A Framework for Identifying Local and Universal Symptoms of Emerging Structural Violence:

A Case Study in Berlin

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Abstract:

Berlin currently faces a housing crisis and is forced to use alternative modes of housing such as converted warehouse spaces for the large number of refugees that began arriving in 2015. While these solutions might prove effective as temporary facilities, the scarcity of housing availability has necessitated the utilization of these spaces on a more permanent basis. The adequacy of these unintentionally designed living environments is called into question.

Poor health often arises as a symptom of distress from inadequate housing. If the initial issue prompting illness is not addressed early enough, the health problems can accumulate and become a chronic disease burden that may impede the ability to work and access quality medical attention, only resulting in larger medical issues. Inadequate living spaces that are created by greater social structures, and house vulnerable or marginalized populations who are being afflicted by housing related illness, are a function of structural violence, a medical anthropological term. Using the temporary refugee housing in Berlin as a case study, this research forges a methodology to identify symptoms of emerging structural violence through qualitative data collected from interviews. Physical health disparities, such as anaphylaxis, weight loss and sleep deprivation, as well as mental health disparities such as a higher prevalence of PTSD and depression were most commonly observed and flagged as potential symptoms of emerging structural violence. If it is possible to identify local symptoms of emerging structural violence in a vulnerable space, it is easier to remedy the problem and mitigate greater future conflict.
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Introduction:
The intentional organization of space, i.e. the built environment, is an unescapable, ubiquitous part of the human experience for those who do not live in complete isolation. Humans are bound to the habitats that they create, which is why so much thought and theory is applied to these spaces. Therefore, there inevitably is a social structure that informs the creation of this new space when creating a physical structure. This new socially informed space reflects the values of the social structure that built it. When a collection of these spaces come together with a particular organizational style that also reflects the values and narrative of the social structure behind the organization, a built environment is created in the image of the social structure’s values and narrative. This built environment works to benefit those that fit into its values and narratives but inflicts a particular kind of injustice on those who are not recognized or respected by the hegemonic social structure. The kind of injustice created by the violence of being excluded by the master narrative of a built environment can result in both material and immaterial consequences, such as health disparities and socioeconomic disparities for the marginalized population. The theoretical terminology for this particular kind of violence is “structural violence,” a term coined by Norwegian Sociologist Johan Galtung, which was further adopted and adapted by medical anthropologist Paul Farmer. Structural violence does not mean that an individual, particular building itself is inflicting this kind of violence on a population. Structural violence refers to the way that the organization of space and the systematic exclusion of marginalized populations from the narrative of creating the built environment can inflict a particular kind of social, emotional, and ultimately physical violence on the excluded, marginalized population.
As previously stated, the material consequences of structural violence result in disproportionate health concerns and afflictions for marginalized populations. Much research has been done to demonstrate how health problems such as asthma, diabetes, obesity, and heart disease are directly caused by social and environmental determinants of health and are therefore symptoms of long-established structural violence. Long-term established structural violence presents a vicious cycle of the built environment and social structures preventing socio-economic success and prompting illnesses due to negligence, which then necessitates expensive medical attention, which can cause further debt and creates an additional barrier to socio-economic success, which can then prompt more health concerns. This accumulation of problems and lack of agency is cornerstone to structural violence.

If the accumulation of problems and health afflictions could be mitigated by detecting the problems earlier on, and addressing them as they came, the vicious cycle aspect of structural violence, which is the engine of structural violence, could be stopped. While there are some health concerns that are academically recognized to be closely linked to structural violence, many of those afflictions take a long time to form and are likely to become chronic health concerns. The purpose of this research is to investigate the application of the structural violence theoretical framework in current situations in order to be able to identify symptoms of locally emerging structural violence, to reduce the amount of chronic illnesses that form later on.

In order to investigate the application of the structural violence theoretical framework and to identify the symptoms of locally emerging structural violence, this paper will use the refugee warehouse housing facilities in Berlin as a case study. Currently in Berlin, there is a pressing housing crisis due to the huge influx of migrants, as well as the large intake of refugees that Berlin welcomed in 2015-2016. In an effort to find space for the refugees, the city of Berlin
created different pockets of temporary housing as a short-term solution to the housing crisis until more progress could be made to integrate the refugees into the general population, both socially and physically. This effort has however become stagnant, and the temporary housing units have become a more permanent reality. The stagnation has occurred for a variety of sociopolitical reasons that are largely concerned with issues of nationality and naturalization as well as a general housing shortage, which have in turn stalled the assimilation process. This temporary housing is poorly structured and does not consider long-term usability or quality of life for the people that it is meant to house. Consequently, the temporary housing has begun to spark symptoms of medical distress within the population that it houses that are compatible with those created by structural violence. This research focuses on studying the health impacts of the temporary housing units on the refugees living in refugee housing accommodations in Berlin and will unpack the socio-political policies attached to the refugee housing in order to understand both the material and immaterial qualities of the emerging structural violence. By studying the first signs of illness caused by the built environment, the nascent stages of being victimized by structural violence, this research looks into what are currently the most pressing health concerns as well as the most effective preventative measures that can be taken in order to affordably accommodate a community without creating long-term health disparities.

In order to address the question of how to identify locally specific symptoms of emerging structural violence, this research uses the temporary refugee housing built in Berlin as a case study. Anecdotal data is collected via interviews in order to get more information on the actual living conditions and health disparities. The interviews are conducted with individuals who have either lived in a temporary refugee housing, work in a refugee aid organizations, or have experienced both. This research highlights how these health disparities, which are a blight on
society as a whole, can theoretically be remedied through infrastructural repairs and intentional planning. The interviews provide a current understanding of the health status and physical reality of the housing situation of the refugees in Berlin. Additionally, they demonstrate that there are common health issues arising from the built environment, such as frequent anaphylactic shock from over-exposure to the chemicals used to kill bedbugs in the temporary housing warehouse structures. These observations point toward a path that ends in structural violence. By applying the theoretical framework of structural violence to the case study of the temporary warehouse refugee housing in Berlin, it becomes evident that the way temporary housing was created for individuals with vulnerable or marginalized identities leaves them more at risk of being afflicted by structural violence.

To compliment the anecdotal information provided by the interviews, this paper contains a quantitative analysis of the prevalence of trauma symptoms such as PTSD and depression in refugees. This analytical portion of the research is based on information collected from other refugees in similar situations to the refugees in Berlin in order to understand the universal prevalence qualities of PTSD and depression in post-migration refugees and asylum-seekers living in refugee housing facilities for at least 12 months. This analysis highlights the significance of one of the more universal symptoms of emerging structural violence, trauma and trauma symptoms, and contextualizes this symptom with other similar cases of emerging structural violence.

In this research I will provide a concise explanation of the three-tiered process that asylum-seekers who came to Berlin in 2015 and later had to go through. Then I will offer geographical and historical context to the research setting. I proceed to define for the sake of clarity and precision the theoretical framework of structural violence that is being used for this
research and put into conversation some of the strengths and weaknesses of the framework. Following this section, I describe the semi-structured interview-based methodology used to conduct the research as well as the methodology used for the informal meta-analysis of PTSD and depression prevalence among post-migration refugees and asylum-seekers living in refugee housing facilities. Finally, I present the data analysis, in which I discuss the gravity and impact of PTSD and depression prevalence, as well as the health disparities that were commonly raised in the interviews and discuss how they relate to and indicate structural violence.
Background:

By 2015, when the Syrian refugees began to arrive in Germany, a multiple-tier asylum process was set up in order to facilitate the arrival of the refugees and for the government to be able to keep track of all the individuals that could be broken down into three phases of asylum. The first phase of refugee accommodation is the initial reception/arrival centers (ankunftszentren), AnkER* (Arrival, Decision and Municipal Distribution or Return) centers, or waiting rooms (wartenraumen), in which the individuals are “processed”, however, these spaces were initially emergency shelters that were makeshift. Once the asylum-seeker has been processed and has stayed for the duration of time designated in the “obligation to stay in initial reception center”, the asylum-seeker should be able to move into a collective accommodation center (Gemeinschaftsunterkünfte). These accommodation centers offer better quality of life because they are more thoughtfully and permanently constructed. The final phase to refugee asylum and housing accommodation is the transition from the collective accommodations centers to decentralized accommodation. Decentralized accommodation differs from collective accommodation centers in that they are usually independent housing structures, such as apartments or small houses that are separate from other housing units, unlike the concentrated housing units of the collective accommodation centers. There is no guarantee that an asylum-seeker will be able to obtain decentralized accommodation, as the law states that all asylum-seekers are entitled and guaranteed housing in collective accommodation centers. While this

* “The premise of AnkER centres is that by keeping applicants at the disposal of the asylum authorities the process will be speeded up and result in fast decision-making and clarity on people’s perspectives: integration in German society or return to the country of origin or to the another EU country under the Dublin system.” - http://www.asylumurope.org/news/26-04-2019/anker-centres-ecre-publishes-report-visit-germany
housing accommodation process is fixed, the timeline associated with each step of the housing process is not fixed and is the source of a lot of emotional and physical distress for the asylum-seekers that get stuck in an undesirable housing phase.

Within each phase of housing accommodation for the refugees there are a variety of actual physical housing types, particularly for the initial reception and arrival centers. Due to the fact, as mentioned before, that these initial reception and arrival centers were initially created as emergency shelters, there is a makeshift quality to the housing that is very impermanent and not conducive to a long-term living situation. The two main types of makeshift housing observed in the initial reception and arrival centers are storage container unit housing as well as warehouse spaces divided into makeshift rooms. Additionally, Berlin initially did not have enough space within these initial reception and arrival centers to house the incoming asylum-seekers and placed them in the apartments of willing citizens who volunteered their living spaces through community run organizations. The storage container unit housing is quite similar in aesthetics as well as function to a trailer home, only they are smaller and less-well equipped in terms of appliances. This housing type is not as common. The majority of the asylum seekers in Berlin were placed within makeshift rooms in warehouse spaces. The warehouses use sturdy, but impermanent, dividers creating rooms which are typically shared by 6-10 individuals.

Additionally, due to the fact that there were not as many refugees in the early 2000’s, many
Collective accommodation centers were shut down between 2002 and 2007, making the waiting times in these initially housing situations longer than the government had planned for. These spaces, while efficient in housing a high-volume of people, do not allow for privacy, had very low hygienic standards which created a breeding ground for illness to pass from one person to another due to proximity, and create an emotionally distressing environment due to the resemblance that these spaces have to prisons.

It is difficult to say what the standard dimensions or general standards are for a typical warehouse room, as accommodation regulations vary from state to state and are dictated by State Reception Acts (Landesaufnahmegesetz), allowing for some states to have incredibly low standards in the name of finding spaces for individuals to live. Because the spaces that are used for the initial reception and arrival centers were appropriated spaces that were repurposed, they are sometimes a mix of a hostel or homeless shelter and refugee asylum housing, meaning that the standards of hygiene are dependent upon the space that was appropriated, leaving little legal necessity for creating a health standard that is recognized across state borders. Typical spaces appropriated into refugee living spaces are warehouses, army barracks, or unused large spaces like airport hangar spaces. As mentioned before, each makeshift room will typically hold between 6 to 10 individuals. There is an effort to separate the sections that hold families and women from the sections that hold men, however, in times of overcrowding, which was often the case during the first 2 years of the influx of refugees, these efforts are put aside in the name of housing as many people as possible, regardless of the psychological impact. In terms of bathroom and cooking facilities, there are communal latrines which typically have a ratio of 1 shower per 10 people. Asylum seekers can eat in canteens that are often present. Some initial reception and arrival housing facilities will have a communal kitchen for the residents to prepare
their own meals in order to accommodate for religious food restrictions that might not be pertinent to all of the residents. That being said, due to the variation in housing standard and restriction regulations, some housing facilities are more accommodating to religious or personal restrictions and lifestyle choices than others, creating a lot of tension and anxiety for its inhabitants.

Berlin had many active formal and informal asylum housing accommodation, which due to their living conditions were also referred to as “refugee camps”, organized throughout the city since 2015, however the most notable refugee camp was the one in Tempelhof Feld, the former airport with a complex history. Tempelhof was originally designed in 1936 by the Nazi architect, Ernst Sagebiel, for the Third Reich, with the intention of having this building serve as a symbol of power and world domination. Designed to be a focal point of power during parades and air demonstrations, the airport is designed to look like an eagle in flight and has space in the upper hangars for people to go outside and watch what is happening on the airfield runway. The airport even had a small concentration camp called Columbia Haus which served as a training space for important SS officers attached to it on the one end of the building.

Tempelhof is still one of the largest buildings in Europe. However, after the fall of the Nazis in 1945, the airport was re-appropriated by the United States as a military base during the Cold War. Tempelhof was the only airport accessible to the Allied forces and was used during the 1948 airlift which brought food and supplies into West Berlin while the Soviet forces put up a blockade surrounding supply routes. After delivering 2.3 million tons of food and supplies like fuel to keep the 2 million West Berliners alive during the modern-day siege, Tempelhof became a symbol of sanctuary, hope, and democracy. The changing narratives of the complex airport don’t end there. In 1993 after the American presence in Berlin ended, Tempelhof was minimally
used for domestic flights, the last flight leaving in 2008. In 2014 the airfield was deemed a public park by the municipality of Berlin, making it impossible for developers to get ahold of the land. Now, Tempelhof is host to, amongst many other things, two refugee camps which are supposedly initial reception and arrival accommodations. One of the camps is a storage container village that is on the airfield on the closer side to the building, and the other refugee camp is within one of the hangars and is a warehouse space that has been divided up into several makeshift rooms. In addition to the complex history that this camp holds, it is also said to hold up to 1,500 individuals.

Tempelhof carries with it a heavy history that still resonates within its walls. It is an eerie sensation to walk through the airport that still brandishes Prussian eagles from the Nazi era, American basketball courts and Soviet bullet holes from the Cold War era. In fact, the Berlin Art Week exhibit was held in one of the hangars, knowing that there are two active refugee camps in the next hangar and on the airfield that is in front. This lack of cohesion in the narrative of the space is best exemplified by the image below, which holds three main areas side by side. On the right one can see an active storage container village that houses asylum-seekers. To the left of the refugee camp is a closed-down carnival ground, which is opened in the summer and then shut down in the colder months. Finally, to the left of the empty carnival grounds, tucked behind a former air-tower is a small brick building with a tall smoke-stack chimney that served as a concentration camp during the Nazi era (Yad Vashem, Shoah Resource Center, The International School for Holocaust Studies).
The cognitive dissonance that this space prompts adds to the already distressing situation of living in a refugee camp and does not create an ideal environment for assimilation. As one can see from this image as well, the refugee camp is enclosed within the airport’s airfield, putting the massive building between the refugee camp and the rest of the world, prompting a sense of isolation. Putting the refugee camp, at a periphery equally does not inspire a sense of assimilation. This sense of isolation due to peripheralization, the impermanence of the housing structures, as well as the trauma of the past social structures that are imbued into the landscape
that the refugee camp is a part of, all come together to create an environment in which structural
violence could wreak havoc.

The initial plan of the German government was to move the populations of asylum-seekers through the initial reception and arrival accommodation centers into the collective accommodation centers, which were in theory supposed to be better quality living spaces, and eventually help the asylum-seekers either assimilate or have time to plan the future. However, this has not been the case, and these temporary structures have persisted both formally and informally. Of note, some refugee camps are not run by the government and are civilian/pro-bono supported and operated, or they are run by private companies that provide housing and food. Others are formally run by the government but are categorized as collective accommodation centers now instead of initial reception and arrival accommodation centers. The process of making these initial emergency shelters, which were built with an impermanent purpose, into permanent housing does not include a huge remodeling in which the quality of the living spaces is improved, rather there will only be small additions and ameliorations. This opens up the possibility of creating an unsustainable living space that is not adequate and will cause greater, material problems for its tenants. This fact of making the impermanent permanent without significant or meaningful restructuring, or looking into the greater context of the collective accommodation centers in the built environment and the assimilated quality of life that the location will give to the tenant, demonstrates that the supporting social structures are not in place for asylum-seekers, and are indicating features that these spaces are more vulnerable to becoming victims of structural violence.

The government has released statements claiming that they were in the process of formally closing down a large portion of the initial reception and arrival accommodation centers
because the formerly refuged individuals had been relocated to more permanent housing solutions, such as the collective accommodation centers. However, according to one of the interviewed individuals, Margareta,* who heads and was one of the originators of a civilian lead and volunteer-based organization that works on housing and civil rights for the asylum-seekers, apart from Tempelhof there are still “about 140 camps in Berlin. It is from container houses to um, former schools where you have shared kitchen and toilets on the floor and you have to share with like 40, 50 other people or you have like one room apartment with tiny kitchen, tiny bathroom.” While there is some government intervention in these housing situations, there is a degree of informality and triage still, which leads to even less cohesion between the camps, because not only is there variation between living condition standards among federal States, but there is variation within the city. The extreme variation makes it difficult to advocate for the individuals living in the semi-informal refugee camps due to the fact that each facility has its own providers and regulations. These must be scrutinized in order to demonstrate that there is poor treatment or that special accommodations need to be secured for an individual who might have particular needs, such as pregnancy or a medical condition that requires outpatient care. While it is true that it is better to have these facilities that put a roof over the heads of the asylum-seeking individuals, the lack of legibility between living facilities can make asylum-seekers more vulnerable to falling between the cracks. Unfortunately, there is no way to streamline the advocacy/educational process that gives the individual agency. The lack of agency, as Margareta points out prompts the asylum-seekers to “feel smaller and less worthy. It has to do with dignity.”

* Names have been changed to protect the identity of interviewees
If the conditions are so poor and an asylum-seeker has stayed in the first phase of housing long enough to move onto the next phase, one might then ask themselves why they don’t just move on. The transition from the initial reception centers to the collective accommodation centers is very stagnated by official, bureaucratic processes that are unfairly impacted by prejudice. Margareta explains how “the process is very difficult. It depends how is it a family, is it a single traveling person, how good is the German and how does the person look like? Because there is structural racism. If your name is Abdula Achmed Saddam and you come with a beard, maybe, probably you, you won't get this apartment because there's so much racism. If you are lucky and you are one of those Kurdish blonde-looking blue eyes, and your German is pretty good and you have been able to start with house to finding a job.” The tie here between racial prejudice, a social injustice, and the inability to obtain better housing which will lessen the negative medical impacts that the initial reception centers have, is an indicator that there are ideologies that are manifesting in material ways, keeping a vulnerable population marginalized in the way that structural violence does.
Literature Review:

Structural violence has a long academic history and has been used to define many of the different structural problems that sociologists and anthropologists have come to encounter. As Paul Farmer wrote in “An Anthropology of Structural Violence” “Just as everyone seems to have his or her own definitions of “structure” and “violence,” so too does the term “structural violence” cause epistemological jitters in our ranks” (2001). This literature review will indicate the way in which the structural violence terminology and theoretical framework are understood and employed in this paper.

The term ‘structural violence’ is originally attributed to Norwegian Sociologist Johan Galtung, who first used it in his article titled “Violence, Peace, and Peace Research" (1969). This term is born from Galtung’s work to define the “conflict triangle” which implicates three different forms of violence used to suppress or oppress a population within a society. The three points of the triangle are structural violence, cultural violence, and direct violence. Galtung illustrates how the term “structural violence refers to systematic ways in which social structures harm or otherwise disadvantage individuals.” This definition of the terminology depicts structural violence as the social injustice rooted in the institutions which uphold a society, which prompt inequity and diminish successful or healthy life chances. This differs from cultural violence, which are the aspects of culture that justify and legitimize other forms of violence, such as the social injustice that structural violence perpetuates. Direct violence, much as its name suggests, is the violence enacted by direct actors that can be traced and is the most visible due to the fact that it is often indicative of physical violence. Galtung’s definition of structural violence helps to understand how a particular group of individuals can become systemically disadvantaged due to social structures that are in place, but does not take into account the ways
in which social structures materialize both as illnesses or physical structures that continue to perpetuate systems of inequality.

After the creation of the terminology, the concept of structural violence was repurposed by a medical anthropologist, Paul Farmer, in order to highlight the ways in which the social injustice that Galtung writes about is not only embedded in social institutions but is materialized both somatically and in the built environment at large. In his article titled “An Anthropology of Structural Violence” (2001) Farmer focuses on the structural violence that exists in Haiti. In Haiti, the structural violence is caused by the years of colonial rule, prompting political instability that has become embedded in the social fabric of the country, impacting every aspect of life, from healthcare to education and beyond. Farmer explains how every space has a history and a narrative that is informed by the hegemonic class that created the space. This space is designed to benefit those who assimilate and accommodate the hegemonic ideal, but mostly the space benefits the hegemonic class. If a population is left out of the history and master narrative, then the only option they have left is either to assimilate, which often means being compliant with oppression and subjugation, or to resist the narrative erasure. However, Farmer notes that if the violence of being left out of the narrative has material consequences (such as health consequences) on the vulnerable and peripheral populations, the possibility of resistance is a myth. This myth of resistance is the root of the lack of agency suffered by the margin population that is left out of the master narrative. Farmer explains that one of the main consequences that comes from a lack of agency, is disproportionate health disparities between those that pertain to the master narrative and those who pertain to the margin. This is the physical, somatic component of the violence that results from structural violence.
The violence of being left out of the master narrative, resulting in disproportionate health disparities is caused by the influence that social structures and narratives have over housing and the built environment, and the relationship between the built environment and the lived experience of space. In the article, Farmer explains the ways in which the social structures influence the creation of space and the built environment. He draws the connection between the “material” and the physical repercussions that result. Farmer explains how “structural violence in particular will not be understood without a deeply materialist approach [because] …to push the metaphor, any social project requires construction materials, while the building process is itself inevitably social and thus cultural” (308). This highlights the fact that anything that is built, be it physical or systemic, is inherently imbued in social views and beliefs meaning that it will carry forward the worldview and order of the hegemonic class. This leaves little room for agency for those who are not a part of the hegemonic class to follow. “The adverse outcomes associated with structural violence—death, injury, illness, subjugation, stigmatization, and even psychological terror—come to have their ‘final common pathway’ in the material”(Farmer, 308). These outcomes form the symptoms of structural violence that will be used in order to identify potential signs of structural violence in this paper.

It is important to note that the “materiality” within structural violence that Farmer writes about is not inherently or strictly about physical structures, the connection between the ‘material’ and the social injustice that informs structural violence is drawn. As stated before, the ‘material’ is forged through the ideology of the dominant social belief system, and then reinforces the social belief system in the way that space is organized. This materialization of the dominant social belief system then has material consequences, such as disproportionate health disparities for the populations that fall on the margins of the dominant social belief system. Farmer
emphasizes the fact that marginalized or peripheral populations are disproportionately affected by the cyclical damage of structural violence. The power imbalance between a dominant population and a marginalized population makes it so that the marginalized population has little to no agency or vocal power in shaping the space (Sharma, 2000).

The idea that the material world and its organization, i.e. the built environment, has a significant impact on the quality of life for an individual that inhabits that space has a long history. This way of understanding the relationship between space and behavior, a kind of environmental determinism, was historically associated with a colonial way of thinking. William J. Glover writes about this notion that lived experience is informed by the material environment in his book, “Making Lahore Modern” (2008), where he explores the development of Lahore into a modern city with a hybrid understanding of difference under colonial British rule. In the introduction to his book, Glover elucidates the colonial nineteenth-century Anglo-European urban “belief that the material world had the power to shape human conduct regardless of one’s willingness to be shaped by it” and the “determinate connection, in other words, between a material environment and the mode of living it produced and corresponded to” (Glover, 2008, xx). The implications of this belief suggest that an individual is powerless against the shaped “human conduct” that is put forth by the material environment. Therefore, if “the material world embodie[s] immaterial qualities” of the dominant social belief system, the marginalized populations are left vulnerable to being excluded from the narrative of the material environment and are powerless against the “mode of living” that the material environment creates (Glover, xx). Glover’s explanation of the way that nineteenth century colonial urban planning uses environmental determinism to restrict agency echoes what Farmer experiences in Haiti. Farmer notes that the vulnerable or peripheral populations in Haiti suffer from a similar problem
prompted by the exclusion from the narrative of the built and social environment resulting in a lack of agency. It makes sense that Farmer would notice the same problem in Haiti, a formerly colonized city, as Glover notices in Lahore, even despite having had different colonial powers in rule with different ruling tactics. Glover explains how the deliberate connection between how social structures are transferred and realized into physical structures that “shape” one’s experience of the world, which remove a degree of agency. The lack of agency is one of the foundational forms of violence that Farmer attributes to structural violence.

Glover then goes on to challenge this colonial urban determinist reform and defines it to be “a larger tradition of urban reform whose proponents emphasized a distinctive materialist approach to fostering societal development. [This tradition] shared an assumption that the material world embodied immaterial qualities that were both tangible and agentive. They were tangible because people who shared that assumption believed that no assemblage of material objects could exist without producing some effect on an observer. They were agentive because the effects objects produced were believed to have the power to shape human conduct” (xx). The theoretical purpose of colonial urban reform is that the colonial power would eradicate all previous illegible forms of human conduct that posed a threat to the hegemonic class and the master narrative. Simultaneously, the hegemonic class would come to dictate all behaviors and keep individuals in check under a great visibility. What ends up occurring instead, is an instance of cultural difference. The design of the built environment space, which is steeped in social structures and their intentions, does impact that way that people are allowed to interact with space, but does not fully change the habitus of the people (Bourdieu, 2015). Instead of the ideal colonial city that is a reproduction of the oppressive cities in the colonial mainland, what emerges is “a ‘hybrid’ city, one that juxtaposed both indigenous and extra-local elements in
paradoxical and unstable combinations” (Glover, xviii). There is a kind of violence that resulted from the instability of these “hybrid cities” which is materialized into unhealthy survivalist living practices that then turn into health disparities. While the habitus of the marginalized people largely remains the same, the new surrounding built environment creates friction and difficulty for those living in the space who do not fit into the hegemonic class’ narrative. Therefore, one is left with a system that does not integrate individuals who are othered through some kind of built environment indoctrination, and instead are left with physical structures that are oppressive and function as obstacles to success.

Glover explains a process of a failed attempt at controlling the internal life and morality of peripheral populations through creating a built environment that emulates the norms and values of the hegemonic social structures that the general population would have to adapt to, which ultimately results in a “hybrid city” with misappropriated and misused space that prompts large health disparities between those who are supposed to benefit from the structure and those who are supposed to adapt to the structure in order to survive. This violent process of erasure through forced adaptation and oppression that Glover describes, is the violent kind of process that causes the kind of structural violence that Farmer uncovers in Haiti. Glover does not argue that environmental determinism, the belief that the way space or environment is organized has a direct ability to predispose a population to success or failure, is incorrect, rather Glover demonstrates that colonial urban reform has a great impact on the “mode of living.” Glover argues that the colonial tactics of urban planning which “were largely meant to persuade toward, rather than force, social change” which “in turn, presume[s] the existence of a reflective subject, one whose capacity for reasoned judgment could be shaped and improved” were incorrect (xxi). These tactics were incorrect because while space and the built environment can influence one’s
experience of space and one’s “mode of living” which might influence the way that one understands one’s role in society, it cannot smother culture, only force it to contort and adapt to a new hostile environment.

A potential critique to the idea that marginalized populations do not have any agency or authority to shape their “mode of living”, is the idea that the real planners and space definers of a city space are those who inhabit the space (Simone, De Certeau). This critique builds on Glovers notion that the physical environment does not necessarily constrict an individual’s habitus, it only impacts one’s physical experience of a city. Abdoumaliq Simone describes the two parts to city planning in his book “City life from Jakarta to Dakar” (2010) in which there is the formal planning, and then there is the “cityness” portion, which are the chaotic elements of the city that are not planned and instead arise from the way in which people naturally use space. There is more autonomy given to anyone and everyone if one believes that “practices of inhabiting the city are so diverse and change so quickly that they cannot easily be channeled into clearly defined uses of space and resources” (Simone, 2010). The “concept city” put forth and built by the urban planners, the people in charge, functions more as a utopia, and the people that fill and use the space are the real planners of the city (De Certeau, 1988). Therefore, one could argue that the “mode of living” is not dictated by the organization of space, but that regardless of how permanent a fixture might be, that the “mode of living” dictates the organization of space.

However, one must remember that not everyone has the freedom from social structures to inhabit space as they see fit, and many people, particularly those that pertain to marginalized groups, are constrained by both societal ills such as poverty and physical ills, such as sickness. Even if an individual does not subscribe to the hegemonic norm, the resistance to that norm is still a form of subjection. There is an oppressive inescapability to the subjugation from the
hegemonic class, both in the material and socio-economic ways that it manifests, that exacts a violent truth on the individuals being oppressed. Unless one is in an anarchist rural setting, there is an inescapable relation of power between the marginalized class and the hegemonic class, because all are “subject to relations of power. Here, specific individuals and institutions use the uncertainties incumbent in urban life and the need of most residents to have a sense of order as occasions to accumulate the material and symbolic resources that are used to exercise authority over how relations get made” (Simone, 2010). The ability to accumulate the material and symbolic resources is not equal and is more rooted in social injustices, demonstrating that there is still a presence of structural violence, regardless of how much the lived experience of a city shapes its space. “Bourdieu used the term “habitus” as a “structured and structuring” principle. Structural violence is structured and stricturing. It constricts the agency of its victims. It tightens a physical noose around their necks, and this garroting determines the way in which resources—food, medicine, even affection—are allocated and experienced. Socialization for scarcity is informed by a complex web of events and processes stretching far back in time and across continents” (Farmer, 315). The structural violence that Farmer talks about combines all the material manifestations of inequality that are most visible in “food, medicine, [and] affection” that result from a history of inequality, and demonstrates why the possibility of resistance is a myth and how the notion of agency and a “right to the city” are impossible (Lefebvre, 1968). While an individual may be able to contribute to the “cityness” of a built environment and can shape the purpose of a space, that does not mean that they will have the access or freedom to escape the negative consequences of being subjected to a space that is created to mold someone to the hegemonic narrative.
The narrative of the built environment and the ability to contribute to the narrative of the built environment is crucial to structural violence due to the relationship between narrative and history. History is a product of who has the ability to shape the narrative of time, which in turn shapes the way that societies understand their identities and the social standings and sufferings of different populations. Because this is a position of great power, those who are a part of the master narrative or the hegemonic class are the ones who control history. Paul Farmer’s definition of structural violence emphasizes how the way that history is told is an act of violence through silencing and erasure. Part of the way that structural violence works is by abstracting blame for injustice through passed time and by renaming it as systemic problems that facelessly perpetuate injustice. However, there was an original moment in which decisions that created a social structure and system were made, which still has impacts in the present day.

History also holds a particular relationship with space, in that they are both socially organized and reflect the master narrative. Space reflects history and therefore space can also reflect a history of oppression. Rebuilding and remodeling space can work as a form of erasure and exclusion from the narrative if a part of the built environment goes un-cared for and unimproved. While people today cannot point fingers at specific individuals who have created the afflictions related to structural violence that they are enduring, they can mitigate the development of future structural violence. Remaining ignorant of the condition of an un-cared for space, be it intentional or unintentional, allows for a space to be forgotten and for more and more structural issues to be materialized and accumulated. This layering of unaddressed problems over the course of time with no official record of how they were collected becomes impossible to untangle, and instead becomes cyclical.
Structural violence is at once both a material form of violence that is inflicted by the built environment and manifests as disproportionate health disparities, and also an immaterial form of violence that removes agency and the ability to resist oppressive structures by erasing marginalized individual’s voices from the master narrative that writes history. This paper seeks to mitigate the damage prompted by structural violence by way of documenting the history of living conditions and societal integration of a new people. The refugees and asylum-seekers in the warehouse refugee housing units in Berlin are a vulnerable and marginalized population because they have been subjected to violence in a social structure outside of Berlin, which has led them to Berlin. By studying and documenting the way that social structures construct and influence physical structures that become the built environment for a vulnerable and marginalized population in the present, this paper hopes to mitigate the occurrence of structural violence caused by the erasure of history that is prompted by negligence.

Farmer’s “hope” was “to ask how the concept of structural violence might come to figure in work in anthropology and other disciplines seeking to understand modern social life,” and it figures into this urban sociological look at Berlin by asking the question of how we can begin to identify local symptoms of emerging structural violence by studying a community that is at risk of falling victim to structural violence due to sociopolitical situations that are amplified by the material structures. The academic field concerned with the study of structural violence is certainly not a new one, however, much of the research that exists is retro-active, and links current epidemics to the built environment. These ubiquitous illnesses that have serious chronic implications and are usually associated with structural violence such as asthma or diabetes, take a while to form and become visible epidemics. This research aims to study in real-time an area that is susceptible to systems of structural violence in order to mitigate an epidemic down the
line, using the temporary refugee housing in Berlin as a case study for a methodology that identifies local symptoms of emerging structural violence.
Approach to Methodology:

This research takes a two-pronged approach to understanding and uncovering further truths about the symptoms of emerging structural violence. The two-pronged approach of this research contains both a qualitative portion and a quantitative portion. The qualitative portion focuses on data collected from interviews. This information was used to get a better understanding of what are the current common medical afflictions in the refugee warehouse housing facilities that might be symptoms of emerging structural violence. The quantitative portion of the research focuses on prevalence of trauma using diagnostic criteria for depression and post traumatic stress disorder. These mental health issues are understood to be significantly impacted by social and environmental determinants of health. The second portion of the study focuses on trauma because of its relevance to the findings of the qualitative data. Overall this research seeks to establish a new methodology for identifying symptoms of emerging structural violence and then establish its relevance in the grand scheme of structural violence.

Qualitative Methodology:

The initial phase of this research project consisted of in-person interviews that were either audio-recorded or transcribed. The interviews were used to gain anecdotal evidence and information relating to the actual temporary housing process and current housing conditions in Berlin. Though official government documents and statements regarding the current housing situation are plentiful, specific housing accommodation policies vary from state to state. Many gaps exist in describing the actual management by the German government. The interviews provided insight and anecdotal evidence in describing the conditions of the temporary housing
units, the actual process of obtaining housing, and the impact that the temporary housing had on individual lives. This information is not often available in published documents.

The refugee housing situation in Berlin was selected for this research, particularly the warehouse housing in Tempelhof airport, because it demonstrated many potential symptoms of emerging structural violence. These symptoms include a lack of agency for the vulnerable population that it housed. The built environment where the camp is built is isolating and prompting a type of ghettoization that does not allow for social mobility and encourages the creation of a food desert. It stimulates both physical and mental somatic health concerns and illnesses that further oppress the vulnerable population.

In order to gain a better understanding of the situation in the temporary refugee housing units in Berlin and to get first-hand personal accounts, this research draws upon semi-structured interview-based information. Before beginning the actual interview process, IRB approval for ethical research protocol was obtained. Interviews were conducted in the offices of Moabit Hilft in Berlin, a civilian-run organization that works for refugee rights in many realms, specializing particularly in finding housing and health solutions for the refugee population. The individuals that were chosen to be interview subjects were those who had an established relationship with Moabit Hilft, be it as an aid worker or as a refugee seeking help from the organization. In some cases, the interviewee was a former refugee who had decided to volunteer for Moabit Hilft once they were more established. All of these individuals had personal experience with and understanding of both the political side of the temporary housing, as well as the lived and day-to-day side of the temporary housing.

Interviewees were not recruited directly from the temporary housing units themselves due to the fact that security in those spaces limited the ability to visit the housing facilities. Many
governmental clearances are required in order to be able to go into the housing facilities. I was not able to obtain clearance in the time frame in which I was physically in Berlin in order to conduct interviews. Interviewees were recruited at Moabit Hilft based on availability, seeing that everyone who was there had a relevant tie to the research at hand. Interviewees were from different backgrounds, but all, save for one, were either current Syrian refugees, or former refugees from Afghanistan that are currently more established in German society and are working as aid workers at Moabit Hilft. Five interviews were collected for this research, two were audio-recorded and the other three were transcribed. The research would be fortified by more interviews moving forward. Individuals were interviewed one at a time and with their consent in a private setting. Depending on consent from the interviewee, some interviews were audio-recorded and some interviews were transcribed. The interviewee had the option to give the interview in German or in English, and the majority selected German except for one interviewee. The names of the interviewees have been changed in order to preserve their anonymity. I transcribed and translated the interviews from German into English as necessary. The data was coded into three primary categories: Specific Health Concerns, Social Concerns, and Housing Information.

In approaching the interview questions for this research attempting to identify potential symptoms of structural violence in spaces that house vulnerable or marginalized populations, I was looking for a few characteristic qualities that places afflicted by structural violence often face. These characteristic qualities that are materially pronounced include a higher occurrence of illnesses such as asthma, obesity, diabetes, heart disease, and sometimes cancerous tumors (Bashir, 2002). I chose to initially focus on asthma, as it is the most common of illness that arises in relation to structural violence. Asthma is a leading indicator of the occurrence of systemic
injustices regarding housing. Initially the research questions asked to the interviewees were more related to the occurrence of asthma and other common activators of asthma such as mold. Notably, the answers from the interviewees indicated that asthma was an ailment of established structural violence, and the temporary refugee housing in Berlin was still in earlier nascent stages and faced other ailments. This new information prompted a shift in the focus of the interview questions aimed at more open-ended questions and centered more around conversations regarding general ailments that existed in the temporary housing and housing conditions.

**Quantitative Approach:**

The purpose of the second phase of the research, the meta-analysis, is to understand whether or not refugee populations in general are more susceptible to having a higher prevalence of depression and PTSD than the host populations. The question that this analysis seeks to answer is: What is the prevalence of depression and PTSD for post-migration refugee populations who are housed in refugee housing accommodations, and how does that compare to the prevalence of PTSD and depression in the general populations of the host countries. As stated previously, structural violence functions by systemically inflaming pre-existing issues and inflicting new obstacles on marginalized or vulnerable populations, prompting a vicious cycle of barriers to entry to society. Having higher prevalence of depression and PTSD burdens individuals with a set of obstacles towards being socio-economically successful in society. Residing in overcrowded housing facilities can only work to aggravate these preexisting conditions. Understanding the outcome of this question will help determine whether or not there is a higher prevalence of PTSD and depression for post-migration refugees in refugee housing accommodations and if this higher prevalence can be considered a general symptom of structural
violence beyond the Berlin refugee housing case study that is the primary objective of this research.

**Quantitative Methodology:**

In order to conduct this analysis, studies were sought through academic search engines that might offer prevalence of PTSD and depression in refugee populations. Ultimately, 4 articles were selected that looked at depression prevalence in post-migration refugee populations and 4 articles were selected that looked at PTSD prevalence in post-migration refugee populations. The selection process for the articles is as illustrated in Figure 1. A systematic review was conducted on PubMed with the search words “Refugee housing”, “Health”, “Post-Migration” “Trauma”, “Depression”, and “PTSD”. Once the articles fit the criteria demonstrated in Figure 1, the sample population size was recorded as well as the percent of the population that was diagnosed with either PTSD or depression. Absolute numbers of individuals testing positive for depression or PTSD were obtained by multiplying the percent prevalence with the total number of subjects in each study. This allowed for data to be weighted in obtaining a pooled prevalence result of post-migration depression and PTSD among refugees. Subsequently, the prevalence data for PTSD and Depression in each of the studies of refugees was compared with available data from the general population in each of the countries in question.
Selected Research Question: What is the prevalence of symptoms of trauma such as PTSD and Depression in refugee populations and how does that compare to the prevalence of symptoms of trauma such as PTSD and Depression in the general population of the host countries?

Selected Key Words: Refugee Housing, Health, Trauma, Depression, PTSD

Search Results on PubMed: 47 peer-reviewed articles

Search Results with Applied Criteria: 6 peer-reviewed articles

Criteria:
1. Studies must be looking at refugee or asylum-seeking populations that were in their host countries for at least 12 months
2. Research must be conducted post-migration
3. The studied population must be living in refugee housing accommodations

Figure 1: Article Selection Process Flow Chart

Quantitative Instruments:

In order to standardize the diagnosis of depression or PTSD, the methodology of each study was scrutinized to verify that testing was competed under unbiased conditions and utilizing comparable, regionally validated instruments. The diagnostic instruments used in all of the studies were the MINI, PHQ-9, HTQ. Each of these diagnostic instruments has been validated to
screen for depression (MINI, PHQ-9) and PTSD (HTQ). These tools are based on self-report and are easy to score. All have been extensively studied. All of these tools have also been validated in the regions in question.

**Quantitative Population:**

The population in this research is heterogeneous. The refugees in question do not originate in the same home country. They do not share the same background and are not located in the same host country. However, all of the populations in the studies analyzed have the same exposure, meaning that they are living in refugee housing accommodation that are either refugee camps or temporary refugee housing facilities. The populations include men and women above the age of 18. This research looks at refugees and asylum-seekers that have been in their host country for at least 12 months and are residing in government or NGO provided refugee housing. The populations in question are all assessed to explore the post-migration effects of trauma on mental health (depression/PTSD). This research specifically looks at post-migration prevalence of depression and PTSD in order to account for the fact that many of the refugees have likely experienced traumatic experiences which has led them to becoming refugees, and also recognizes the role that refugee housing accommodation might play in contributing to rates of PTSD and depression.
Quantitative Findings:

Results:

The results from this meta-analysis indicate that the pooled prevalence of depression among post-migration refugees and asylum-seekers is at 40%. The results also indicate that the pooled prevalence of PTSD among post-migration refugees and asylum-seekers is 55%. This information is illustrated in Figures 2 and 3. This means that regardless of pre-migration experiences, which country is the host country, and what measures are taken once in the host country, 40% of refugees and asylum-seekers that post-migration are housed in refugee housing accommodations have depression and 55% have PTSD. These numbers are significantly higher than those of the general populations of the host countries as demonstrated in Figure 4. When compared to data from host countries, the prevalence of depression was significantly higher in the refugee population than in the host country general population. Papers that report PTSD prevalence rates in the same countries show numbers ten times lower than what is found in this analysis. This analysis demonstrates that post-migration refugees and asylum-seekers living in refugee housing accommodations continue to manifest a high risk of PTSD or depression. This risk is significantly higher than what is found in the general population of host nations.

<table>
<thead>
<tr>
<th>Depression</th>
<th>Total</th>
<th>Percent</th>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somalia</td>
<td>431</td>
<td>45.3</td>
<td>195</td>
<td>236</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>831</td>
<td>38.3</td>
<td>318</td>
<td>513</td>
</tr>
<tr>
<td>Sweden</td>
<td>143</td>
<td>30.1</td>
<td>43</td>
<td>100</td>
</tr>
<tr>
<td>Greece</td>
<td>135</td>
<td>44</td>
<td>59</td>
<td>76</td>
</tr>
<tr>
<td>Pooled Percent</td>
<td>1540</td>
<td>40%</td>
<td>616</td>
<td>924</td>
</tr>
</tbody>
</table>

Figure 2: Depression Prevalence in Refugees and Asylum-Seekers

<table>
<thead>
<tr>
<th>PTSD</th>
<th>Total</th>
<th>Percent</th>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burkina Fasso</td>
<td>408</td>
<td>85.8</td>
<td>350</td>
<td>58</td>
</tr>
<tr>
<td>USA</td>
<td>323</td>
<td>51.4</td>
<td>166</td>
<td>157</td>
</tr>
<tr>
<td>Somalia</td>
<td>431</td>
<td>34</td>
<td>141</td>
<td>264</td>
</tr>
<tr>
<td>Greece</td>
<td>135</td>
<td>39.4</td>
<td>53</td>
<td>82</td>
</tr>
<tr>
<td>Pooled Percent</td>
<td>1297</td>
<td>55%</td>
<td>716</td>
<td>581</td>
</tr>
</tbody>
</table>

Figure 3: PTSD Prevalence in Refugees and Asylum-Seekers
Figure 4: Prevalence of Depression in Refugee Population vs General Population in Host Country

Discussion:

The findings of this meta-analysis suggest that the prevalence of depression and PTSD among post-migration refugees or asylum-seekers that have been in their host countries for more than 12 months and are in refugee housing accommodations is significantly higher than the prevalence of the general populations of the host countries. These findings are in line with those
that have been found in other meta-analyses that study the prevalence of depression and PTSD among post-migration refugees in refugee housing accommodations. A research article published in the BMC Psychiatry journal titled “Prevalence of depression and associated factors among Somali refugee at Melkadida camp, southeast Ethiopia: a cross-sectional study” (2015) notes how, “refugees are at high risk of psychiatric morbidity because of forced migration, traumatic events, and resettlement in unfamiliar environments [4]. Refugees and asylum seekers (those awaiting decisions on whether their refugee status is accepted) are at elevated risk of developing mental health problems as they have often experienced multiple and chronic adversities, and studies have demonstrated their higher prevalence of psychological disorders, in particular of depression and post-traumatic stress disorder.” This is a commonly expressed notion in research on this subject matter and is echoed by 2018 article titled “Mental health and quality of life among asylum seekers and refugees living in refugee housing facilities in Sweden.” This article states that “several studies report higher levels of mental health problems [2–5] and lower self-rated quality of life [6, 7] among refugees when compared to the general population.” This study found that “of the total sample, 56–58.4% reported clinically significant levels of symptoms of depression, anxiety and risk of having PTSD. The research that this paper is conducting is not alone in noting the high prevalence of PTSD and depression among the post-migration refugee population living in refugee housing and suggests that housing plays a big role in inhibiting comfortable and successful settlement in the host country. It is interesting to note that in Greece, the prevalence of depression in 2003 was less than 4%. During the financial crises of the last decade, the prevalence increased to 12.8% at the worst moment (Poole, 2018). This pales in comparison to the corresponding prevalence of depression found in 44% of all refugees in Greece. At a time when entire livelihoods were being lost in the general population, only a
fraction of the citizenry manifested depression when compared to the refugees. This might be attributable to similar causes of depression identified in the Berlin interviews.

It is important to note the limitations of this study: Though several research projects have studied the prevalence of depression and PTSD, few have studied the role that housing accommodations might have on prevalence of depression or PTSD. As noted in the 2017 article published in the International Journal of Environmental Research and Public Health titled "Exploring the Relationship between Housing and Health for Refugees and Asylum Seekers in South Australia: A Qualitative Study," “there is currently little research that clearly outlines the links between housing and health outcomes for asylum seekers and refugees in countries of resettlement.” Demonstrating a direct correlation between refugee housing accommodation type and prevalence of depression or PTSD in post-migration refugees might be studied with long term research that included extended follow up of the populations across time, in order to study how different living environments impact prevalence of depression and PTSD. Particularly, there is little research that studies the long term prevalence of depression and PTSD among refugees post-migration and post-settlement in non-refugee housing accommodation facilities in order to study how different living environments impact prevalence of depression and PTSD. It is for this reason that this research requires the refugees or asylum-seekers in the studies had to have been living in the refugee housing facilities in their host countries for at least 12 months in order to observe the way that housing might have an impact on trauma, and that the trauma is not just caused by post-migration stressors.

Every article that was looked at for this study indicates that when confronted with a living situation such as the one faced by the refugees in Berlin that are the subject of this study, a large percentage of the population will experience either depression or PTSD or both. While the
Berlin refugees were not specifically studied, the vast backgrounds of the refugee populations and host countries included in this research coupled with the fact that across the board, refugees had a significantly higher rate of depression or PTSD, demonstrate that this is a ubiquitous problem, and allow for this pooled prevalence to be applied to the Berlin refugee population. Based on the fact that the individuals studied had been in their living environments for more than a year, it is clear that this trauma does not dissipate after arrival and is still disproportionately high, meaning that the built environment and the lived experience that the space creates is not tremendously helpful and might actually be a part of the problem. If it is so clear that is a vulnerable population in terms of mental health, why is that not addressed more in the way that the housing structures are built in the first place, or why aren’t more medical interventions put in place to deem these conditions “necessary” to receive treatment. Many of the studies included demonstrated that by getting treatment for mental health conditions that persist in the post-migration phase of refugee life, the mental health conditions got better. The numbers are still higher than the prevalence percentage for those in the host countries, demonstrating that this population is still particularly vulnerable. The combination of social structures that do not provide the medical care necessary because of either economic or bureaucratic reasons, with the way that the physical structures might be consistently influencing mental health issues in a negative direction, making refugee require more professional attention that they cannot get, indicates that the higher prevalence of PTSD and depression is a symptom of structural violence. There are social interventions that can take place to help and prevent this disproportionate representation of mental health conditions.

Understanding that the prevalence of depression and PTSD is elevated in these populations should motivate policy guidance in the development of mental health programs that
mitigate morbidity. One study published in Psychiatry Research (2019) demonstrated that levels of depression and PTSD could be significantly decreased with interdisciplinary treatment programs lasting as little as six months.

This research uncovers the commonplace nature of trauma and mental health disorders in refugee populations living in refugee housing accommodations world-wide, regardless of background or host country. This is a ubiquitous problem that needs to be addressed and further studied. Future studies into this field should assess the role of built environment on prevalence of depression and PTSD in later post-immigration periods (2 to 3 years post-migration) as compared to their first year post-migration. If the prevalence of depression and PTSD lowers as the refugees adapt to new conditions and hopefully are moved to more permanent housing, one could begin to better understand the role that housing had played for their mental health. One particular research design might compare the experience of refugees and asylum seekers to recruited migrant workers. The differences in housing experienced by these two groups might further clarify the role that the built environment plays in emerging structural violence.
Qualitative Findings:

Structural violence is a particularly dangerous and difficult problem due to its inescapability, and the fact that it is perpetuated by a seemingly faceless and intangible cycle that is elusive. There is no particular checklist yet that has been penned by academics or policy makers, with which one can simply diagnose a case of structural violence and then start to mend the problem. Though this paper argues that there are typical telltale signs such as particular health discrepancies, or occurrences of vicious cycles that have to do with socio-economic opportunities, these symptoms are not written in stone, and they are not the only ones. Structural violence is much more slippery than that. Structural violence, both social and physical structures, is a type of violence caused by institutions or powerful groups which make it so that a group is made vulnerable, ultimately highlighting that there is a cyclical system of power that disproportionately affects a group of people negatively. This particular slipperiness of structural violence is why it is imperative to be looking for small signs in vulnerable communities or environments that structural violence might be at play. It is important to focus on the built environment because it is a concrete aggravator of the violence that is socially imposed that can be altered. Additionally, the built environment defines what one’s experience of the world will be like, and if it is negative or dangerous, it will have very real and immediate consequences.

The refugees who live in the refugee camps face a slew of environmentally prompted illnesses, but do not have the agency to address the structural elements that cause the illnesses, creating a vicious cycle. For example, if a refugee was ill due to the poor hygiene of their overcrowded living environment, but had the ability to quarantine themselves, perhaps some illness could be contained. Unfortunately, the proximity of the living environment coupled with the lack of agency to go to a different living space makes it impossible for the refugees to
address the medical problems at hand and make a change that mitigates future problems. In conjunction with the lack of agency to address problems that arise from the physical environment, there are also social structures, such as the health care system, that are not created to directly benefit the refugees, further contributing to the vicious cycle that could feed structural violence.

Germany has a universal multi-payer health care system, meaning that individuals who earn less than a certain salary receive statutory health insurance and those above a certain tax bracket have the ability of obtaining private health insurance. Because of the universal multi-payer health care system refugees are subject to receiving medically subsidized health care. However, as Margareta notes, “the first 15 months [in Germany, the level of health care for the refugees] is lower than my health care [as a German Citizen]. After 15 months [the level of health care] is the same.” The level of care that Margareta was referring to was the mandatory medical attention that is provided to asylum-seekers in accordance to the Asylum-Seekers’ Benefits Act. The Asylum-Seekers’ Benefits Act stipulates that medical attention is granted to any asylum-seeker who is experiencing “acute diseases and pain” or requires “necessary” medical attention in the first 15 months of their time in Germany (Borgschulte, Wiesmüller, Bunte, & Neuhann, (2018). This ruling has led to significant discussion about what qualifies as “necessary” medical attention. Treatment for other medical issues that do not qualify as “necessary”, particularly chronic diseases, require that the social security office of the local government approve the medical service with a signed health voucher. This lack of specificity has led to various legal cases in which asylum-seekers have eventually been able to obtain the medical attention that they required; however, those cases have only been possible with the right representation and means. Others who do not know their way around the legal system for social reasons, such as not
speaking German, have a harder time getting the necessary medical attention. Additionally, refugees are more likely to be in a vulnerable medical position within the first 15 months because there is a higher chance that they are being housed in the initial reception and arrival accommodation centers.

What differentiates a health disparity that is a symptom of structural violence from being just an illness, is the social contexts and cause of the illness, and how it is treated. Looking at the context of the health disparity helps one understand how the problem of a small illness can implicate an individual further in medical or social issues (such as poverty) and create a vicious cycle that will keep that individual societally stagnant. An example of this is the idea that illness begets poverty, and the poverty begets more illness. As noted earlier, while there is a possibility for asylum-seekers to obtain medical attention, there is not a strong structure in place to actually help make that medical attention legible and accessible to the refugees. Margareta notes how this lack of legal understanding of the vulnerable position of the refugees creates an imbalance even though, as she notes, “health is health, you can't be getting out less, less help” just because you are of a different legal status. The opaque nature of the socio-political structures that dictate how an asylum-seeker can go about obtaining medical attention while already at disadvantaged position in being an individual with a liminal legal status in a country culminates into a potential factor for structural violence.

When attempting to identify symptoms of structural violence by looking at health disparities, one must understand that there are both physical somatic illnesses and concerns as well as mental health illness and concerns. By conducting interviews, one gets a better understanding of what kind of illnesses are common in the studied space and the prevalence of those illnesses, which allows one to understand how these illnesses might be connected to and prompted by the built
environment and the greater social structures at play, leading to structural violence. There are many social and environmental determinants of health that are unknown or un-studied, and it is imperative to broaden the understanding of which illnesses are connected to structural violence. For instance, many of the illnesses commonly understood to be symptoms of structural violence, such as diabetes or asthma, were not as present in the warehouse refugee housing. This is likely due to the fact that the warehouse spaces are still relatively new on the timescale of structural violence. Illnesses such as diabetes or asthma demonstrate accumulated issues regarding to the built environment such as asbestos or mold for asthma and a food desert for diabetes that appear on a longer timeline. Different timelines and different conditions—due to location and context—will prompt different illnesses to arise; however, regardless of which illnesses arise, if they are prompted by both the built environment and are also connected to social inequality, they are likely indicative of structural violence.

In conducting interviews, it became apparent that the warehouse refugee housing is not without visible somatic illness or medical concerns. One of the most significant health concerns that arose was the prevalence of anaphylaxis. The anaphylaxis is brought on by the presence of bedbugs and the way that the organizations in charge of the warehouse refugee camps choose to go about removing the bedbugs. The overcrowding of the temporary warehouse rooms and the low availability of washroom access prompts hygienic problems within the facilities, which allows for a problem like bedbugs to be quite common. The bedbugs are particularly prevalent in the temporary warehouse housing because the social structures that have created these living spaces have not taken into account that bedbugs are a significant problem. Additionally, the tenants don’t have the access to the proper resources nor the agency to do anything about the bedbugs, demonstrating that there is a social determinant of health at play.
While the bedbugs themselves don’t present a significant problem, the manner in which the officials in charge of the facilities address the bedbugs is a serious concern. Bedbugs are not immediately dangerous nor are they insects that cause long-term damage, at worst they cause rashes, blisters or minor allergic reactions that manifest in skin irritations. Though one must remember the fact that it is uncomfortable and disturbing to have to share an already cramped living space with a pest, and that there is a psychological impact as well. In order to exterminate the bedbugs, Margareta describes how “[the temporary housing facilities] spray that poison and the people have to get back inside after four hours and they are not supposed to go back after 24 hours, but they don’t give them a different place for 24 hours. So, they have to go back inside. There is no option. You can’t let 200 people sleep on the street. So, we have anaphylactic shocks.” The premature re-entrance into the recently exterminated space which exposes the tenants to the toxins that prompt anaphylaxis is a result of both social and physical factors, which contribute to the evidence that this health concern is, in fact, a symptom of structural violence. There is a disproportionate number of anaphylaxis cases in the temporary refugee housing, indicating that is more of a localized issue that can be tied back to the social and physical structures which relates back to structural violence. Additionally, the asylum-seekers do not have a choice of when or how the extermination will happen and similarly lack the agency to choose to stay somewhere else for the 24-hour period further contributing to the fact that anaphylaxis is a symptom of structural violence.

Anaphylaxis, as defined by Mayo Clinic, “causes your immune system to release a flood of chemicals that can cause you to go into shock — your blood pressure drops suddenly and your airways narrow, blocking breathing.” Anaphylaxis is also not a typical response to an allergen, where the body builds an immunity or tolerance for the allergen. Anaphylaxis is far more
exaggerated a response to an allergen. Once one experiences anaphylaxis, the immune system is weakened, and is more likely to go into anaphylactic shock again, further weakening the immune system. Anaphylaxis presents a particularly concerning threat for children who have not yet fully developed their immune systems and can present a long-term health problem such as being immunodeficient. The potential chronic illness that multiple exposures to toxins that prompt anaphylaxis and compromise the immune system, could quickly turn into a vicious cycle of health problems. An accumulation of health problems begets other social problems, specifically those health problems prompted by social and environmental determinants of health rather than genetic or personal determinants, which is common to structural violence. This indicates that anaphylaxis functions as a symptom of the nascent stages of structural violence in the temporary warehouse refugee housing in Berlin.

In addition to the higher occurrence of anaphylaxis, another medical concern in the warehouse refugee camps is weight loss. This common phenomenon which can lead to other greater health concerns. Margareta explains how “most people when they live in camps and they get served food, they lose weight because every person I saw when I see a picture from before, I look at them like, Oh, you lost a lot of weight.” The fact that there is not a choice of what is being eaten and dietary restrictions, for religious or cultural reasons, are not taken into account and is one of the lead causes of this weight loss. Part of this particular issue is the fact that there are a variety of cultures and religions being housed in the camps, so it becomes very difficult for the facilities to take every single restriction into account. It is a question of choice. As an interviewee states, “it has to do with dignity. It's not like in a, in a canteen, in a university that you choose [what to eat], I mean we decide what to eat, when to eat, how to eat with what to eat. [The refugees cannot].” There is a lack of agency when it comes to food. Even when individuals
do have the ability to cook for themselves, access to cooking utensils and ingredients that are the cultural norm for the refugees are not available or more difficult to get. This creates a kind of food desert, especially when one takes into account the isolation that a place like Tempelhof presents. The social barriers to obtaining the food necessities for refugees prompts a somatic response like extreme weight loss which has sever health consequences that can even become chronic, making it an economic burden. It is for these reasons that the causation of weight loss is a symptom of structural violence.

Anaphylaxis is an easier symptom of structural violence within the Berlin temporary warehouse refugee housing to diagnose due to its clear visibility and materialization; however, there are other medical symptoms that are less visible yet still as impactful, such as trauma. Being someone who seeks refuge signifies that one has had to flee one’s country for reasons of life and death, and one can imagine that there is a lot of trauma that comes with that as demonstrated in the quantitative section of this paper. Margareta expresses how “most of [the refugees] have a trauma and this has to be treated.” While the trauma may not have been directly caused by the housing, it is certainly bolstered by it. There is no privacy in these warehouse spaces. There are 6-10 individuals in one small room, and as one of the women that was interviewed mentions, “you have no way of choosing” in regard to who you live with. She raises the point that “it's more a problem about health because if you are stuck with a lot of people and you're traumatized. It's very, very difficult you have to live with people you don't know. You don't, maybe don't like, you don't like to smell, you don't, maybe don't even understand because they come from completely different backgrounds.” So, not only does overcrowding prompt a problem with hygiene in terms of bedbugs or access to washrooms, but it creates a stressful environment in which an individual who might have experienced past trauma is retraumatized.
The aggravation of past traumas in the overcrowded spaces of the warehouse housing is a particular threat to those who have been confronted with sexual violence in the past. One interviewee that chose to remain anonymous states how by taking away the privacy that comes with space and also the ability to choose who to live with from the asylum seekers, “they don't have [a] safe space, so you take an entire life from them.”

Due to the fact that the refugees are not full citizens of Germany, it is more difficult or even impossible to receive medical attention for issues regarding mental health. Margareta expresses how “most of [the refugees] have a trauma and this has to be treated” and because the housing aggravates the trauma “we have a housing [issue] on the one side, and on the other side we have doctors [issue].” The housing issue is that the housing aggravates the trauma, which then necessitates medical attention. The doctor issue is that because seeking help for mental health might not appear to be “necessary,” an asylum-seeker might not be able to obtain the requisite medical attention to address the trauma. There is also another housing and social issue, which is about how the process of transferring from one housing unit to another, or from one housing facility to another, is equally as difficult and tied up in bureaucratic processes due to the housing crisis. The social and physical structures come together to create an impossible situation for someone who suffers from trauma by minimizing its importance while simultaneously re-stimulating it. While a concern about mental and emotional wellbeing is different than concern about somatic wellness, there are still very real and physical consequences to suffering from mental and emotional disorders that prevent individuals from succeeding in society. If a refugee cannot succeed socio-economically, the horizons of potential linked to leaving the space that re-traumatizes become increasingly limited and more distanced. This vicious cycle is a cornerstone
to structural violence, and demonstrates that higher instances of trauma are an invisible symptom of structural violence.

Trauma as an emotional and mental experience on its own poses a threat by way of making it harder to socio-economically succeed; however, there are still somatic manifestations of trauma that create the potential for poor physical health, such as lack of sleep. Margareta notes how “so many people, [for] years, they sleep just three or four hours a night and at night they can’t sleep, they can’t sleep because of the situation they're in, about the housing situation they're in.” The lack of attention paid to helping refugees seek the proper medical attention for their mental health problems, which are bolstered by their living environments, manifests into a real health problem that can having lasting effects. Lack of sleep has been linked to a higher likelihood of developing obesity and diabetes both typical chronic illnesses that are a big financial burden and are associated with structural violence (Savage, 2013) (McHill, Wright, 2017). As stated by one of the refugees that was interviewed, “sleep is one of the most important things you need to rest your organs, your brain, everything needs to rest. You need to calm down.”

It has already been mentioned that lack of sleep prompted by trauma has somatic medical consequences for the people who suffer from it which impedes their ability to move forward in life and keep them stuck in a vicious cycle, there are additionally social consequences as well. Margareta indicates the social impact of lack of sleep in how “[the individuals who can’t sleep] come too late because they fall asleep on different times. So, they come too late for German class, then they fall out of German class. A lot has to do with housing so much.” The refugees are stuck in a vicious cycle that does not allow for them to move out of the temporary housing conditions. The inability to go to German class (which would benefit the refugees and increase their chances of getting better housing), is prompted by the lack of sleep, which is prompted by
the trauma that is bolstered by the temporary housing conditions. The cyclical nature that is motivated by social structures and bolstered by physical structures, that keeps the refugees in the temporary housing conditions is consistent with structural violence, further indicating that there are symptoms of structural violence in the temporary warehouse refugee housing in Berlin.

At large, solving the physical structural issues comes as a result of shifting social structures, meaning that social change has been made. It is much harder to adjust a social system once it has become physically enshrined and becomes a fragment of standard life. In Berlin, many social changes have been made that favor refugees, however, the physical structures followed the immediate social response to the housing crisis and had already been set in place, further entrenching a vicious cycle of structural violence anyway. Luckily, the circumstances in Berlin for the refugees living in warehouse container refugee housing are not completely physically permanent, and there is still a chance to adapt the current situation so that the harm of the structural violence can be mitigated. This is why when understanding structural violence, one has to focus on the built environment. The built environment is a physical manifestation of the current social structures and values. Though as time passes, the initial intention behind the built environment might change, the way that space is organized and how that influences certain populations stay the same. The current social structures in place that created the built environment do not value the refugees in the same way that they value citizens or individuals that can bring in money for the national economy, and it shows in the lack of care and thought that are put into the housing units. When one talks about the built environment, one is not just talking about the physical structures, one is also talking about the social structures that have created the built environment and those that propagate it.
Understanding the influence and significance of the built environment in regard to structural violence and the impact that it has, one is then left to uncover what are the next possible steps to heal those impacted. According to many of the interviewed individuals, and Margareta in particular, the ideal solution to ameliorate the violence being enacted on refugees in regard to consistently re-activating and aggravating personal and collective traumas is by creating a space for privacy and agency. This is done by giving refugees apartments. “The best place is an apartment – an apartment lowers the trauma by 50%. … What we all need, and there is no difference between us and refugees, is a safe place. You need a place to cook, where you can sleep, and you can rest…Like my apartment, I need to have a lock.” While this is the best possible solution, there is also an understanding that Berlin is struggling with a housing crisis at large for all of its citizens and not solely the refugees which is why camps are built. However, as one of the anonymous individuals who formerly lived in a camp and now worked for Moabit Hilft stated;

“Those camps need to have a quality standard, the same quality standard we have. Those camps shouldn't separate, and should have people like students, families from Berlin or wherever, like a regular housing. It would be important that we see the materials [used for building refugee housing] as materials and not that this material is just for refugees.”

It is not sufficient for housing, the foundation of the built environment, for refugees—particularly that which is semi-permanent as the refugee housing in Berlin has come to be—to be a roof and walls. To ameliorate the damage done by structural violence, the approach has to be both social, such as removing systems of division and separation, and physical, creating structures that are made to last and well made, even if modest, and not treating them as a band aid to a problem that will go away.
Conclusion:

The two-pronged methodology proposed in this paper allows for the collected data to identify the existence and magnitude of local symptoms of emerging structural violence. The data collected for the purpose of this research suggests that there might be a disproportionately high occurrence of anaphylaxis in refugee children. The commonplace occurrence of anaphylaxis in the temporary warehouse refugee housing in Berlin is indicative of the way that social structures can physically impact a community and create health disparities. Anaphylaxis is one of the local symptoms of emerging structural violence identified in this paper. In this environment, anaphylaxis appears to be socially and environmentally determined offering significant potential to become a chronic illness. Anaphylaxis can cyclically impact the vulnerable population of the asylum-seekers and limit socio-political mobility. Further, other locally prompted symptoms of emerging structural violence that were identified through the collection of interviews were extreme weight loss, lack of sleep, and a high prevalence of mental health issues, particularly PTSD and depression.

The data studies on the prevalence of PTSD and depression in global post-migration refugees and asylum-seekers living in refugee housing facilities for 12 months or more demonstrates that this population is particularly vulnerable. Therefore the decision to deny mental health treatment to refugees—in the case of Germany it is in the first three months of their acclimation to the host country because mental health treatment is not considered to be “necessary”—coupled with the overcrowding and isolation created in the refugee warehouse housing facilities, is ultimately oppressive. Of note is the ubiquitous nature of these conditions suggesting that higher prevalence of PTSD and depression in post-migration refugees and asylum-seekers in the previously mentioned living conditions to be a universal symptom of
emerging structural violence. This becomes all the more evident when prevalence rates of the refugee and asylum seeker population are observed to be significantly higher when compared to those of the general population of the host country and in some cases the migrant worker population. While this disparity is likely multifactorial in nature, the contributing role of the built environment emerges as central to this problem.

Studies demonstrating that prevalence of PTSD and of depression may be significantly lowered in post-migration refugees and asylum-seekers receiving multidisciplinary mental health interventions suggest the need to establish timely interventions within these vulnerable populations.

The methodology employed in this research does not only seek to identify the local symptoms of emerging structural violence, but also seeks to uncover what is the root cause of these health problems. All of these symptoms were caused by a combination of discomfort stimulated by the housing and by the socio-political structures that govern the housing and therefore those who live in refugee housing. The combination of the lack of certainty pertaining to when medical attention could be received, the bureaucratic sluggishness that prevents individuals from leaving the temporary housing units, and the lack of privacy or higher hygiene standards, created an environment within the temporary housing units that eradicates agency and keeps individuals within that housing system. This combination of factors containing both social structure components and physical structure components, creates the perfect environment for a potential diagnosis of emerging structural violence. In order to prevent this community from developing more severe, chronic consequences from a more deeply entrenched structural violence, future steps need to be taken to address the set of social and physical structure
complaints that cause the quickly accumulating health disparities arising in the refugee population.

Future studies should be undertaken in order to clarify and quantify emerging health disparities in this population. The extent of anaphylactic morbidity should be measured and compared to the general population. This data might influence timely changes in policy aimed at intervention and abatement. In addition, a broader data set of interviews will likely present other conditions that are environmentally prompted and socially reinforced in the temporary housing in Berlin. These could be catalogued as symptoms of emerging structural violence. Similarly, future research should focus on studying various other locations with similar situations utilizing the same methodology. This will foster the creation of a collective data base of local symptoms of emerging structural violence. Ultimately, the development of a universal set of symptoms of emerging structural violence should be developed. This would aid in developing a concrete vocabulary to diagnose emerging structural violence in order to quickly address the cause of the nascent medical afflictions so that they do not accumulate and become part of a deeply entrenched system of structural violence.

The imperative nature of this research compels us to document and bring to light the stories of the refugees and asylum-seekers in order to integrate them inextricably to the master narrative. Silencing, which happens all too often to displaced populations such as refugees, is a form of violence and often results in a redaction from the grand historical picture. In order to mitigate the violence of erasure that Paul Farmer highlights as being a cornerstone for structural violence, we must include the voices, opinions, and stories of the refugee population. And in so doing, prevent further damage to a vulnerable population in terms of citizenship and access to protection from the hegemonic class.
The methodology proposed by this research, which is based on the anecdotal information collected from the refugee’s personal experiences seeks to include refugees in the history making process, as well as hopefully prevent further erosion of agency. “The erasure of history is subtle and incremental and depends upon the erasure of links across time and space. We know, too, that forgetting is also a natural—indeed, biological—process. Time heals all wounds, including those which, never drained properly, are waiting to burst open again, to the “surprise” of those who have forgotten” (Farmer, 2004, 308-309). The act of documenting does not allow for the natural process of forgetting. Taking preventative measures to make sure that the societal wounds are properly drained by addressing the root causes of the emerging structural violence ensures that those wounds won’t burst open again.
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