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Refuge for the Refugee

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REFUGE FOR THE REFUGEE

May 2020

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FIGURE 01: Joyce, Allison, npr.org, January 21, 2018

OUTLINE

ABSTRACT

This capstone investigates the overlap of psychology and architecture as a tool to address the issue of mental wellness in refugees. It focuses on the way refugee camp conditions perpetuate the trauma that is experienced, and how the inhabited spaces foster unhealthy interactions that add to the emotional stress refugees endure. Most of these unhealthy interactions are caused by overcrowded living conditions that prevail in most refugee camps, leading to violations of privacy and personal space. By investigating aspects of social psychology and proxemics, this capstone connects these concepts to spatial solutions, with the goal of reducing emotional stress and improving mental wellness conditions among the refugee population. As an outcome, a taxonomy is developed in categorizing design guidelines.

INTRODUCTION

The overlap of psychology and architecture highlights a strong relationship between the physical built environment and the human being. Architecture has the power to affect an individual on a psychological level. Human beings are sensitive to surroundings, as they can be influenced by the color of walls, and their personality changed with the environment; "the significance of architecture is premised on the notion that we are… different people in different places."[1] Architecture can be "not only physical but also psychological sanctuary."[2] Such a relationship between psychology and architecture must be recognized at a deeper level in pursuing and dissecting the impact on individuals' well-being, and as a result, providing guidance in improving communities as a whole.

The concept of personal space is understood as the zone around an individual to warrant protection from stressful stimuli. It is the zone where an individual feels safe from potential aggression or stressors, and can vary from person to person, or day to day. This personal space is naturally sought by the human being, and is subconsciously shaped and delineated by the brain, and when it is violated or unattainable, it deeply affects the individual's psychological stability and comfort.

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1.   Botton, *The Architecture of Happiness*, 13
2.   Botton, *The Architecture of Happiness*, 10

This issue of unattainable personal space is very pervasive to refugee camps, where thousands of people coexist in overcrowded communities. This prolonged violation of space creates rifts outwards and inwards of the individual. It can fuel external tensions within the camps, and it could trigger the violence that camps encounter. Moreover, a refugee who is experiencing the psychological traumas of resettlement may struggle to properly heal and cope with a lack of, and violation of, their personal space.

Architecture has the power to properly and positively influence the psychology of an individual, thus the question is:

How can psychological trauma in refugees be reduced through the creation of thoughtfully designed spaces, resulting in a sanctuary of privacy, dignity, security, and social wellness?

Why Does a Refugee Flee?

To aid a refugee's trauma, it is essential to first understand their experiences. This non-fiction narrative follows Paul Sooksengdao's life that led to his journey as a refugee:

During the Vietnam War, a blockade dividing North and South Vietnam forced the North Vietnam communists to invade through Laos. With the help of rebel communists in Laos, the Vietnamese communists began using the Ho Chi Minh Trail to get around the blockade. The United States responded by bombing the trail in an attempt to stop the communists from invading South Vietnam.

It is 1972, Paul Sooksengdao is nine years old, living in Vientiane, the capital of Laos. He has grown used to seeing the military planes overhead, on their way to drop bombs on his country. This time though, he experiences the explosion. It sounds like a train. Communists are attacking the airport only miles away, and he watches as "all hell breaks loose," and the bullets and fighter planes are flying overhead in a chaos, while picture frames are falling off the walls of the house all around him.

Three years later, communists have taken over Laos. They begin to steal boys in the night, taking them to concentration camps for extreme labor and to brainwash them into communism. Many cannot endure the harsh treatment and do not make it out. The sound of machine guns shooting down those who attempt to escape becomes a regular nightly occurrence.

It is 1977, and Paul is in school where he often hears the names of the men and boys who were taken the night before. This time he hears the name of a friend, and it triggers him to get out. He walks out of the classroom, and to the Mekong River that acts as the border between Laos and Thailand. He has a plan. He gathers some nearby kids to go swimming. As they play in the water, Paul watches the guards along the banks. He sees them begin to slack off, so he begins to distance himself from the group. He is swimming for his life before anyone even notices. By now the guards begin to shoot. He isn't sure what he's more afraid of, being shot or the river monster the older boys teased about. But when Paul hits the middle of the river, he knows he is safe. The communists have to cease shooting or else Thailand will shoot back. And when he makes the mile-long swim to the bank of Thailand, he climbs out of the water, wipes the leeches off, and looks back towards Laos. He has left his home and his family behind. He is fourteen years old.

Paul is immediately taken by police to begin processing him as a refugee.

Paul's experience reflects a country torn by war, but that is only one of the possible situations refugees may have endured in their home countries that pushed them to flee. Along with war, their home countries may be suffering from religious, national, social, racial, gender, or sexual orientation persecution or hunger. These issues push an individual to flee the country, starting their journey as a refugee. As shown, the process of fleeing is hazardous, and for others, that part of the journey can last much longer. For some, they must walk many miles to reach a point where it is possible to cross oceans or borders to find a camp. When they reach that point, it is likely they will have to pay a great amount of money to be smuggled out of the country. The cost is so high, that many families cannot afford to get everyone out. This often means that parents can only send their children ahead while they stay behind. This choice reflects the desperation and urgency of what a refugee is fleeing from, to think that it is safer to send one's children alone into an unknown future, rather than to remain together in the country that is enduring violence. When they reach this point to exit the country and must cross the ocean, they are packed onto a boat with an unexperienced driver and treacherous waters. This means that the boat is likely to capsize, resulting in a loss of the little belongings the refugees brought, and many times, a loss of family members.

Upon reaching the refugee camp, there is a chance that an individual could be turned away, even after all their travels to get there. This is often the case if they have lost their identification, which then leaves the displaced person in a state of limbo. They would have to return to their home country and face persecution or oppression yet again, or attempt to keep traveling in search of another camp that will accept them.
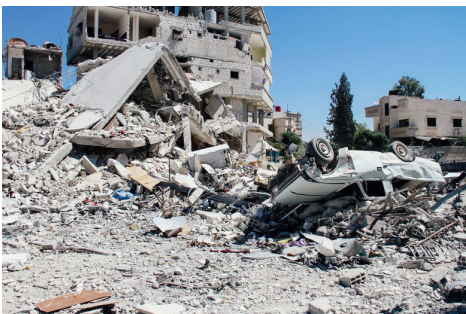

FIGURE 02: The war and destruction Eyad Aw-wadawnan and his family left behind in Syria.

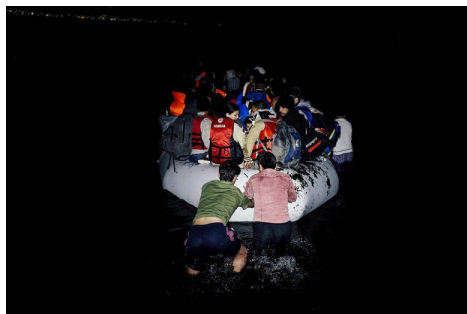Al-keswani, Ward. Slate.com. June 16, 2013.

FIGURE 03: Awwadawnan and his family were smuggled out of the country by boat.

Bekas, Umit. Slate.com. March 5, 2015.

FIGURE 04: Awwadawnan and his family in a makeshift settlement in Samos, Greece.

Baltas, Costas. Slate.com. October 20.

Life in a Refugee Camp

If accepted into a refugee camp, the day to day life of a refugee includes challenges for even the simplest human needs. Food is rationed and many camps use a ticket stub system for refugees to get their meals. Water is retrieved from taps that are often located miles from the camp. Children are usually tasked to carry the buckets to and from the taps, and to transport gallons of water on their shoulders for miles takes a large amount of time out of their days, meaning that these children do not receive an education. The daily life of a refugee means that these basic tasks and functions, like getting water and food, become exceedingly challenging and deprive children of their basic right to an education, and individuals from participating in other activities. To add to this, the water often can become contaminated, and the food is so little that many become malnourished. These conditions make refugees more susceptible to diseases, which are especially difficult to combat as they do not have access to vaccines or adequate healthcare.

Mental Wellness of Refugees

On top of these physical challenges, the refugee also faces psychological traumas. After facing persecution and being forced to flee one's home country, a person experiences a great deal of emotional distress. As a result of these traumas, many refugees experience mental health disorders. Post-Traumatic Stress Disorder (PTSD), somatization, anxiety disorders, adjustment disorders, suicidal tendencies, and major depression are all common to refugees.

In an interview conducted by Public Radio International, Adel Ismail, an English teacher in the Domiz refugee camp says, "most of the people here, they are suffering from psychological conditions...and because of these bad psychological conditions, there are a lot of social problems." The effects of untreated internal tensions can lead to physical violence. "Those invisible wounds, those mental health problems, can have...chronic consequences for the society itself," says Ana Maria Tijerno, a Doctors without Borders mental health advisor. These consequences often take the form of domestic violence against women and children, or gang fights in the camp's streets. But treatment and screening are difficult. In many cultures, there is great stigma; "If you go to a psychologist or a psychiatrist, maybe they will say you are mad, you are crazy. They are ashamed to go to the health center," explains Adel Ismail.[3]

3.   Wood, "Inside the Syrian Refugee Camps."

up to
40%
of Adult Refugees
experience PTSD

6.8%
of Adults in America
experience PTSD

up to
90%
of Refugee Children
experience PTSD

5.0%
of Children in America
experience PTSD

PTSD has been measured to affect a range of 10-40% of the adult refugee population, and 50-90% of refugee children.[4] To compare, only 6.8% of adults and 5% of children in the United States experience PTSD,[5] and within the United States' war veteran population, 30% experience PTSD.[6] This means that refugees, civilians, are experiencing PTSD as much as, if not more, than someone who has actually fought in a war.

up to
15%
of Adult Refugees
experience
Major Depression

6.7%
of Adults in America
experience
Major Depression

up to
40%
of Refugee Children
experience
Major Depression

12.8%
of Children in America
experience
Major Depression

Major depression affects 5-15% of adult refugees and 6-40% of refugee children.[7] In comparison, 6.7% of adults and 12.8% of children in the United States experience major depression.[8] There are many challenges in attempts to provide treatment. Language barriers, cultural differences, and stigma make screening and treatment difficult to address and provide care.

Design has the potential to bridge this gap in language and culture to aid in psychological traumas by creating spaces that individuals can feel safe in and bring back a sense of identity. Persistent violation of one's space and its negative effect must be acknowledged in the design of a refugee camp. The introduction of specific design methods can begin the refugee's mental recovery at the subconscious level, using the power of physical space to provide a psychological sanctuary as "a guardian of identity."[9]

4.   Refugee Health TA, "Mental Health."
5.   National Institute of Mental Health, "Post-Traumatic Stress Disorder (PTSD)."
6.   Post-Traumatic Stress Disorder, "What Is PTSD?"
7.   Refugee Health TA, "Mental Health."
8.   National Institute of Mental Health, "Major Depression."
9.   Botton, *The Architecture of Happiness*, 10

"The territory concept is to define it as an area controlled by an individual, family, or other face-to-face collectivity." This definition of territoriality from Robert Sommer goes on to discuss its connotation about home, the need for roots and familiarity, and the desire to create order in one's environment.[10] There are primary, secondary, and public territories. "Breakdowns in territoriality may be associated with social disruptions," but having clarity between these territory types can lower crime rates.[11]

Edward T. Hall determined four human distances: intimate, personal, social, and public. Each space has a close range and far range. He described personal space as "a small circle in physical space, with the individual at its center and a culturally-determined radius."[12] Its distances were commonly found to be 1.5'-2.5' (close) and 2.5'-4' (far).[13]

INTIMATE 18"   PERSONAL 4'   SOCIAL 12'   PUBLIC →

CREATED BY AUTHOR

Territoriality and personal space are part of a larger definition of **privacy**, or "selective control of access to the self."[14] Alan Westin describes it as "the right of the individual to decide what information about himself should be communicated to others and under what conditions."[15] Westin defines four functions of privacy as: personal autonomy, emotional release, self-evaluation, and limited and protected communication. When individuals do not have the opportunity to express those functions, they might feel "always on". One needs privacy to relieve the burden of acting the way others expect them to.[16]

10.   Kaplan, *Humanscape*, 268
11.   Altman and Chemers, *Culture and Environment*, 152
12.   Proshansky, *Environmental Psychology*
13.   Hall, *Hidden Dimension*
14.   Altman, *Culture and Environment*, 77
15.   Kaplan, *Humanscape*, 325
16.   Kaplan, *Humanscape*, 326-327

THE FOUR FUNCTIONS OF PRIVACY

Personal Autonomy	Emotional Release	Self-Evaluation	Limited + Protected Communication
Protects the development and maintenance of a sense of individuality and consciousness of individual choice in life	Life in society and its demands generate tensions and require various types of emotional release that may not be done in public for physical and psychological well-being	Serves the need to process information that cannot be processed on the go and integrate experience into meaning	To set interpersonal boundaries or confide in and share personal information with trusted others

CREATED BY AUTHOR

Privacy is facilitated through behavioral mechanisms. These mechanisms manage personal space and territory through verbal and nonverbal responses, and cultural practices. Where there is an uncontrollable high density of people, crowding occurs. This means there is reduced ability to utilize behavioral mechanisms and successfully protect from undesired interactions. "Success or failure at privacy regulation may well have implications for self-identity, self-esteem, and self-worth – or the very well-being and survival capability of people and groups."[17] In refugee camps, where the high density of people is extremely uncontrollable, overcrowding becomes the forefront of many problems.

These concepts define the core of many issues with mental wellness that refugees face in camps. Understanding them presents opportunities to address those internal struggles, and in return can positively affect a camp's society as a whole. If well understood, these concepts of privacy can be applied in the design of refugee camps to bring back a sense of self-identity, self-esteem, and self-worth to the refugee.

17.   Altman and Chemers, *Culture and Environment*, 81

This investigation is predominately written research, drawing connections from previous researchers' works on social psychology and proxemics, to behavioral occurrences in refugee camps, and resulting in the creation of a design taxonomy for refugee camps. The ideas of Edward T. Hall, Irwin Altman, Alan Westin, Robert Sommer, and more were studied to develop an understanding of the importance of privacy to the human being. Case studies were also used to gain knowledge on specific aspects of design already in use that could be applied to the formation of this new taxonomy. The studies chosen convey a strong background research, and their resulting projects address spatial conditions within refugee camps. Paired with background knowledge from family experience, the journey of the refugee was studied through published first person accounts, participation in the "Walk in the Shoes of a Refugee" event by NWACanopy, and a review of documents and statistics from the United Nations High Commissioner for Refugees (UNHCR) and other sources. An analysis of existing camps expanded on this knowledge and gave insight to the many ways camps can function and form. This aspect of the research also gave context to statistics for a better understanding. First person interviews were attempted, however, client protection policies prevented this possibility, and were substituted with published first person accounts. These accounts still provide very relevant insight and perspectives shared by refugees themselves, and highlight the emotions and feelings that they endure. After studying those accounts, operative words emerged out of the feelings of comfort and decent living conditions that refugees seem to lack, but have a basic human right to. Operative words such as privacy, dignity, sanctuary, security, and social wellness, were predominant in first person accounts of what refugees were lacking. After understanding the refugee experience from the point of view of social psychology and proxemics, conclusions were drawn to create a design taxonomy using the operative words as points of departure and analysis. This taxonomy serves to return those feelings to the refugee through design and planning. It should act as a replicable set of guidelines and points of consideration for designers to create better and healthier spaces for healing; a Refuge for the Refugee.

Refugees, Resiliency, and Public Space: The BSA Syria Initiative / Bekaa Valley, Lebanon

Mass Overview + module sample
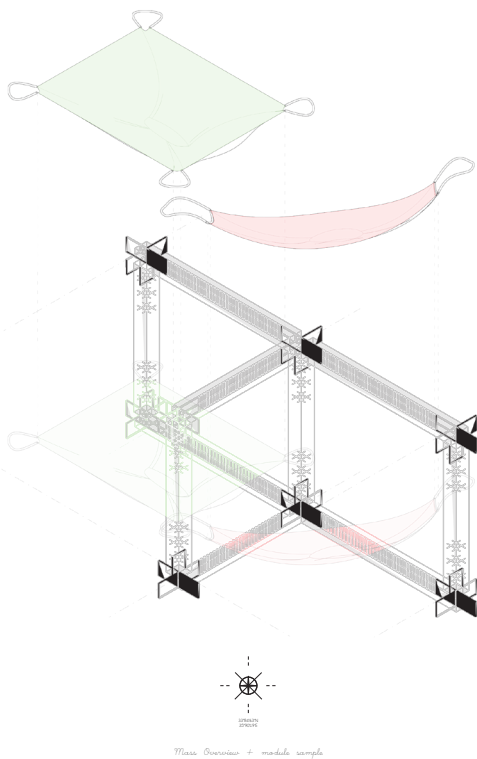
FIGURES 05: The BSA. Refugees, Resiliency, and Public Space: The BSA Syria Initiative. May 2018.

The Syria Initiative was established in collaboration between the Boston Society of Architects (BSA) and Boston design community in partnership with the Karam Foundation (Karam) and Sawa for Development and Aid (SDA). Their mission was to design and construct child-focused spaces in refugee camps, that foster positive inter-actions, social cohesion, and healing. This playground built in the Bekaa Valley was the Initiative's first step in developing a "transnational, collaborative, and replicable process to design and construct child-focused spaces in the context of conflict or natural disasters." This focus came from the realization that the average stay in a camp is 17 years. An entire childhood can be lost without a focus on childhood development in camps. Play is an important part of a child's cognitive development, competence, gross motor skills and peer group leadership. This project implements a play space with hammocks, swings, seesaws, seating, climbing nets and a basketball court. Of many lessons from this work, one takeaway is how the space was designed to be easily assembled and disassembled, with variable heights and widths that can accommodate different space restrictions. Another is the focus on design for healing, and translating a cognitive need to a spatial commodity, and studying the Syria Initiative's techniques in doing this will carry forward into this research. [18]

18.   The BSA, Karam, SDA, and the Project Architects, "The Syria Initiative."

Spinelli Community Center Project / University of Kaiserslautern / Mannheim, Germany
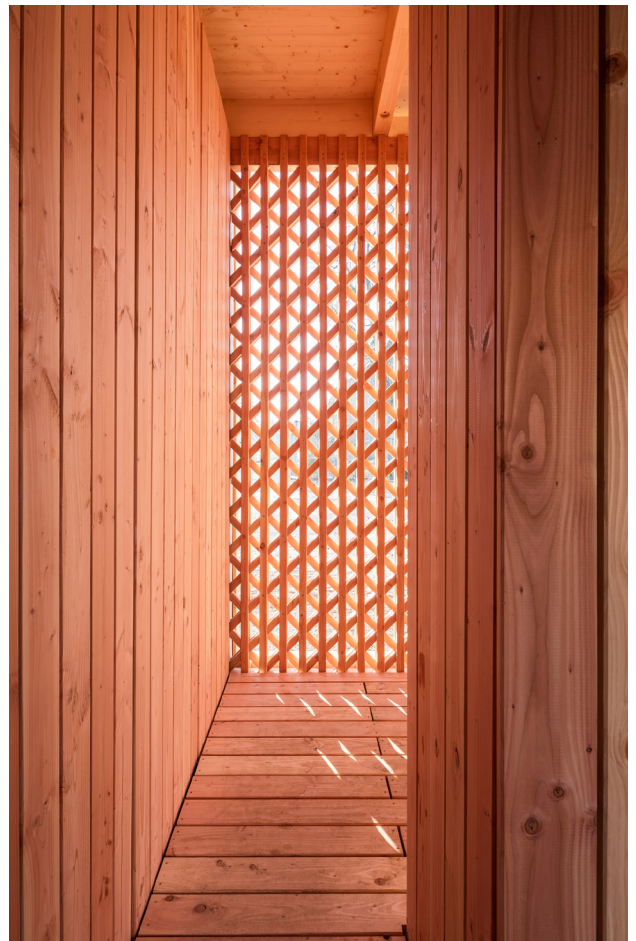

FIGURES 06: Wegner, Yannick. Dezeen.com.

Architecture students from the University of Kaiserslautern designed, fabricated, and built a community center for a refugee camp in Mannheim, Germany. Working with refugees, the design was directly informed by their needs and interests. Cross-laminated timber clad with Douglas fir was used for the walls, with latticed woodwork as a structural element that also provided architectural interest and dappled light. The material was chosen for its inviting warmth. The project consists of a large communal space that can be used as a stage or auditorium, as well as small courtyards and private niches. Its consideration for social and private space can be informative to this research and design taxonomy. The influence and input from refugees on this project is extremely valuable. "The ornamental structure with its varied play of light is recognized by the refugees as a reminder of oriental ornaments, and as an inviting gesture of identification in a foreign place." This is revealing of the refugee's need for a sense of identity amongst uncertainty.[19]

19.   Gibson, "Students Build...Community Centre in German Refugee Camp."

Space of Refuge / Samar Maqusi / Bartlett School of Architecture, University College London
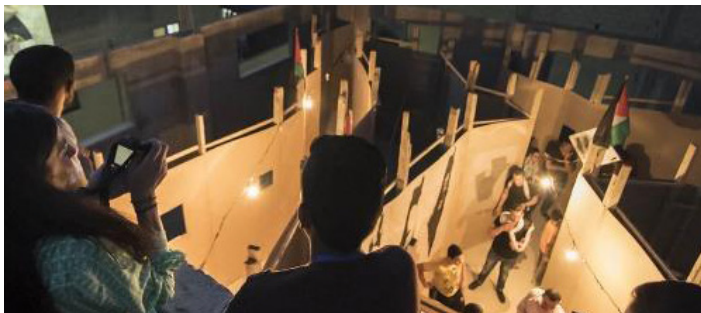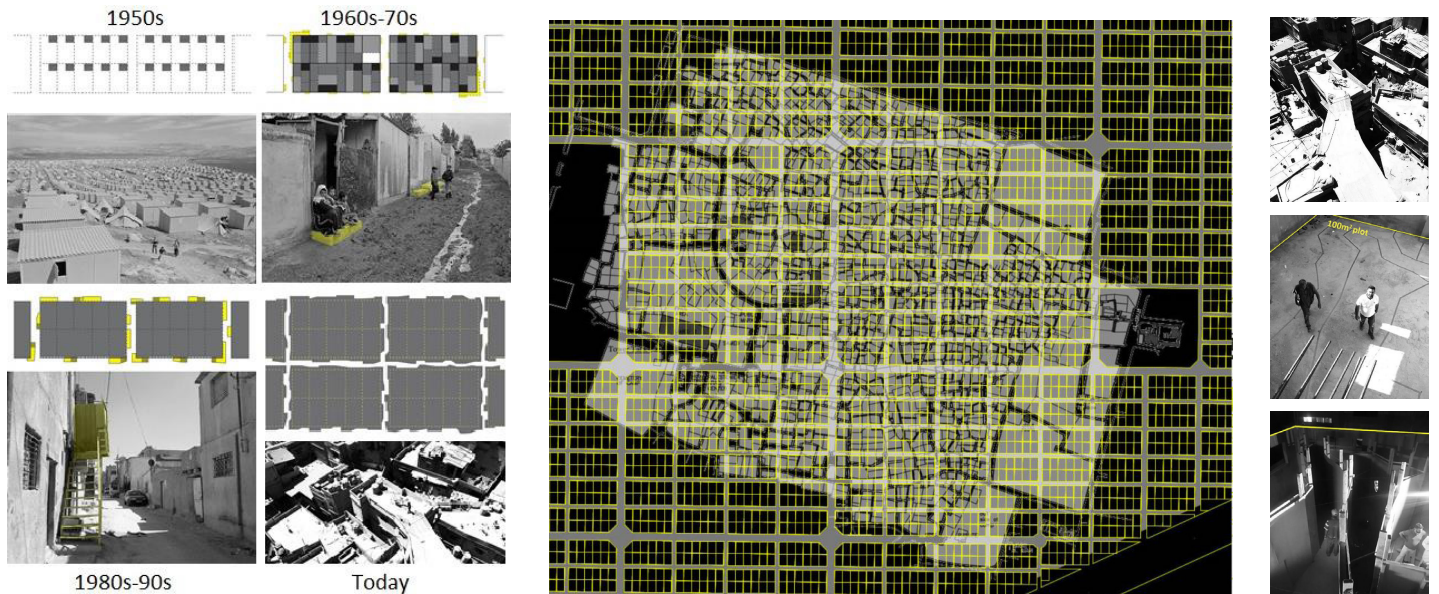
FIGURES 07: Maqusi, Samar. University College London, August 16, 2017.

Space of Refuge studies the spatial production and evolution of space in Palestinian refugee camps, and results in an installation that serves to "act as an agent for 'transferring space and knowledge'." The project analyzes how one camp evolved over time under the influences of restrictions from the government and United Nations, and the "spatial violations" that refugees made in an attempt to gain more space than allotted. A superimposition of two different camp scales demonstrates the difference in spatial production across refugee camps. This installation superimposed a strictly gridded camp scale onto a more organic camp scale, and incorporated film, sound pieces, and photography to start a dialogue on existing spatiality and a transfer of knowledge across camps. As a case study, it is valuable to understand the refugee's use of space, and how that evolves over time with and in spite of regulations.[20]

20.   Maqusi, "Space of Refuge."

The refugee crisis has displaced over 70.8 million people worldwide. Of those displaced, 25.9 million are refugees, 3.5 million are asylum-seekers, and 41.3 are internally displaced people (IDP).[21] Most of the world's refugees come from Syria, Afghanistan, and South Sudan, making up 57% of UNHCR's refugees. Over half of the refugee population are children under 18 years old. Top asylum countries hosting refugees are Germany, Sudan, Uganda, Pakistan, and Turkey, which is hosting 3.7 million. Only 92,400 refugees have been resettled[22] in other countries, while the others remain in refugee camps in asylum countries. [23]

REFUGEE POPULATION, MID-2016

1,000   10,000   100,000   500,000   1 million   Data not available
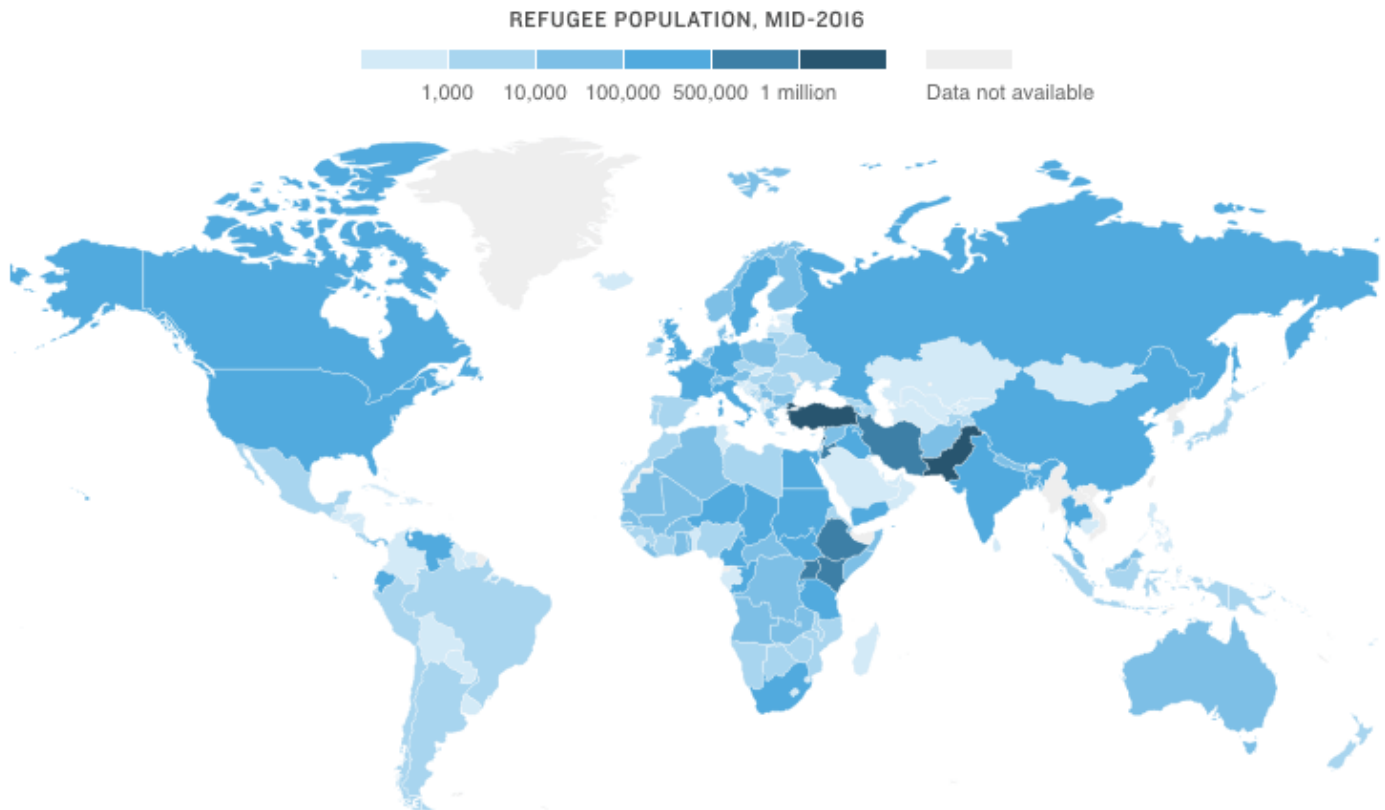
FIGURE 08: Park, Katie. NPR.org. 2016

21. A refugee is an individual who is forced to flee their home country due to conflict, violence, or persecution. Every refugee is first an asylum-seeker, someone who is seeking international protection from their country of origin. Some asylum-seekers are never granted refugee status. An IDP is not a legal status, but describes an individual who is seeking refuge within their own country.
22. Resettlement is for those who cannot return to their home countries due to a persistent and unforeseeable end to conflict or persecution, and have needs that cannot be met by the country currently offering protection
23. UNHCR, "Figures at a Glance."

UGANDA

BANGLADESH

JORDAN

YEMEN

KENYA

UGANDA

BIDI BIDI CAMP

CREATED BY AUTHOR

Refugees here fled from the South Sudanese civil war, creating the world's largest refugee camp until recently. As the second largest, the camp looks and functions very different than most. The shelters are small huts with thatched roofs instead of long rows of white tents, and there is space to farm around them. Refugees are given plots of land and organize their huts in clusters with family, and farm their own resources.

These more permanent structures and practices serve refugees, but when they resettle elsewhere or return to their home countries, the structures could be used by the local community. [24]
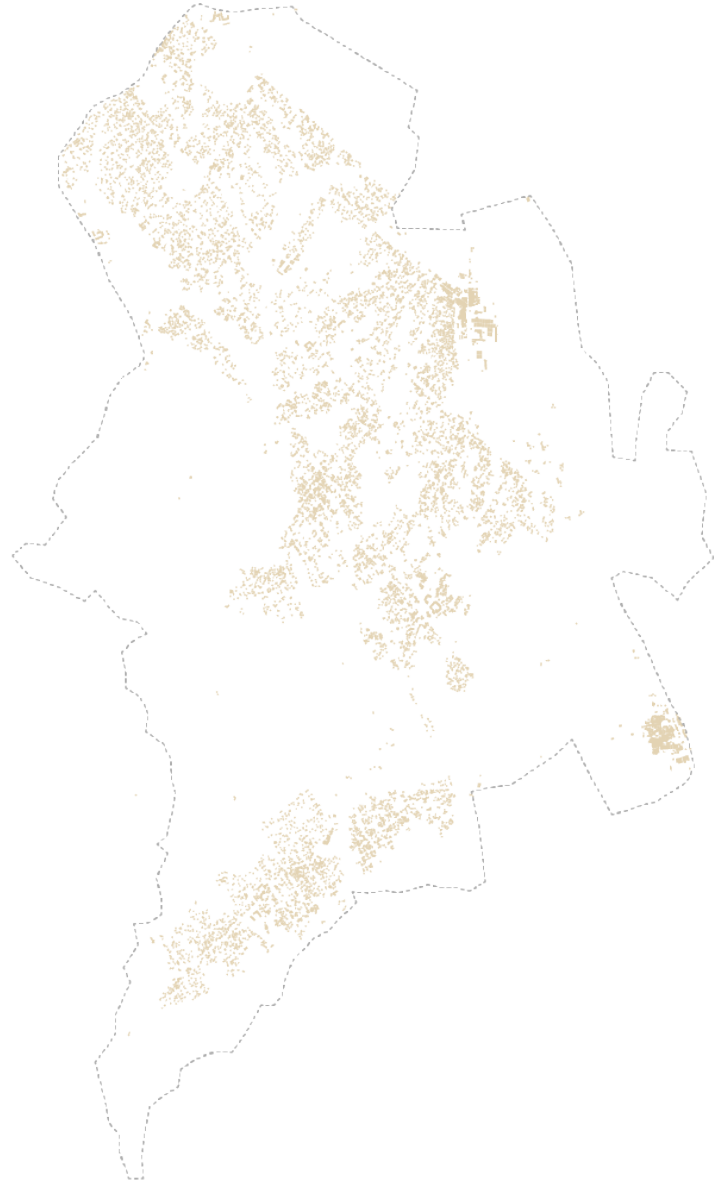
CREATED BY AUTHOR

Total Population	232,109
Total Households	42,843
Country of Origin:	
South Sudan	232,016
Sudan	92
Democratic Republic of the Congo	1 [25]

24. Wernick, "Refugee Camp Becomes a City."
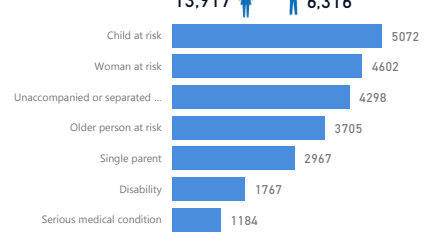25. UNHCR, "Uganda- Refugee Statistics."

Age & Gender Breakdown

0-4	8 %	8 %
5-11	15 %	15 %
12-17	9 %	10 %
18-59	18 %	13 %
60+	2 %	1 %

Women and Children
86 %
199,954

Elderly
2 %
5,524

Female
53 %
121,987

Youth 15-24
22 %
50,205

Specific Needs - Top 7

13,917   6,316

Child at risk	5072
Woman at risk	4602
Unaccompanied or separated ...	4298
Older person at risk	3705
Single parent	2967
Disability	1767
Serious medical condition	1184
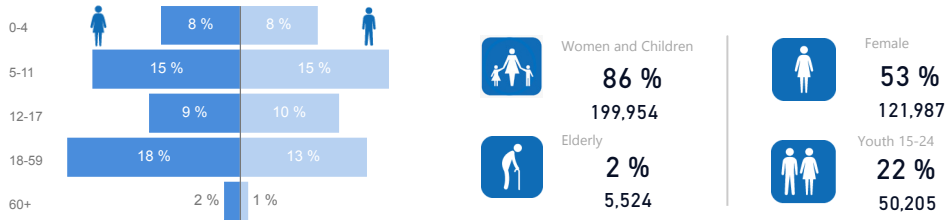
FIGURE 09: "Uganda Factsheet- Refugee Statistics February 2020- Bidibidi," UNHCR

FIGURE 10: Leiva, Oscar. crs.org.

FIGURE 11: Curtis, Ben. theguardian.com. January 17, 2020.

KENYA

KAKUMA CAMP

CREATED BY AUTHOR

CREATED BY AUTHOR

Most refugees in Kakuma come from Sudan and Somalia. The camp was started in the 1990s when civil war in Sudan drove people out of the country towards neighboring countries such as Kenya. Political strife continues to displace many in both Sudan and Somalia.

A semi-arid climate leads to high temperatures during the day and a drastic drop in temperature at night, periods of little rainfall, and periods of highly destructive flooding. [26]

FIGURE 12: Wachiaya, Cathy. Kakumagirls.org.

26.   Kakuma Girls Project, "About Kakuma Refugee Camp."
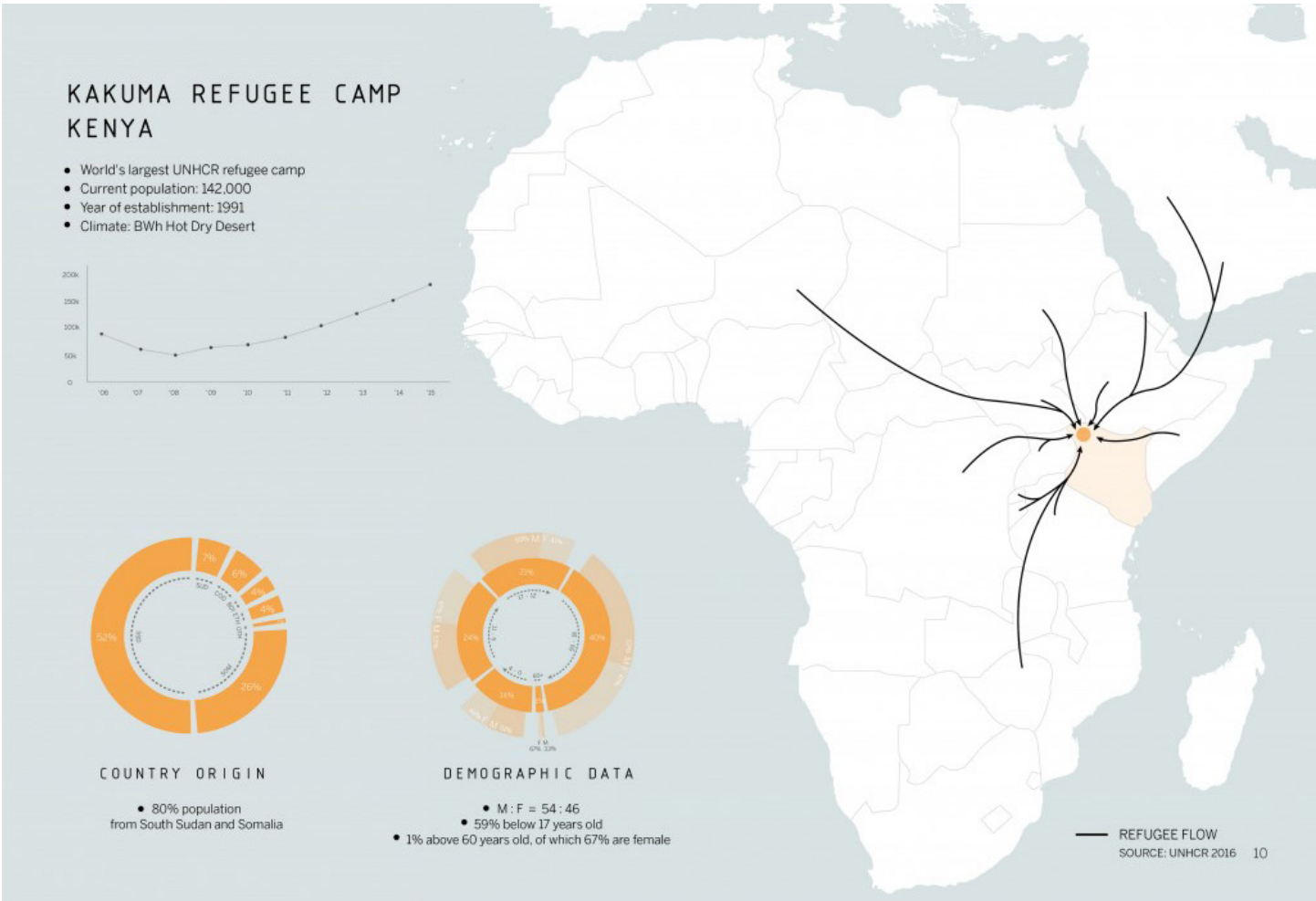
FIGURE 13: IAAC. Iaac.blog.com.

FIGURE 14: Devine, Carol. Kakumagirls.org.

YEMEN

KHARAZ CAMP

CREATED BY AUTHOR

The Kharaz refugee camp was opened in 2001, and is the only camp in Yemen to this day. Refugees are from Ethiopia, and mostly Somalia. Somalis were forced to flee for Yemen because of tribal violence and civil war. [27] They crossed the Gulf of Aden, a dangerous trek. The camp itself is very secluded. It is surrounded by mountains and desert, isolating those who live there. [28]

In recent years, UNHCR has begun Assisted Spontaneous Return (ASR) back to Somalia. This program has begun because of declining conditions in Yemen, and an increase in stability in the refugees' home country. ASR has taken more than 4,800 Somali refugees home from Kharaz. [29]

CREATED BY AUTHOR

Total Population	8,639
Total Shelter Blocks	71

5.4 square kilometers
45% of population has no occupation [27]

27. UNHCR, "Kharaz Refugee Camp."
28. The New Humanitarian, "Refugees Hope for Better Life."
29. UNHCR, "Somali Refugees Return Home."

IDPs displacement trends over time
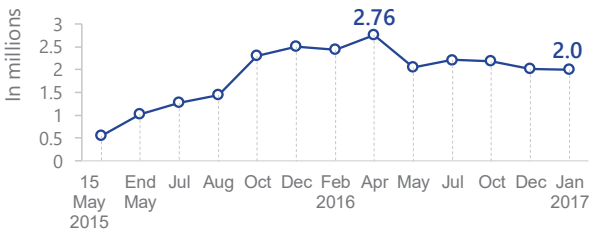
FIGURE 15: TFPM. Reliefweb.int. March 2017.
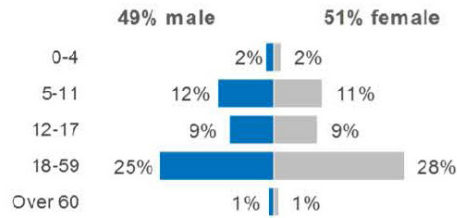
POPULATION DEMOGRAPHICS
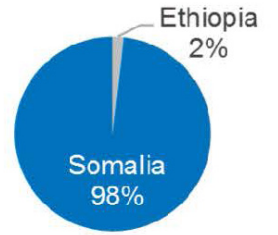
FIGURE 16: "Kharaz Refugee Camp, Yemen-Factsheet." UNHCR.

FIGURE 17: J.Björgvinsson. unhcr.org. March 2007.

FIGURE 18: Flamand, Annasofie. aljazeera.com. November 20, 2010.

KUTUPALONG CAMP

CREATED BY AUTHOR

Most refugees in Kutupalong are Rohingya Muslims who fled Myanmar in the midst of a military crack-down. The situation unfolded rapidly, leading to the world's largest and most densely populated camp with 16,709 people in the official camp, and approximately 598,035 people in the makeshift extensions.

The camp's location and hostile terrain makes access difficult. Flooding and landslides are a prevalent danger to shelters and refugees, especially as unstable makeshift shelters continue to emerge. The makeshift settlements that expanded around Kutupalong have created poor housing and livable spacing for people. More than 40,000 makeshift shelters are outside of the official camp. The conditions are very poor in the makeshift settlements and do not follow UN guidelines, which are leading to high rates of disease.[30]

Kutupalong
Refugee Camp

Kutupalong
Makeshift Settlement

Balukhali
Makeshift Settlement
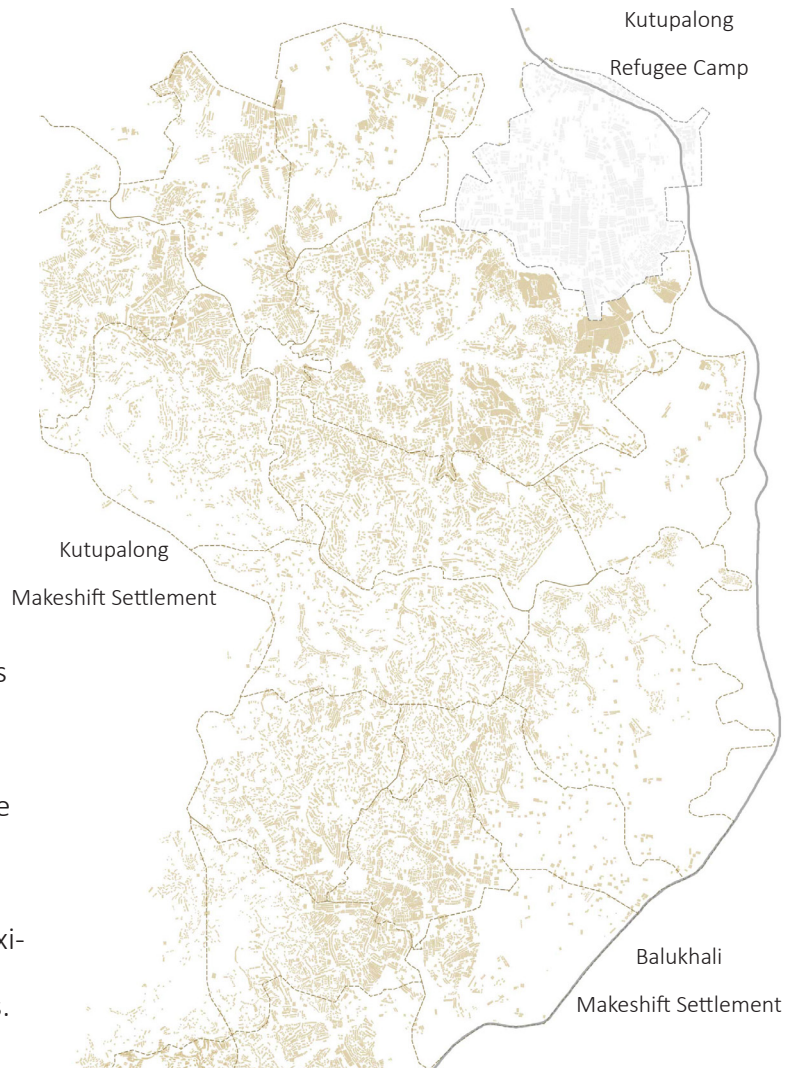
FIGURE 19: Cai, Weiyi and Scarr, Simon fingfx.thomsonreuters.com. December 4, 2017.

FIGURE 20: Arnold, Roger. unhcr.org.

30.   Reuters Graphics, "Life in the Camps."
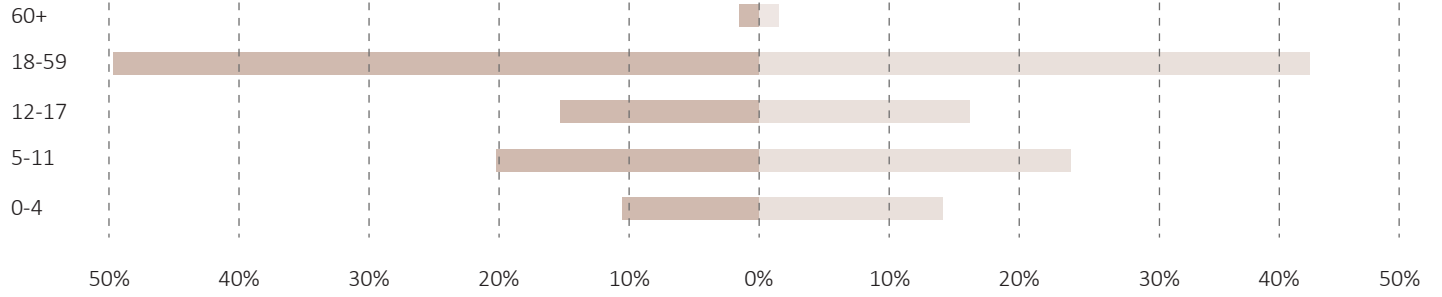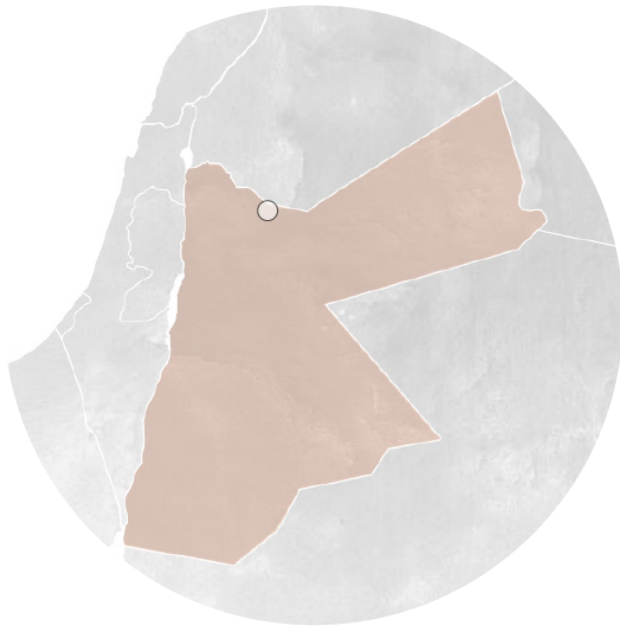
Total Population 16,709

Female
Male

FIGURE 21: Dean, Adam. unhcr.org.

JORDAN

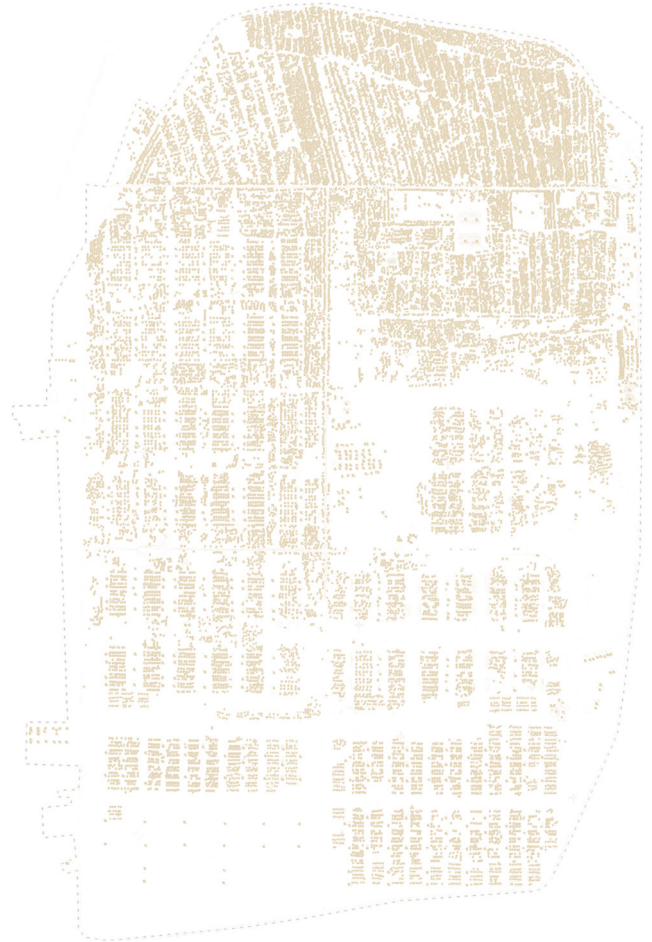*ZAATARI CAMP*

CREATED BY AUTHOR

CREATED BY AUTHOR

Violence in Syria has driven more than 5.6 million out of the country. After ten years of conflict, the Syrian Refugee Crisis is considered to be the largest displacement crisis. Many Syrians fled to Lebanon, Iraq, or Turkey. In Jordan, the Zaatari camp has become a semi-permanent shelter and approximately 93% of refugees live below the poverty line. Conditions are harsh in the desert, with brutal summer heat and dust storms, and freezing winters. Water is scarce in the summers, and the metal caravan shelters bake in the sun and become unbearable.

TOTAL POPULATION   76,143

Age Range

0-4	19.7%
5-11	21.8%
12-17	14.3%
18 - 59	41.
60	2.6%

Origin

- Dar'a 80%
- Rural Damascus 14%
- Homs 2%
- Damascus 2%
- Other 2%

FIGURE 22: "Jordan – Zaatari Refugee Camp January 2020-Factsheet," UNHCR.

UNHCR organized the camp into twelve districts, and appointed each with camp leaders. Each district was organized based on communities the refugees had come from in an attempt to create a sense of community in the camp as well.[31]
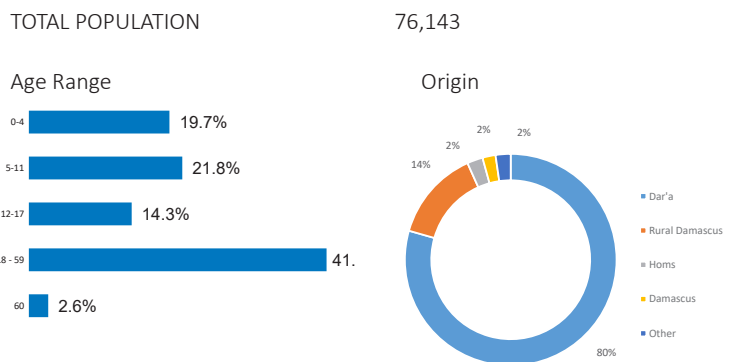
31.   UNHCR, "Zaatari Refugee Camp."

FIGURE 23: Sokol, B. abc.net.

FIGURE 24: Matas, Jordi. arcgis.com.

FIGURES 25: Joyce, Allison. npr.org.

PRIVACY

DIGNITY

SANCTUARY

SECURITY

SOCIAL WELLNESS

Through research and the study of first person accounts, these words are recognized as feelings and needs that are lacking in the refugee experience. They are used as points of departure and analysis to create a design taxonomy by translating these intangible feelings into physical spatiality. It is an attempt to return those feelings back to refugees as basic human rights, to overcome language and cultural barriers in mental wellness treatment, and to provide spaces that foster healing.
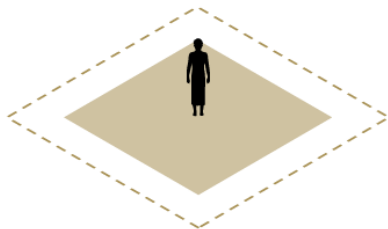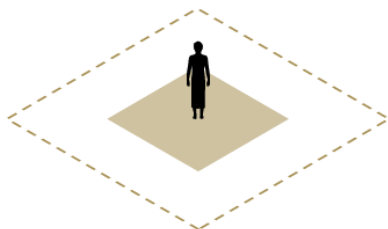

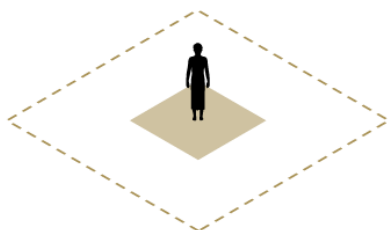FIGURE 26: Dean, Adam. unhcr.org.

Existing Weakness

UN minimum
acceptable area

Actual Space
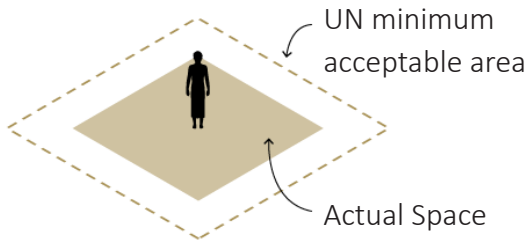
Average of All Camps at Kutupalong
15.46 sq. m per person

Kutupalong Refugee Camp
17.15 sq. m per person

Kutupalong Makeshift Settlement
7.78 sq. m per person

Balukhali Makeshift Settlement
4.47 sq. m per person

FIGURE 27: a diagram from Thomson Reuters Graphics depicting square meters per person in the Kutupalong camp in Bangladesh.

FIGURE 28: an image by Henk Wildschut illustrates the creative ways refugees attempt to mark their territories and private spaces. This refugee at the Choucha camp in Tunisia, July 2011, uses water bottles filled with sand to create a boundary for his tent and flower beds.

"Although every space in the camp was full, they just repeated, 'Find a place and make it your house.' We looked for three days to find an empty space, until finally a friend offered us his tent."[32] — Eyad Awwadawnan, a Syrian refugee on the Greek island of Samos.

Robert Sommer stated that "the territory concept is to define it as an area controlled by an individual, family, or other face-to-face collectivity."[33] Territoriality in relation to privacy is something innate to human beings across cultures; It is, "in every sense of the word an extension of the organism."[34] This concept is apparent in the international guidelines set by the United Nations. It states that the acceptable space per person in a refugee camp is 35 square meters. This regulation is often not met.

How can the design of refugees' spaces give individuals more control, or the sense of control, over their territories and privacy?

32. Awwadawnan, "I Have Become Lost Like My Homeland."
33. Sommer, *Humanscape*, 268
34. Hall, *The Hidden Dimension*, 103

Design Taxonomy
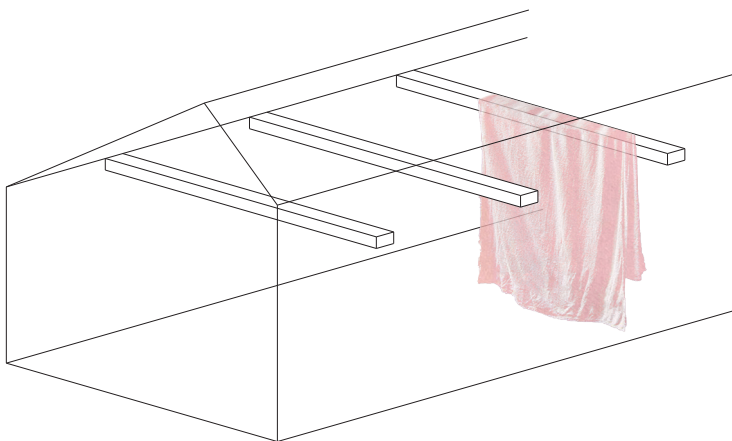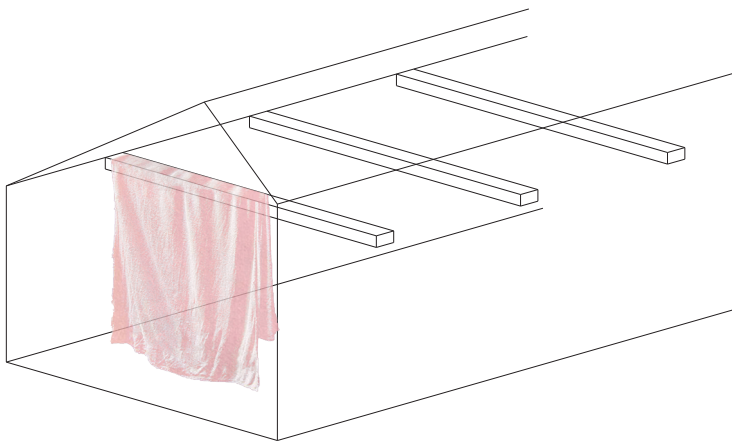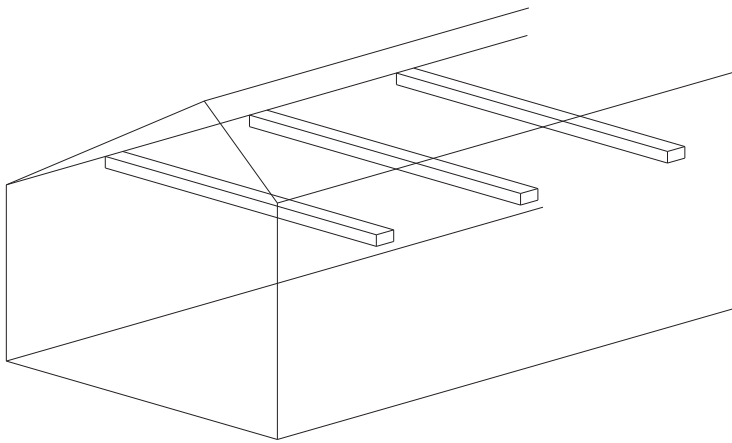
The interior of a shelter can be filled with relatives, and even other families. The shelters are often one large space, making personal space inside one's own house unattainable, affecting the mental state with no break from external stimuli.

According to Sommer, territoriality can mean the need to create order in the environment for the comfort of familiarity, and the explicit operation of choice and control.[35] In an attempt to give that control to the refugee, the interior space should have the opportunity to create smaller spaces, breaking down the shelter into personal spaces when desired.

A possible solution could be introducing revealed beams that can be paired with tapestries to offer flexibility in space making. It could be a simple way to give back territorial control and personalization to the refugee.

"Personalization serves both to signal that the territory is controlled by the occupant and to depict self-identity..[It] may...serve to regulate other people's access."[36]

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35. Sommer, *Humanscape*
36. Altman and Chemers, *Culture and Environment*, 145

Existing Weakness

FIGURE 29: An unnamed refugee tells his story on @RefugeeStories Instagram

FIGURE 30: a photo taken by Carol Devine show women at the Kakuma refugee camp in Kenya walking to educational centers.

"I know what being a refugee is. It's a painful world. A refugee has no hope, no future."[37] — Unnamed, @RefugeeStories Instagram

This quotation reveals the pervasive sense of hopelessness in the world of a refugee. Many cannot see the end of their journey, and believe there is no future. However, it is important for refugees to maintain a sense of purpose and remain hopeful; to not lose one's identity.

Dignified living includes access to clean water and food, as well as services like education, religious spaces, and recreational activities. In today's camps, these basic necessities can either be difficult to attain, or hidden behind unorganized and chaotic living conditions. It is important to clarify and strengthen the refugee's relationship to these buildings of hope, because "we look to our buildings to hold us, like a kind of psychological mould, to a helpful vision of ourselves."[38]

Can camps be designed to restore a refugee's dignity and sense of self-worth to encourage hope for the future?

37.   Unnamed, @RefugeeStories.
38.   Architecture of Happiness, 107

Design Taxonomy

"In a hotel room strangled by three motor-ways, or in a wasteland of run-down tower blocks, our optimism and sense of purpose are liable to drain away...we may start to forget that we ever had ambitions or reasons to feel spirited and hopeful."[39]

To design for dignity, it is important to sur-round the refugee with reminders that there is still a future, that they have purpose. This could mean camps should plan for shelters to be centered on buildings that emanate hope-ful messages, like education centers, religious spaces, and recreational activities. Creating a plan that provides sight lines from as many shelters as possible, to these buildings could serve as a reminder of one's future.

Another possibility is designing these building types to stand out from the repetition of shel-ters, and to stand at a height or location that is visible at any point in the camp. Designing these buildings with more visual interest can "enhance people's identification with the insti-tution" and the ideas that it represents.[40]
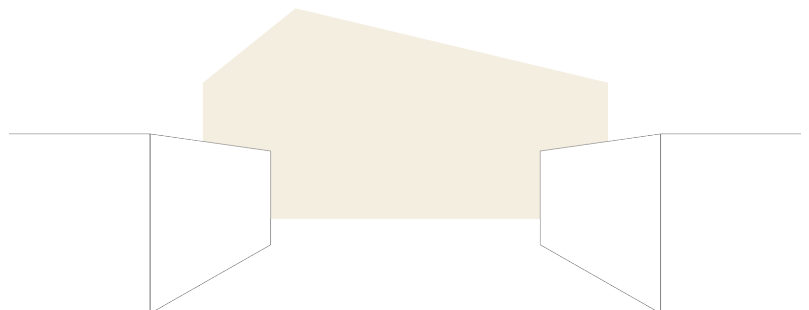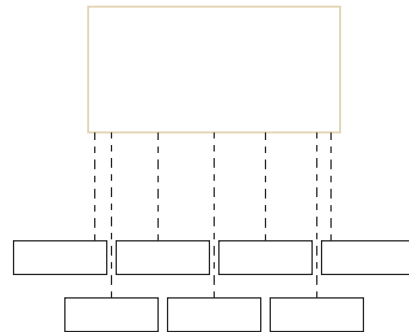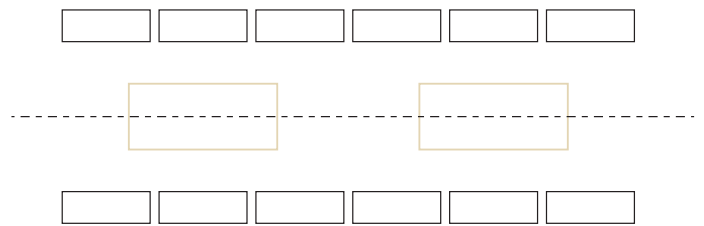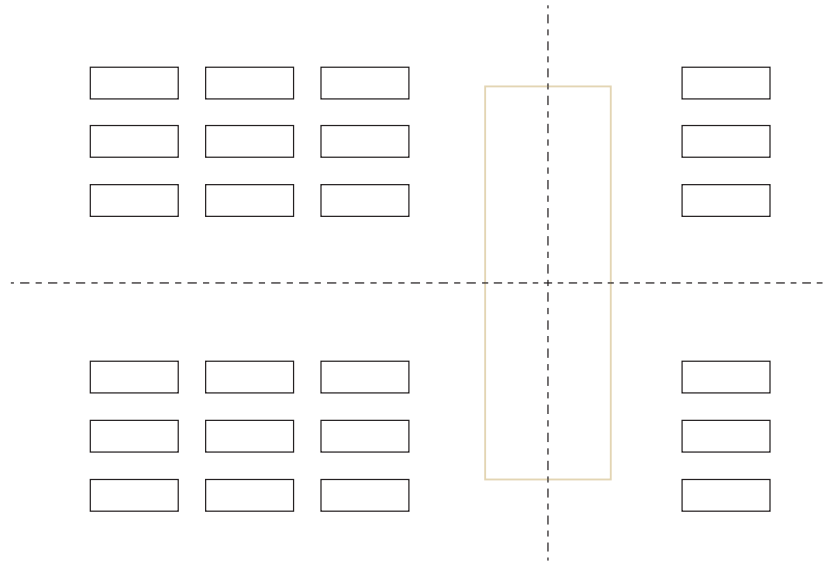
39. Botton, *Architecture of Happiness*, 106
40. Altman and Chemers, *Culture and Environment*, 145

CREATED BY AUTHOR

Existing Weakness

FIGURE 31: an image by Henk Wildschut for the New Yorker illustrates how refugees from camps all over the world grow plants as a mechanism to create something that is theirs, that feels like home. It is the act of putting down roots that gives a sense of belonging and control over something. This image was taken in Bekaa, Lebanon, May 2017.

"I went out looking for another place, and I found one in the woods outside the camp. We spent 17 days there.

The sky was the roof of our house, the trees were the walls, and the earth was our bed. We would throw some of

*our food far away from where we slept as bait for insects. The space was covered in bugs and human waste."*[41]

— Eyad Awwadawnan, Syrian refugee.

Awwadawnan's story describes many refugees' attempt to find sanctuary in an overcrowded camp. Sanctuary is a place where one can take refuge, find safety, and feel at home, and refugee camps are far from acting as one. So, refugees must attempt to create a sanctuary on their own. Sanctuary is necessary to protects one's identity through the expression of personal autonomy, emotional release, self-evaluation, and limited and protected communication, the functions of privacy. [42]

Can a sense of sanctuary be designed into the spaces of a refugee camp?

41. Awwadawnan, "I Have Become Lost Like My Homeland."
42. Westin, *Humanscape*, 326-327

Design Taxonomy
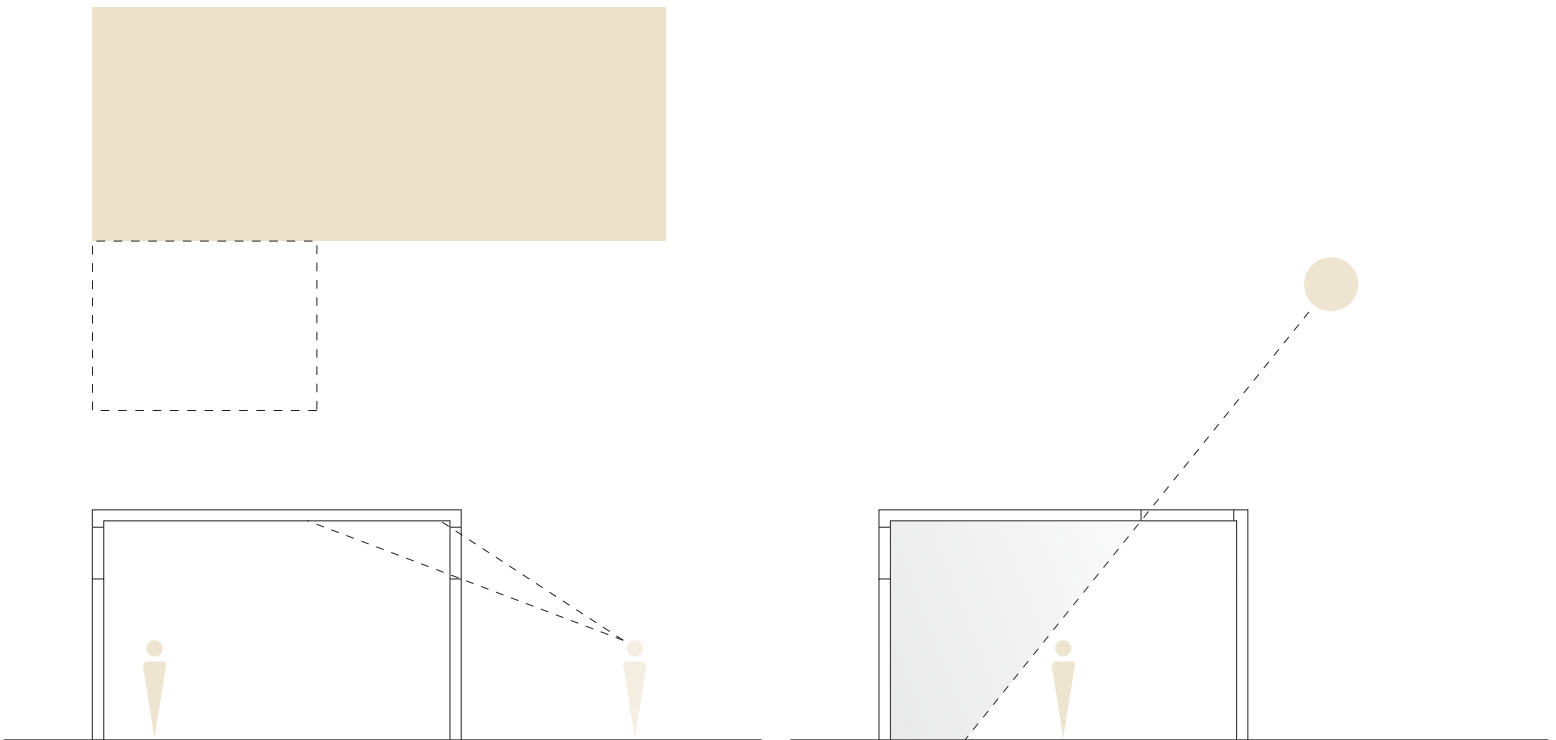
CREATED BY AUTHOR

The spiritual tradition of asking the church for sanctuary reveals the deeply rooted sense of the word. Historically, those who needed protection could seek refuge in the church for a time and be protected by law. These ideas of refuge influence today's connotation of the word "sanctuary."

To design a sanctuary space in the midst of a refugee camp, permitting one to make their mark can give a feeling of home. Each shelter could be given a plot of surrounding land that its resident may use and build on, or use for gardening.

A sanctuary within an overcrowded space desires a private space for introspection, beyond the eyes of others, and where one can withdraw from external stresses. Another possibility of creating this sanctuary could lie in the design of a shelter's openings. A refugee's shelter is often the only place one can come close to privacy. The need to shut out the outside world might ask for the design of clerestory windows, rather than openings that offer views in/out. It might also lead to skylights for an introspective space. These options provide sunlight and ventilation, while maintaining privacy from the outside.

Existing Weakness

FIGURE 32: an unnamed refugee talks about his time in "detention centers" on @RefugeeStories Instagram

FIGURE 33: this photo by Patrick Brown for UNHCR, depicts two girls waiting with their family's belongings while they build a new shelter. A landslide wiped away their last shelter.

"When I look back on my time in detention, I try not to look at it in a negative way, because I learned so much in there. So much about human nature, about desperation and control."[43] — Unnamed, @RefugeeStories Instagram

In situations of overcrowding, feeling out of control can lead to disruption internally and externally, fueling societal tensions and violence. Violence in camps is common, and without a sense of security, the mind is constantly on guard. However, the knowledge of safety and the ability to control one's surroundings can put the mind at ease.

"Perhaps a design feature which could increase feelings of control...could ameliorate some effects of density."[44]

The ability to control boundaries and regulate one's space correlates with improved self-identity and a sense of self-worth, and even "the very well-being and survival capability of people and groups." [45]
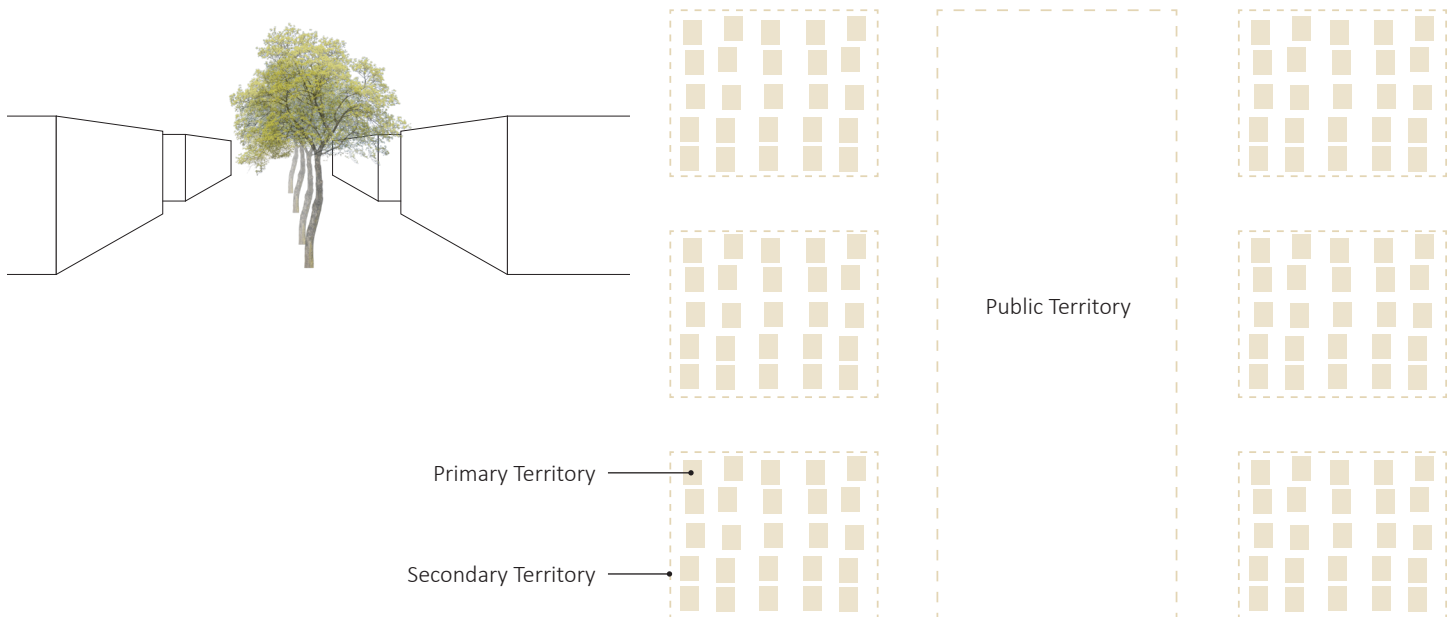
How can we design for a sense of security?

43.   Unnamed, @RefugeeStories
44.   Sherrod and Cohen, *Humanscape*, 337
45.   Altman and Chemers, *Culture and Environment*, 81

Design Taxonomy

Public Territory

Primary Territory

Secondary Territory

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To design for security, clarity in territories is important, as "breakdowns in territoriality may be associated with social disruptions."[46] It is the factor of unpredictability without defined territories that creates a lack of security.

High density and large numbers of people can lead to that unpredictability. In the design of refugee camps, this can be taken into consideration by breaking down the amount of people and organizing groups into separate territories. This effectively creates a community with a manageable volume of residents, which is small enough for people to recognize one another and form bonds.

The primary territory is the individual shelter, secondary is the community block, and the public territory is made up of education, markets, etc. In order to create a clarity between these territories, clear wayfinding should be utilized. This can take the form of signs, colors, or visual markers. It can also be effective to ensure that the spacing between community blocks clearly demonstrates a separation. It is also important that there are multiple locations for public territories. This will ensure that density does not exceed into unpredictability in order to maintain a sense of security and controllability.[47]

46. Altman and Chemers, *Culture and Environment*, 152
47. Altman and Chemers, *Culture and Environment*

Existing Weakness

FIGURE 34: An aerial view of the Bourj Al Shamali Palestinian refugee camp in southern Lebanon reveals how tightly packed camps can be. This camp's buildings are mostly only separated by 2-3 meters. From Claudia Martinez Mansell, "Camp Code," Places Journal. April 2016.

"Again, I have so many worries here with the neighbours. The restaurant people beat my sons for no reason and again I am living in fear."[48] *—* Karma, Tibetan refugee.

In overcrowded refugee camps, many social interactions can be negative, claustrophobic, or unwanted. This fuels both internal and external tensions and creates rifts in the community, evident in the often violent out-breaks. Again, this is due to a breakdown in territoriality.[49] A sense of community can be created to reduce these tensions by bringing people together in positive social interactions by focusing on the design and clarity of secondary and public territories.

How can refugee camps be designed to foster social wellness and cohesion?

48.   Karma, "From Tibet to India: A Refugee's Story."
49.   Altman and Chemers, Culture and Environment

Design Taxonomy

Personal Space Zone

Social Zone

12'

4'

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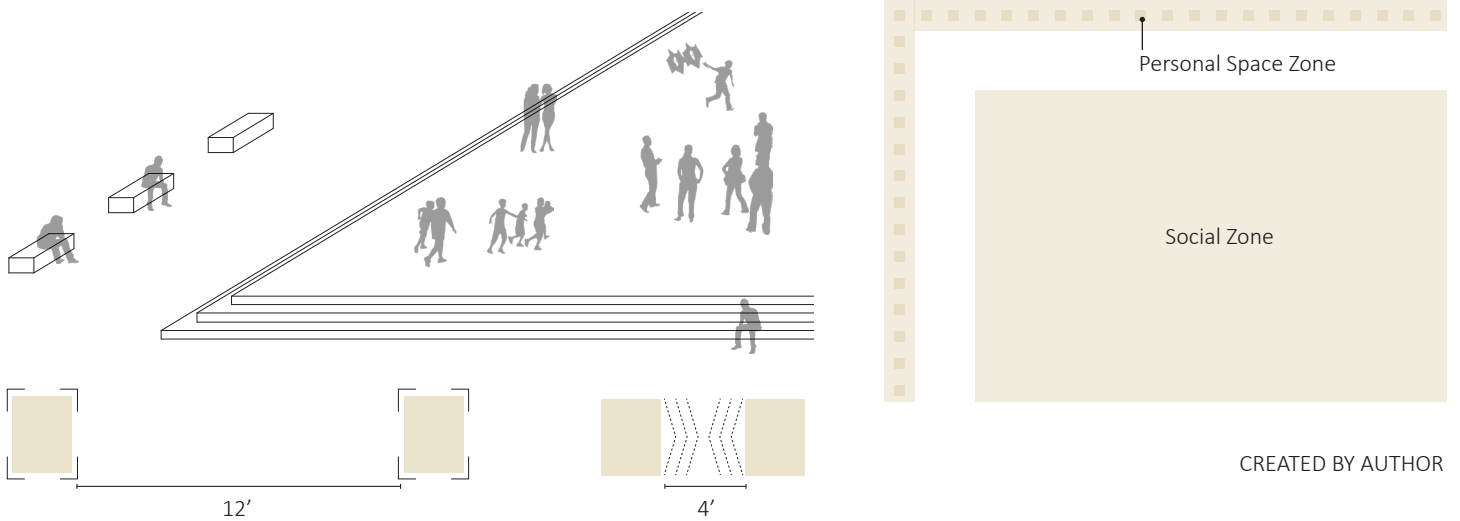
Many refugee camps are formed with little spatial organization or consideration for the public realm. While the private shelter is extremely important, social wellness must also be considered in order to develop a sense of community and normalcy. As studied from the BSA Syria Initiative case study, "building-in opportunities for normalcy and healing through the public realm," is an element in refugee camp design that can create social cohesion and ease tensions.[50]

The United Nations regulates one school for every 5,000 people,[51] which could be applied to communal spaces as well. By requiring a space that fosters gathering, playing, and socializing for every 5,000 people, it ensures that this type of secondary/public territory is available to refugees while maintaining a controllable density.

These communal spaces should consider semifixed-feature design.[52] This is a space that offers flexibility between sociopetal and sociofugal opportunities. In other words, the communal space should have flexibility in moments that bring people together and opportunities that discourage conversation. The case study on the Spinelli Project in Germany is an example of a space that does both. The personal space zone of 1.5'- 4' can be used for spacing that fosters interaction. The social zone of 4'- 12' can be used for spacing that discourages contact. This type of design allows people to feel comfortable with the option to be involved or not, fostering a space for healthy interactions, and resulting in social wellness.

50. The BSA, Karam, SDA, and the Project Architects, "The Syria Initiative."
51. UNHCR, "Camp Planning Standards."
52. Hall, *The Hidden Dimension*, 108

DISCUSSION

This capstone addresses a large topic and issue in refugee conditions. The research and scope of the work was limited by a single semester, one student, pandemic conditions/restrictions, no travel opportunities to study refugee camps in person, and the inability to conduct first person interviews. Despite these limitations, a valuable contribution was made by laying down a groundwork on this topic of using architecture to heal in refugee camps. The creation of this design taxonomy serves to act as a point of departure and consideration for designers seeking to create more thoughtful refugee spaces, with the purpose to heal.

CONCLUSION

Methods such as clerestory windows, beams and tapestries, visual connection to education centers, and semi-fixed-feature communal centers are replicable and simple solutions that have big effects. Their impact on reducing the psychological trauma that refugees experience can be significant due to the resulting spaces that respect notions of privacy, personal space, and territoriality. This capstone's design taxonomy recognized the overlap of psychology and architecture to find the spatial solutions for meaningful and powerful design in the world of refugees, in order to begin the necessary healing process of psychological trauma.

PRIVACY	Eyad Awwadawnan, a Syrian refugee on the Greek island of Samos, first person account	Robert Sommer, *Humanscape*, territoriality definitions and concepts	Irwin Altman and Martin Chemers, *Culture and Environment*, territoriality/personalization concepts
DIGNITY	Unnamed refugee, Sierra Leonean refugee, first person account	Alain de Botton, *Architecture of Happiness*, psychology of architecture theories and concepts	Irwin Altman and Martin Chemers, *Culture and Environment*, territoriality/personalization concepts
SANCTUARY	Eyad Awwadawnan, a Syrian refugee on the Greek island of Samos, first person account	Rhonda Shapiro-Rieser, *The Sanctuary Movement: A Brief History*, historical context of sanctuary	Alan Westin, *Humanscape*, privacy definitions and concepts
SECURITY	Unnamed refugee, Sri Lankan refugee on asylum in Australia, first person account	Drury R. Sherrod and Sheldon Cohen, *Humanscape*, concepts on density, personal Control, and design	Irwin Altman and Martin Chemers, *Culture and Environment*, concepts of privacy regulation and territoriality
SOCIAL WELLNESS	Karma, Tibetan refugee, first person account	Irwin Altman and Martin Chemers, *Culture and Environment*, concepts of territoriality	Edward Hall, *The Hidden Dimension*, concepts of semi-fixed-feature spaces

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