorded videos of daily activities are played simultaneously. An important aspect that is carried around after experiencing trauma in conflict is that being scared does not fade easily. Our body reacts to different sensations that remind us of a trauma we experienced. Conflict and destruction are loud and visually violent. Both our hearing and sight are the two main senses that are deeply affected by trauma. This audio-visual exploration is designed mainly around those two senses. Often after a trauma, spontaneous sounds are magnified in the mind. Our body reacts strongly to these sudden natural sounds. This reaction of our bodies directly reminds our mind of the trauma we once experienced. Our mind then replays the traumatic event. This simple experience in space creates a chaos in the traumatic mind and reminds the person of the exact trauma even after experiencing it.

Exploration

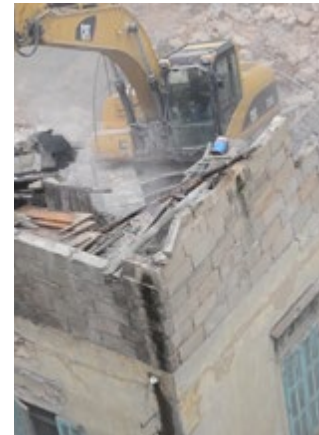


Figure 86: Screenshot of Video: Demolition of the Old House
Photograph by: Sally Louffy

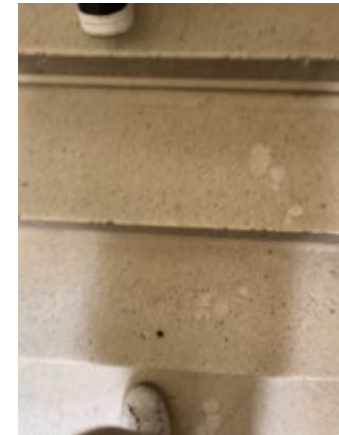


Figure 87: Screenshot of Video: Walking up the stairs
Photograph by: Sally Louffy



Figure 88: Screenshot of Video: Bumper cars with mom and khalto
Photograph by: Sally Louffy



Figure 89: Screenshot of Video: Raining car wipers
Photograph by: Sally Louffy



08 Conclusion

The world has always witnessed destruction and war in its various parts. What history and the present have taught me is that my job is no longer to build and hope for stability but to design for the feeling of safety in danger. This project highlights the reality of a hidden layer in design that is not always exposed or thought of. It does not only apply to architecture but to many fields of design. Trauma is an outcome of violence and it manifests in the human body and mind through involuntary and unexpected actions. Trauma has an embodied and perceptive influence on the human and so therefore when designing, we must take into account how our result is being experienced. Minor things can be triggers. Trauma is always relevant, but lacks understanding and acknowledgment. To design for trauma, we must understand its embodied implications on a human.

Trauma is felt, seen, heard and touched. For the purpose of this project, I do not wish to inflict trauma but I rely on trauma to be understood only through text, sound and image as consistently played in my head. To design for safety is to know what both safety and fear feel like in times of trouble. This project allows you to walk through moments in space where trauma exists and start the conversation of acknowledging and including trauma-sensitivity in our design. What is lacking in design in places of conflict is the awareness that things are hidden. If things are hidden, it does not mean that they do not exist.

Designing for post-traumatic spaces comes with the awareness of a surrounding. Spatial design requires attentive knowledge of space, time, memory, trauma and people. Conflict exists only during a small amount of time, but the repercussions of violence on the built environment has a long social and spatial consequence. To design for effectiveness is to acknowledge all the moments that occurred in a specific space and re-produce accordingly.



09

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11 Declaration of Authorship

I, Sally Loutfy, hereby declare that I am the sole author of this master thesis and that I have not used any sources other than those listed in the bibliography and references. I further declare that I have not submitted this thesis at any other institution in order to obtain a degree.

Cologne, Germany
28th of June, 2022



Moments in Space is a research narrative and embodied exploration of different moments that decipher the way we understand a post-traumatic space. This Master's thesis project explores the different layers of architectural representation, urban mapping and spatial design in places of conflict. It acknowledges the hidden manifestations of trauma in the built environment. Through the embodied and sensorial experience that trauma has on our mind and body, moments in space magnifies the un-visible effects of war, destruction and conflict on our daily spatial experience.

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