em·bed
housing the homeless
sarah pyne

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advisory committee
Cruz Garcia
James Bassett
Nathalie Frankowski

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Abstract

While architecture, a physical built art form, markets itself as a public endeavor, access divides along societal and economical status. Urban planning of city layouts mimic and deepen these divides, falling prey to the ideology that one must afford spaces, beauty, and comfort. Those who fall short of societal standards must be designed away as to not inconvenience the desired user. Washington DC does not even deem shelter a human right. The homeless, who population is higher there than anywhere else in the United States, are simply neglected. The Embed Projects aims to recognize their needs. Exploring the conditions and attributes that led them there, the everyday struggles faced, the community centers focus on overall support through many facets.

Breaking down hostile architecture, the failures of homeless architecture solutions typically offered, and the systemic design to keep individuals from escaping homelessness, and exploring the lifestyle sustainability offered through permanent housing. This thesis offers a city wide, communal plan to provide flexible, permanent housing to individuals suffering from homelessness and a full network of support for every homeless individual. It aims to address not only the housing but the societal measures that led to it, and difficulties of within this community.
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General Audience Abstract

Historically architecture was designed to be for everyone but never has been. Money and class have always played a large role in the design, and the over network of cities should never be restricted.

This thesis navigates the start of a network throughout Washington DC that would help to understand the issues of homelessness. Public housing would be offered in a variety of sizes and locations with the hope of a growth throughout the city.

Granted private rent housing but also a network to support them. It looks into the reasoning for individuals to fall into homelessness and who is most vulnerable, the issues faced by those suffering from it, and the roadblocks society has set up against escaping it. The design of the two community centers dives into these issues and roadblocks, attempting to offer possible solutions.

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Every space we design, we must think about who will be using it. Whether we want to create a quiet space or activate the area, we design around our hopes knowing we will not actually control who inhabits it. Professors have constantly brought up that as much as you can design to pull your intended crowd in, you must also be careful to keep out those you do not want. Too often, the people they refer to as undesirable are those suffering from homelessness with the implied substance abuse, mental issues, and distrustfulness associated. The fear of their presence often was placed above the comfort of the “preferred” inhabitant and the beauty of the design. I was told to be wary of more than dark alleys and corners, I had to be careful of benches and outdoor seating areas—anything that might constitute a bed. Hostile architecture exists on wide scale and in many forms, ranging those tucked behind a facade of functionality to blatant statements of malice. Designers and urban planners join the government in deciding who they want where, resulting in divided cities and tensifying socioeconomic differences. When an architect is complicit in these choices and adapts their designs to governmental positions, they become culpable in the worsening of the issue. Architects should never let pass for those who can afford it a chance to make their home.

“As architects, we have a duty of care to provide shelter for those who need it. I feel that architects can help by battling against the design guide and councils that want to design the undesirable out of their towns.” Furzer also conceded that “there are many underlying political issues that need to be addressed before the issue of homelessness can seriously be addressed in the manner it requires.”

My question was why is design being used to make life worse for the less fortunate when it had the power to make life better? Growing up my family spent a lot of time volunteering at the local homeless shelter, especially cooking and serving meals. As I got older and a little less shy, I began talking to people I would routinely see coming in. It made me realize how society simply failed most of them. Sometimes simple bad luck was involved, an individual who had just lost their job or face medical issues that caused them to lose their job. More often it was a government or systemic issue that took or was being in the streets.
The healthcare system puts profit above health, especially mental health, constantly denying people access to care or robbing them when they need it. 21% are living with chronic health problems and 16% have a physical disability. Mental health is treated even more negatively. There is a history of severe mental illness in 31% of the individual adult homeless population and only 7% can access mental care. In another 22% 32% have dealt with chronic substance abuse, where it is not recognized as an illness in need of treatment but is instead demonized and heavily criminalized. The prison system is designed to create repeat offenders, releasing people into a society that rejects them after stripping them of necessary skills and rights. Of the single adults who are homeless, 41% have formerly been institutionalized. The government does nothing to rectify this, instead waiting for them to return to prison. It is not surprising to think that, where they have no access to health care, they end up in worse health. At a rate of only one in five, the homeless population has a significantly lower life expectancy than the general population. The reason for the shortened lives of the homeless is due to domestic abuse, with 30% of single homeless adults and 32% of adults in families regardless of gender. In a country that holds systemic income deep into its core, people of color are disproportionately affected. In 2020, 54% of Black people were living below the poverty line. In this country, the largest innocence is in the government’s handling of the criminal justice system, where it is inextricably linked. One of the systems the United States had so highly, the US military, instead serves its current members. Veterans, too often suffering from PTSD, can end up homeless after being discharged with nothing but trauma remaining from their time in service. With the government actively working to help veterans, they are dropped by over 50% in the last ten years. Showing racism aplenty, not only affect the number of homeless, but consequential effects. Any of these compounding factors can make a difficult situation ever harder. And there is a lot of overlap.
Rent prices in DC make it difficult to get stability. 55% of the population doesn’t make enough money for affordable rent (the average household would have to earn $28.10 an hour for affordable housing). Rent prices vary drastically ward to ward with the cheapest prices being over in wards 7 and 8, the farthest from the city.

Affordable housing is limited within the city with wards such as ward 3 offering as little as 1% of the housing. This lack of affordable housing is carefully crafted to stay that way, as you could see on the last graph, they do not actually have the highest rent rates but instead their urban planning has worked very hard to keep out those they deem undesirable.

In a country designed to keep from helping its most needy citizens, it is hardly a shock that the capital is in the works. The rate of homelessness in DC is 93 homeless per 10,000 people, over 5 times the national average of 17 and nearly twice the second highest, New York.
Washington DC is also one of the few places that does not believe a human being has a legal right to shelter. Unless it is under 32 degrees or over 95 degrees, the city has no obligation to provide beds — not even proper housing, just a bed. Families fair best with 667 family units available. The larger portion of the homeless population, the single adult, is not as cared for. On average, the city offers 890 beds to individual men, and 322 to individual women. Which is barely enough for 30%. They provide zero beds to gender non-conforming individuals, who like the trans community face serious discrimination from shelters and the government as a whole.
So what can we as architects do?

The first thing we must do is stop building hostile architecture. Design must be for everyone. No more spikes to keep people from laying or camping somewhere. No individually seating to make laying down impossible. Designing a better tent is also not good enough.

Most architectural solutions today just add spikes, designing countless collapsible sleeping pods and pop-up shelters—repositionable restraints to a permanent issue. Another common response in paradigmatic housing is to use the idea of filling the gaps of cities, between and on the sides of buildings and above rooftops, with affordable housing. The name alone suggests an impression of the mere existence of the homeless leeching onto society, while tucking them into shadows of the cities perpetuates the sentiment of hiding the homeless from view. The structures tend to offer little more than an enhanced form of homelessness. The goal cannot be to make the problem more palatable but instead to assist in permanent solutions.

Temporary housing, or temporary stays in permanent housing, has both advantages and drawbacks from the pop-up housing. It typically offers safer and more secure spaces for the individuals, but the impermanence of these set-ups only solidifies the transitory lifestyle that those using them are trying to escape, a fugacious hold on the stability such individuals deserve.

Data continues to show that long-term stability in the form of permanent housing is the best basis to help people suffering from homelessness recreate their lives.
One approach oriented around helping individuals with one or more of these compounded issues is the Housing First Approach. This approach is about providing permanent housing to the person first among other things to allow people to sort out their complicating factors and establish a job, stability, and the likes. Where the standard route is to try first for a shelter, but any medical, mental, or behavioral challenges can quickly have the person back out on the streets. If you make it through the shelter you are moved into transitional housing. Where you then attempt to establish a steady income and landlord relationship as you move into your new home. Housing First skips this, giving individuals a home that allows as many factors that can lead them back into homelessness. This approach focuses on the needs and desires of an individual and seeks to reach them and assist them to reach a recovery without ever offering a strict destination to exit. The backbone ideology is that individuals who are unwilling or unable to commit to sobriety or mental health care are still deserving of shelter. The HF approach allows them success to start living whereby be a support in whatever level of self-improvement they are willing to reach. Hopefully, with permanent housing and support these goals will grow into full commitment. Regardless these individuals deserve a safe space to try.
Appearance — Houses or construction should blend into the existing neighborhood, appearing rather average in design among its surroundings. Contrary aspects of the design should be visible from the street and approachable. It is important for the design to enhance relations amongst neighbors rather than to seem closed off. And most importantly, Location — Residences are best located with conventional residential neighborhoods that have lower levels of crime and the non-residential competing uses. Supplemental to available work, recreation, shopping, access to readily sustenance is paramount.

Groceries and food security is often absent in the fabric of cities matching the economic patterns. HF developments should avoid such voids. However in the future developers need to make an effort to rectify such planning failures.

Social/health services. This is particularly important because HF are often located in less socially accessible areas with minimal health and social services that require facility accessible through easily accessible public transport.

With these factors in mind, I selected 5 sites of varying sizes. All are currently government owned vacant lots. 2 larger sites that have community centers in conjunction to housing units, and 3 smaller housing only units selected to be linked to the larger facilities for residents looking for a less communal approach.
The Florida St Embed Center is located on one 7 land parcels and like all the sites
is currently a government owned vacant lot. It has two metro options, a bus stop
directly out front, two nearby hospitals and very close food availability. It has 2
two bedroom, fully accessible, family units, 5 one bedroom units, 10
studio units. Most importantly, it has a large community center for both
embed residents, and those not yet placed in permanent housing.

There are public mailboxes for those without a permanent address. Job
applications, medical forms, bank account applications, personal identification
forms, and the list goes on and on. It is so easy to forget how many forms require a
mailing address and how much tougher life can be without one.

There is access to computers and wifi, for job hunts, education, research,
or pleasure. As well as work spaces for individual or group studying or working.

There are both individual and group therapy spaces. Experiencing
homelessness alone puts great emotional strain on a person, especially if they have
any of the possible compounding factors. All residents would be greatly encour-
ged to support their mental health.

The center provides laundry access to both its residents and homeless
population. More importantly for those who are not yet within the program, it
provides access to bathrooms and showers. Reestablishing personal
hygiene can help give them back a sense of dignity as well as step them up for
success in other endeavors.

A sense of community is a primal human desire, and those suffering from
homelessness lose that touch of that. The center provides several spaces to help
them regain it. There is a communal kitchen and dining area, giving
them the option of cooking and eating together in a large scale. There are
raised garden beds for them to garden together and stock those meals. There
is also a community pantry, for donated food to serve an informal soup
kitchen.
There is a large flexible workshop for a variety of uses. Outside providers visit the houses and present workshops providing education, skills training, and access to crucial community resources such as substance abuse treatment, alternative therapies, medical and mental health services, and employment assistance. The house itself typically does not provide these services, only access, and coordination with the outside professionals who deliver them. A custodian of the space would manage the building and the programs brought in, while the community needs are fulfilled by local providers. They have a connected apartment and office space. Often longterm members of the program will be sought after to take on these roles. Unlike some approaches, this support is not conditional. Individuals are able to choose when and what support works for them. Helping targeting a broader spectrum of individuals. The space might offer discussions and classes on more niche topics, such as communication skills and parenting. Host exercise classes to help the community regain its physical health. Offer day care options when needed. And adapt to many more programmatic needs.
The Kramer St Embed center is located on a series of the smaller of DC’s two equally-sized lots, offering 12 vacant lots. Unlike most shelters, there would be no discrimination against sexual orientation or gender presentation. Couples would be allowed to live together. Animals would be welcome, pushing back against reason people avoid shelters. It has two close metro stops, a bus stop, a nearby hospital and many food options.

There is a smaller community center on site. It has an adaptable work space which would be occupied similar to Florida St. Therapy spaces for those who are interested and a communal gathering space. Bathroom, shower, and laundry access would be available for the community. It has a communal kitchen, dining area, and pantry. Continuing to provide community through food.

There are a total of twenty-two one bedrooms, ten on the first floor and twelve on the second floor. As these hope to be long-term residents, the apartment are designed to grow with them.
KRAMER ST
FLOOR 01  :  ONE BEDROOMS

KRAMER ST
FLOOR 02  :  ONE BEDROOMS
The apartment would start relatively bare and open. Basic furniture would be provided and greenery for its mental health benefits. The space would be split in three with sliding doors making it as open or not as they pleased. The space would be flexible to maximize funding, but very flexible in adaptivity to the inhabitant's preferences.
As they developed mental stability, they may add in more furniture and begin to make the space their own. As it is not a temporary space, their personal style and design could be showcased and they will have the ability to truly lay down their roots.
The flexibility of the space allows for many set-ups or
layouts, for example the living room and bedroom could
switch locations. The residents might have decided to
develop a family or bring a child into the home, the
apartment would grow with them.
While the square footage is relatively small, both spaces could be converted to bedrooms as the family grows or as often as studio spaces. The rearranging and manipulation of the space allows for many options to fit the need of the inhabitant(s).
Thoughout the entire program is linked. The smaller site on Kenyon street would have three more one bedroom units. Lewis street is only two streets over from the Kramer center and would offer two more two bedrooms. Across the river on 15th another sited would be linked back to the others, offering four more two bedrooms. All would have access to both community centers and their services.
The goal would be expansion, embedding sites into the city and making a network community with the hopes of easing the struggle of homelessness that too many experience.