

Elizabeth Pierce

Comprehensive Studio

Honors Thesis

Social Needs and Architecture: Reflection on Studio Design

Intentions

1. The Program

The program called for a facility that would provide a transitional space for men, women, and families to be reintegrated into society from tough times. To achieve that the building should have educational class rooms including a teaching kitchen. There will also need to be a clinic that will be able to help the residents manage their disease by providing them with the proper medications and ways of management. along with this there needs to offices for counselling services to be housed in. The facility needs to have appropriate housing for single occupancy rooms and separate family housing. Lastly s major component of the facility will be a community center that is open to for public use.

The site is located in Oklahoma City at the intersection on Robinson and NW 11th. The site is currently a parking lot, meaning that terrain wise it is for the most part flat. The location is near a church and the surrounding buildings are on the market to be rented or sold. The East side of the site is along an ally and the most active side would be the West against Robinson. Electrical lines along the site are no longer in use and can be removed. The only vegetation on the site is a tree located on the North West corner. For this urban context there will be no site set back and the building must be built to at least 5 feet from the edge.

2. Owner's Desires

When designing it is very important to consider what the owner's values and plans for the site are. The client took us on the tours of current residencies the Winds House organization was working out of. These were historic houses in the midst of being renovated. The two houses were being used to house both single occupancy rooms and family. Along with that there are offices where an onsite employ would stay during the day to monitor and provide assistance to residents.

When speaking to the owner he expressed some clear wants. The top concern of the client was that the single occupancy be separated from the families. This is something they could achieve in the current housing. He found this very necessary. Secondly, he was concerned about the security and control over the residents. He made it clear these are people that need help learning how to live on their own again and how the times spent with them varies. He would like to be able to control access to the residencies and have the individual apartments to have a key system that was easily changeable, like key card.

On top of that he would like to have some control over the HVAC in the apartments since some residents are not responsible enough to smartly control temperatures. When asked about the

privacy of the whole facility he didn't see that as a large concern. He mentioned that the Winds House was there and in the open, but not actively advertising. If someone needed them they could be easily found.

3. The Cause

The Human Immunodeficiency Virus or HIV is a pandemic that is affecting people from all around the world. However, this disease is not just a biological issue. HIV is deeply tied into the societal fabric of many cultures. It can be found that stigmas have formed around the disease because the groups of people that make up the higher percentages of the disease's victims.

People with HIV can be known to suffer from Depression often. In fact, symptoms of depression are often found in 20% to 37% of adults living with HIV and AIDS. (Gay, 2016) Because of stigmas and fear social isolation can set in and this can lead to may developing symptoms. (Fan,2014) Social support is very important to the prevention of the disease in a population.

There are studies that have been conducted that study the relationship between the Health-Related Quality of Life or HRQOL to the development of depression. (Bekele, 2013) It has been found that

environment can be a factor weather or not someone would develop Depression. It was found that often people who felt that they were not supported had a higher tendency to develop depression. When someone is suffering from depression the likelihood that they would skip treatment or avoid getting tested goes up. (Lee, 2002)

In the profession of Architecture there is an established code of ethics. Architects believe in the need to better the environments in which people live in. By making communities more livable the likelihood that HIV will take hold is lowered. This can be done if research is implemented in the design process.

An example of such design would be when architects at the State of the Art of Architecture came up with an idea to economically install balconies to an apartment building. When they were installed the pre-existing walls with small punched windows were taken down and balconies were craned in place. This change resulted in a flood of light into the apartments. Residents reported that this had greatly enhanced their living spaces. With the increased light they could have house plants, which has also been proven to improve one's mental state. This may seem small but greatly affected this community in a positive way. ("Architectural Solutions to Poverty and Community", 2015)

4. Architects Intentions

Upon reflection in teams, concepts were formed and driven by key beliefs. It was agreed that the goal was to create a healing atmosphere that would foster the rehabilitation of the residents into society. It was recognized that there were two communities that were needing to be addressed. The internal community, the residents and Winds House employees and the external communities, the greater Oklahoma City area. It is important that there be a connection between the two.

It was proposed that there be a clear distinction between the public community center and the private residencies. To do this the community center acts as a glass pedestal for the residencies to rest upon. The hope is that this transparency will create an open space that will be welcoming to both communities.

Another important aspect of the design was to create specific spaces that would encourage the interaction between communities in hopes to create an understanding of each other. These spaces were proposed and crucial to the concept, they were a café on the first floor along the western side, then we transformed the laundry facilities for the residents into a functioning laundromat. The greatest hindrance to the fight against HIV is the lack of education that results in fear. These spaces will hopefully bring in the public and stir conversation. These

spaces could also generate income and perhaps even be run by the residents in a job education program.

It is known that people respond positively to the inclusion of nature in their living spaces. This was essential to the design on the in between spaces throughout the facility. These also serve as areas that spear through the clear distinctions of the spaces. A terrace like green space works its way from the ground level all the way up through the apartments. Secondly there are other green voids that act as a separator of the community center and the more private clinic on the ground level. Lastly there is an inclusion of green gardens all along the roof of the community center. This will provide ample space for the residents to have spaces to heal and reflect.

The envelope of the building is meant to create a shelter like atmosphere for the residents. It is made of a mesh material that would be incorporated throughout all sides of the building. The façade would be 'veil' like in mostly covering the from the second story up, which are the living spaces for the residents. The idea is that from the outside there may be a clear distinction between what is public and what is private. However, as a user moves through the facility the lines are blurred with a magnitude of design choices.

5. Quality, Durability, and Performances

System integration was a huge part of the design. For this project structure, HVAC, and lighting were developed in more detail. Structure was a steel frame system. This was chosen because it is more economical, and Oklahoma has a local steel manufacturer that would also cut down on total cost. The members in the lower community center are larger because it has to carry the load of the apartment structures. I believe that it was considered that the upper levels would be a light weight steel stud structure with further development because of the odd angles that the apartments took.

HVAV was something that was very important to the building design since it was a goal to have the building as efficient as possible. The Winds House is a non-for-profit organization and would benefit from the decreased cost in running the building. The facility has three air handling units. This was so that the three main components of the facility, community center, Gym, and apartments, could be run separately. The design has two located on the ground floor for the community center and the apartments while the third one can be easily accessed from the roof garden above the clinic.

Lastly lighting was very important to the design. Lighting can greatly impact the feeling of the space and since this was a facility for the healing and reintegration of the residents. The goal of lighting is to have evenly distributed and to mimic natural light as close as

possible. The goal is that during the day that additional lighting be kept at a minimum, where this will help the Winds House save on money. The lighting will be integrated in such a way that it keeps a clean appearance through out the facility. The lighting should not be flashy in appearance itself but can highlight the buildings unique features.

6. Finals

In the final design the overall concept on the whole was similar to that of the original. It was still centrally focused on the healing process of the residents. However large changes where made to the spaces that were meant to foster conversation between the external and internal communities. The goal was to add a playful air to the complex through active forms and popping color. This color however would not be overpowering in the spaces that where kept clean intentionally for the more quiet moments of thought.

Schematically, major changes in the building's planning was focused on the apartments and the cooling towers within those spaces. The functionality of those towers where questioned so the in the end where removed. Once those masses where taken out there was a void that now needed a function. Focused heavily on the interactions of

residents those voids were molded into shared balconies and patios. The idea is that this would encourage neighborly interaction and be part of that healing process.

There was a space that was to be focused on and for this project the gym was chosen. It was chosen because this space had such a large impact on the major western façade and was originally lacking in development. Originally the space was meant to be totally separated from the surrounding complex in an architectural sense. In the end the skin system would later allow for it to tie back to the main facility. The gym located on the southwest corner of the site is a box with an undulating roof and skylight system. The sky lights would drop down and allow for the desirable evenly distributed light. All the major systems were also integrated into these skylights keeping the interior space very calm.

The gym sat with views into two the voids resulting in gardens on the ground floor. Since this space was also a multi-functional space it was thought that being able to expand the space into the gardens would be nice. Massive sliding doors on the south side can be pulled open and that whole wall would essentially disappear. This would hopefully lead to some natural ventilation in the space with further development. The gardens are meant to have all the beautiful colors of

a variety of flowers. There would be bright orange concrete planters that double as seating that run through the entirety of the project.

The developed skin system was composed of Trespa panels and an interference stainless steel fins in a bright purple color. The fins originally were solely located on the gym; however, it later became a greater expression of the focal spaces such as the laundromat. The fins move in a wave like motion with each fin being unique in its own shape. Since the gym was still waning to be this 'jewel' the fins on the outside of that space had a slightly different make up. Instead of being completely made of the purple steel the gym fins were segmented with dichroic glass. This glass has a special quality that it will has two sides that when light interacts with is are different colors. On the outside the glass would appear a bright orange color while in the space it would appear a cool blue. This just adds to the playfulness trying to be integrated into the space.

7. Conclusion

In conclusion I believe that I was able to achieve what I had set out to do. My number one concern was creating an environment for the residents to enjoy, flourish, and be proud of. Having researched the disease and the social groups most effected, I know that the lack of knowledge or wiliness to talk about it has greatly hindered efforts

against the spread of it. On top of that it is very stigmatized, and the hope is that while this facility meets the needs of the residents and the winds house that it would stir conversion.

Citations

- Bekele, T., Rourke, S. B., Tucker, R., Greene, S., Sobota, M., Koornstra, J., ... & Hwang, S. W. (2013). Direct and indirect effects of perceived social support on health-related quality of life in persons living with HIV/AIDS. *AIDS care*, 25(3), 337-346.
- Dempster, Q. (2015, November 02). Architectural solutions to poverty and community alienation. Retrieved from <http://www.abc.net.au/news/2015-11-02/dempster-architectural-solutions-to-community-alienation/6904668>
- Fan, H. Y., Conner, R. F., & Villarreal, L. P. (2014). *AIDS science and Society* (7th ed.).
- Gay, C., Kottorp, A., Lerdal, A., & Lee, K. (2016). Psychometric Limitations of the Center for Epidemiologic Studies-Depression Scale for Assessing Depressive Symptoms among Adults with HIV/AIDS: A Rasch Analysis. *Depression Research and Treatment*, 2016, 11

Lee, R. S., Kochman, A., & Sikkema, K. J. (2002). Internalized stigma among people living with HIV-AIDS. *AIDS and Behavior*, 6(4), 309-319.