What is an Architect?
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ABSTRACT

Humans construct buildings to meet some of their most basic needs. People have always built, and will continue building with or without architects. Architects and their designs are often given too much credit. Designers like to think their work contributes to our society positively, when in reality the contributions are minor. People want to feel safe, legitimate, and dignified. Beyond the fulfillment of basic needs and desires, the specifics of design are less important. The field of architecture today rewards designers more for aesthetic and technical beauty and innovation than for actual contributions to the communities in which they work. I provide examples from studies which explore what people really want in design, examples of designers working to truly improve peoples' lives, and projects I have worked on that have the same goals.

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Architecture students are asked to define architecture many times throughout their years of school. They are asked in studio courses, architecture history courses, and theory courses, just to name a few. A definition of architecture can be sought from the dictionary, professors, theorists, architects, and non-architects. As students, we are often guided to the likes of Frank Lloyd Wright, Zaha Hadid, Le Corbusier, or Frank Gehry to find definitions of architecture which we can use to guide our work. While the work of these design stars is often given high praise, I would argue it misses much of design’s true potential.

“Architecture doesn’t just function; it expresses the human condition. It’s about human dignity. It’s about respect. It communicates identity and enables people to speak, to participate, to act. If you want to see what design has to do with identity, look at people’s clothes, their cars. Architecture does the same things; it just lasts longer.”

-Public Architecture

Design facilitates human activity, rather than dictating it. Architecture provides a physical infrastructure within which the needs and desires of people are met. Academia and professional practice are filled with definitions of architecture that drive designers’ work. At the culmination of my undergraduate studies in the field of architecture, this question is still unanswered. There is an even more important question though. As I am about to embark on my next step toward work in the field of architecture, the question on my mind is, “what is an architect?” This work attempts to explore that question by looking at innovative work by designers practicing today, exploring some sociology about homes, and analyzing some atypical projects I have worked on during my undergraduate studies at Ball State University.

The first step in understanding the role of design in this world is understanding that designers work for real people. The users of the spaces created by architects and planners should be the most important driving force behind these designers’ works. In order for this to happen, we must explore what people really want from design.
What is Home?

Architects should not design for themselves or for fame, and they should rarely design for design’s sake. There are bigger and more important factors that should drive the work of designers. In order to understand these factors, it is important to understand what people really want from architecture.

Home is more than a house, more than a room, and more than an apartment. According to Lee Rainwater, housing on the most primitive level has to do with sheltering the individuals who reside within it, and should be evaluated on how adequately it achieves this. He notes that the house becomes the place where one can maximize individual autonomy and minimize conformity to the formal rules of public demeanor. He also mentions the conceptions of the house generalized to the area around it. The suburb, village, farm homestead, and city neighborhood can all be seen as one large protecting and gratifying home. When discussing housing, people talk of the inside as deeply affected by what goes on immediately outside. The definition of home is not the same for everyone. It often varies by social class. Marc Fried studied relocated slum dwellers from the West End of Boston in the 1950s. He found that in general, people in a lower social or economic class had a higher need for external stability. He noted that these people’s feelings of being at home and belonging are integrally tied to a specific place. This is due to the network of interpersonal relationships and group identities connected with a specific neighborhood or home site. Home is the living room where birthdays are celebrated every year, it is the neighbor’s porch where chess is played every Wednesday afternoon, it is the garden that is tended to every summer to yield zucchini for family dinners. Home is a specific building, a specific back yard, a specific neighborhood, but it is less about the designed details and more about the refuge, stability, and familiarity the area and neighbors provide.

Home is also attached to memories and events. In the South, people often refer to home as the place where one grows up and the origins of family roots. It is the place for reunions, fish fries, and late night “do you remember when” sessions. Although home sites are often tied to a specific place, they can be tied to multiple specific places where objects of remembrance are collected or rituals of everyday life are practiced.

Families in a higher economic or social class are less reliant on a specific building as the source of a sense of home. This is not to say that there are no fond memories of growing up or emotional attachments to the places that provided space where great moments in life occurred. Because people in a higher economic class are less reliant on their neighbors for a sense of support, they are less tied to a specific house or neighborhood.

Another difference between social classes regarding housing concerns safety. People in lower social classes are still battling to make the home a safe place, whereas that battle has long been won in the middle class. Once safety has been achieved, functions related to self-expression and
self-realization are added to the definition of home. Middle class homes become the locales to a wider range of social interaction. The home’s specific location becomes less important as social circles are more dependent on work, leisure, or interests rather than physical proximity.

Rainwater, as well as others such as Herbert Gans who studied Boston’s West End, found that many lower class people are content with much about their housing, even though it is “below standard” in the eyes of housing professionals, as long as the housing provides security against the most blatant of threats. These people are more concerned with comfort and contentment than improved housing. They often economize on housing to have money to pursue other interests and needs. They put resources into making the home life as comfortable and easy as possible, often resulting in many major appliances centered on the kitchen. They are also much more interested in having neighbors who are similar and maintaining easy access among people who are very well known.

No matter the criticisms and stigmata of public housing projects, there is little doubt these situations are preferable to slum dwellings. In Rainwater’s interviews in public housing projects, he found that most residents consider their apartments imperfect, but very few complained about design aspects of the insides of their apartments.

As social status rises, demands on housing increase. People in the middle class are more interested with owning their own home, and often their own front and back yard. Decoration on the inside and outside also become much more important, as noted by Rainwater. That is not to say, however, that people in the lower class are not interested in decoration and aesthetics. The yard becomes a place where both adults and children can relax and enjoy themselves and each other. In higher social classes, there exists stronger concern of protecting the neighborhood from the incursions of lower class people who might bring violence of one kind or another.

What this means is that home has to satisfy needs of safety and comfort. Then home can be embellished according to the desires of the home owners. Home is less about design, and more about a satisfaction of needs, wants, and desires. People do not remember whether the windows in their house are placed in a certain pattern or if the rooms are organized on a grid or not. What is important is the activities that home makes possible. The building and neighborhood are the physical infrastructure necessary for life as we know it to happen. The design of this infrastructure can impact how people use the space, but it is really the use of the space that is important, not the design.

“Architecture is not just a matter of technology and aesthetics but the frame for a way of life — and with any luck, an intelligent way of life.” - Bernard Rudofsky
An important problem with designing for poor, homeless, or displaced people is that the clients cannot pay for the designers' work. This causes many practices to avoid these people altogether. Some designers, however, are doing wonderful work with these people in mind.

"As architects in stable democracies our responsibilities are clear cut. Our role in those societies where freedom has been ripped away by force, or where nature has devastated whole cities, or when generations of minority groups have been forced into a life of poverty because of a certain philosophy, is hazy by comparison. The need 'to house', born out of the adversity of war offers for architects the opportunity to provide shelter for fellow human beings in need."

- Sean Godsell Architects

Much of the work by Sean Godsell Architects demonstrates the possibilities of architecture to truly aid in bettering peoples' lives, even when they cannot pay for it. One good project is called the Future Shack. The project is a temporary housing unit that uses a standard shipping container as its basic unit. The house can be shipped to locations all over the world to provide shelter for people who have lost their homes to war or natural disaster. It can also serve as housing for those in third world countries, or anyone who needs temporary or remote shelter.

Another project by this office is the Park Bench House. The nature of this project is very simple, but its impacts can be beyond measure. The Park Bench House project is a way to incorporate shelter for the homeless using existing city infrastructure. At night, the top of the bench angles up to provide a more comfortable place for sleeping and a roof for protection. Beyond providing a place for homeless people to sleep and keep dry, this project offers inclusion of homeless people into the city fabric. They are no longer viewed as problems that need to be hidden, but instead they are treated like equal humans, who have needs just like everyone else. Another similar project is the Bus Shelter House. Again, the idea behind this is to use city infrastructure to accommodate displaced people instead of shunning them.
Many designs and ideas discussed previously have been related to poverty, homelessness, informality, disaster, and extreme cases of life. It is important to also note innovation regarding the relationship between design and people in less volatile living situations. One firm that has good examples of these innovations is LOT-EK.

LOT-EK uses existing industrial objects as the raw materials for new spaces. A few of their projects push the boundaries of typical design, not in a flashy or arrogant way, but rather in ways that really impact how people live and interact.

LOT-EK is:

“Making architecture with existing objects, systems and technologies to be used as raw materials” | “Displacing, transforming and manipulating existing objects to fulfill program needs” | “Re-thinking the human body interaction with products of the industrial/technological culture”
lot-ek.com

LOT-EK’s Mobile Dwelling Unit project creates apartments out of standard shipping containers. These apartments have pop-out spaces to make the interiors larger. The units can be shipped all over the world and plugged into towers which provide infrastructure for heating, cooling, electricity, water, etc.

UNIQLO container stores are mobile retail stores that can be shipped anywhere in the world.

While these projects seem to cater to the wealthy who can afford to travel and move their homes all over the world, the ideas behind them are a contemporary spin on a nomadic lifestyle, and can also be applied in many situations.

Shipping houses across the country or even the world is not the most sustainable practice. But demolishing buildings isn’t either. When one of these dwelling units becomes abandoned, the entire unit can be reused without demolishing or wasting anything. These units can also be used in temporary housing situations, similar to Sean Godsell’s Future Shack.

Containers which hold retail stores or services including grocery stores, laundry services, libraries, or medical units can be mobile throughout big cities. They can bring services to people who do not have transportation or cannot journey far from home. Building one permanent medical unit in a slum or poor part of a city can be expensive and only benefit one neighborhood, while building a mobile unit can benefit multiple neighborhoods for the same cost.
I have had the opportunity to work on a few projects dealing with people who cannot afford to pay designers. The following are two of these projects.

For five weeks during the summer of 2008, eight students and I worked with professors, students, and an architect in a favela called Villa Pinto in Porto Alegre, Brazil. The trip was intended to yield a built project designed while we were there. After spending some time in the area, meeting with professors, architects, and people who lived in Villa Pinto, each student designed a small project to better the community. The projects were focused around an existing community center (CEA) since they were willing to meet and work with us and they would allow us to build our project on their site. The projects were small since we had limited resources and time. The project I designed is called CONNECTIVE BEAUTY.
From analyzing the existing guard stand at the CEA, I concluded that it was not serving much purpose at all. It was the intended main entrance to the site, but nobody used it. It was slightly worn down and could not even function as a guard stand since it could not be secured, and there was not even a gate. In addition, it was not providing a connection between the community center and the street. There were no signs, and from the street one would not even know the community center was located there. As the main entrance to the site, it had the potential to bring people into the community center, and center activities to the people outside. It could become a hub for Villa Pinto residents to interact.

The goals of the project were to restore the stand so that it could function, controlling access to the site, and to provide a connection between the community center and the people of Villa Pinto. In this case, the university was willing to donate materials. Other projects, however, could seek donations from charitable groups. They could even use scrap materials from other building sites. The project was designed to employ inexpensive materials in case donations could not be found. All of the renovations and additions to the guard stand would be done by community members during classes taught at the CEA. The construction process would teach Villa Pinto residents skills that could be used in other areas. The investment of their time and energy into enhancing the community center would instill a sense of pride and ownership in the resulting piece of “architecture.” When people feel a connection to a building, they are less likely to deface it, and more likely to protect it. Contributing to the completion of a project, especially one which enhances a person’s community, instills a sense of pride within that person. When an outside entity comes into a community, builds a project, and quickly leaves, much of this pride and ownership is lost.

The proposed project includes a new skin, made of PVC piping and durable fabric, for the roof. The skin is colorful and extends the roof to provide protection from the sun or rain. There is also a new sign made of the same materials that is used to announce the presence of the CEA and inform people in Villa Pinto of the activities, services, and classes offered by the center. The proposed project also features versatile display surfaces constructed of PVC piping and fabric by the community members. The surfaces attach to the outside of the guard stand. They can protrude horizontally from the stand acting as a table to display objects created within the center, or they can be raised to act as a hanger to display clothing, artwork, or other larger products made during community center classes. The surfaces can also sit or hang parallel to the guard stand walls, allowing them to be additional signage. They are built to survive the weather, and can be easily removed at night or when nobody is around for security.

The proposed project would hopefully make the guard stand more functional and aesthetically pleasing. It would also create opportunities to share happenings within the CEA with people in Villa Pinto, including crafts, clothing, food, or even musical performances. The project is designed to be flexible for when needs change throughout time. The process of completing this project would allow community center members to gain skills and also pride and ownership in the enhancement they helped bring to their community.
Existing Guard Stand:

Proposed Guard Stand:

1. Roof panels for overhang
2. CEA sign and calendar
3. Multi-function panels as tables, hangers, or signs

Analysis

Guard stand is the intended main entrance to the CEA, but people don’t use it.

Entrance lacks all connection with the street and square across the street.

Ideas

Stand has potential to be very visible to the community.

Stand can be covered with a new façade, which will maintain the structural integrity and security potentials.

Stand can be demolished and rebuilt, which will require more labor and materials and could damage the structure.

Improvements to the stand can be built by community members using skills taught through CEA programs.

Intentions

To enhance the aesthetic qualities of the CEA entrance.

To create a venue for advertisements of CEA programs, events, and products.

To attract community members to participate and interact more with the CEA.

To include community members and CEA in design and production of project.

To be flexible for the future.

To allow collaborative work between students, university, and community members that passes knowledge to all parties.
Flexibility:

This project employs panels made from PVC pipes framing fabric. These panels are used for signage, shade, roof overhang, shelves, and hanging racks. The panels can be made by community members attending CEA programs like sewing classes. The panels are flexible in that they can be created in any size needs and can be plugged into different places for different purposes. They are removable for security and durability.

Construction:

PVC connections to brick wall. Allows for flexibility, movement, and removal.
Construction:
The PVC frames can be cut and assembled by Villa Pinto residents. The fabric can be cut and sewn during CEA classes.

Models:

A small model of the proposed guard stand was constructed to present to people at the CEA. A rough model of the multi-function panels was also constructed and presented.

Results:
After presenting our projects to the CEA, they chose three that they would like to see built. **CONNECTIVE BEAUTY** was one of the three they chose, but ultimately not built. As a group we decided to clean an area behind the CEA and install outdoor flooring to create a space for activities to happen outside. We quickly learned that as foreign students with little resources and little time, producing a built project was unlikely. We cleaned the area, but ultimately could not produce a built project. Some of the students were expecting to leave Brazil having built a project to add to their portfolios. They were upset that this did not happen. Other students really wanted to leave something that would better the community. Nothing tangible was left. After thinking about the supposed “failure” of the trip, it became clear to me that it would have been inappropriate for us to construct a project. Life in a favela is very challenging, and as people who were not familiar with Brazil and even less familiar with poverty and slums, how could we think that we would have any answers to make their lives better? We left them with ideas and plans for bettering their community center. For us to come in, build a project, and leave, would deny the people of Villa Pinto all the benefits of the process of “architecture.”
This project was an entry in the 2007 AMD Open Architecture Network Challenge Africa. It was a collaboration between myself, Ben McHugh, and Ben Herring. The challenge was to empower the youth of Mukuru Kwa Njenga, an informal slum settlement of 250,000, to connect with other youth and create positive change in their community by building a technology media lab and library. The client was the Slums Information Development & Resource Centres (SIDAREC) in Nairobi, Kenya.

One driving force behind this design is the fact that a computer in a slum in Africa is often used by many children simultaneously. The design of the space and how people interact with the computers should foster multi-functionality and multiple users. Another driving force behind the design of this project is the monetary value of the computers compared to the income of the users of the space. One computer monitor could be sold for what one family makes in one or two months. Poverty and hunger could lead some people in the slum to see these computers as an opportunity to feed their family for a few months. We wanted the project to be flexible and allow rearrangement of spaces and buildings to fit changing needs. We also wanted this design to be applicable to projects all over the world, which is quite fitting with the purpose of the Open Architecture Network.
Project:
The idea of bringing computer access to people in the developing world is bigger than one site in Kenya, though this one site is as important as all the rest. The CORE project is one that provides a simple, standard, and inexpensive system for bringing computers to people all over the developing world. The CORE:SIDAREC project shows how this system is applied specifically to this site.

The biggest issue that arises from introducing valuable and fragile technology into developing parts of the world is control. The technology must be secure from theft and protected from environmental elements. By creating a small and controlled CORE to house the valuable and fragile equipment, the amount of uncontrolled and free space on the site is maximized.

The CORE is constructed of reinforced concrete masonry units with available materials supporting the roof. The SIDAREC project employs open web steel joists. The rest of the buildings will be site specifically designed. In this project, the building walls are gabion walls. Gabion baskets are cheap and can be inexpensively filled with discarded stone from local quarries. These walls can easily be disassembled and moved in the future if needed. Gabion walls also have many interesting levels of permeability including light, air, and sound. They can be easily built by people in the community, giving them ownership and making the project rely on the people who will be using it.

Projectors will display information from the computers onto screens within the spaces. The computers can be accessed by multiple people simultaneously, while the actual computers are kept secure in the CORE. This allows for maximum flexibility. It also allows teachers to project work in front of a whole class, and to look at all of the work at once. There are screens on the street façade to show what is happening inside, draw people to the site, and aid with performances on the amphitheater. This provides an opportunity to connect the site with the community. The site is designed to draw people into the courtyard, to mix and mingle.

PV panels will be used to generate power which is stored in batteries in the CORE. Rainwater is harvested on the roofs and freely stored in cisterns which are available for anyone on the site to draw water from.

The CORE project brings computers to people. The CORE:SIDAREC project brings a community learning center to Nairobi. These ideas are a starting point. They are the beginning to an adaptable project for the people of the community to make their own.
A Nintendo Wii remote can respond to multiple infrared light sources. If connected to a computer, these can be used to control the computer almost like a touch-screen. This system is similar in price to a traditional computer system, but allows for increased security and is better suited for multiple functions and multiple users.
A mock-up of the computer system was assembled and used to present the project.

1. personal computer
2. Nintendo Wii remote
3. projector
4. screen
5. handheld infrared light
The library has space for books and tables for single users or multiple users. Computers are on screens along the walls in the library. There is a classroom for programs offered by the center. There are also smaller meeting areas and space for the security guard to live. The roof collects water which is stored in cisterns for people to access.

CORE walls are constructed of CMUs, while other walls are constructed of gabions to allow for the expansion and rearrangement of spaces as needs change.
This section shows the relationship between the CORE and the library space. It describes how people access the computers by using the screen system and how the equipment is secured within the CORE.

Many large screens maximizes the number of computer users at any time. Multiple functions can be performed on any computer to meet the needs of multiple users.
PROJECT DISCUSSION

FLEXIBILITY

These projects were both designed to be very flexible. Movement of panels in the CONNECTIVE BEAUTY project allow the guard stand to serve multiple functions. The use of gabion walls in the CORE:SIDAREC project allows for the building and spaces to change shape, grow, or shrink to accommodate users' needs over time.

If a building is truly going to meet the needs of its users for decades, then it must be flexible. Flexibility is achieved by having open floor plans to allow for changes within. It can be achieved by using materials and construction methods that allow for easier changes to the building layout. However flexibility is achieved, architects must design buildings with attitudes that promote and encourage change if necessary. The architecture field as a whole must not treat buildings as sacred. Overwhelming criticism, scrutiny, and possible outcry would occur if a curator at the Guggenheim in Bilbao wished to expand the museum, move a few walls, or knock a few down. Because the building is seen as so sacred, an expansion would require an international competition instead of simply a local architect and contractor expanding the museum to meet its current needs.

LOCAL INVESTMENTS

Both of these projects employ building materials and construction techniques tailored to the communities they would be built in and the people using the spaces. The CONNECTIVE BEAUTY project uses materials readily and inexpensively available and construction techniques that can be taught during classes at the community center. The CORE:SIDAREC project uses local materials and construction techniques that probably many residents in the slums have skills to work on, such as welding and constructing CMU and gabion walls.

The construction of a building is a very complex process and has the potential to spread wealth and enhance local communities. By purchasing local materials, jobs and wealth stay within the community. This also results from hiring local construction workers. Building projects not only enhance a community by providing new and useful space, but they can really reach out much further and enhance a community in many ways.
AESTHETICS

Both of these projects have certain aesthetic characteristics, as is inevitable with any design project. The CONNECTIVE BEAUTY project used enhanced aesthetics to make people feel a little better about the space. The CORE:SIDAREC project's aesthetic qualities were a result of the combination of materials used.

Aesthetics in any architectural project are important. Nice looking surroundings can make people feel good about where they live or work. The people in the slums decorated the insides and outsides of their houses, even though they barely had enough money to eat. Aesthetics should not become more important than the function of the space or its users. During the design, construction, and life of a building, the needs of the users should always come first.

PEOPLE

When discussing architecture, people judge a building's success or failure related to many issues. These discussions often exclude people. Ultimately though, architecture is about people. This should be the driving force behind most design projects. There are some projects which are only for art's sake, or for design's sake, but those should only happen if that is the expressed goal of the client. No architect should ever treat the design of somebody's house, a new building at a school, or a company's corporate office as an artistic experiment. Buildings are not experiments, they are huge investments.

Even the way we talk about buildings gives ownership to the architect. We discuss Frank Gehry's Guggenheim instead of talking about the Guggenheim Museum in Bilbao. We talk about Peter Eisenman's art museum in Ohio, instead of calling it the Wexner Center for the Arts at Ohio State. Maybe this is just a way to ease conversation about architecture, but it makes the buildings more about the designer, and less about its function or users.
WHAT IS AN ARCHITECT?

With or without school-trained architects, people would build. Structures would rise to meet the needs of people, families, and communities. Society entrusts the duty of designing safe buildings to architects, and clients expect architects to meet their needs within their budget. So what is an architect?

Rather than shaping human activity, architectural design complements this activity. Designers think they can cause people to behave certain ways through design. While it is true that design can influence how people use a space, the primary influence is ultimately the user. People will cut through open lots instead of taking the sidewalk all the way around. Architecture's prime social function is to facilitate people's doing what they want or have to do. The primary function of an architect is to design structures that are able to meet known and predictable activities.

When an architect becomes a star, his or her work becomes about the author. Although buildings and star architects can bring attention to cities or campuses, architecture is not about fame. When an architect or institution is pursuing a project for attention, they miss the point. They forget about the cost, the users, and the builders. Projects go way over budget and buildings do not function as they should.

At the end of the day, an architect is hired to complete a building project. An architect should put the needs of a client over any desire for artistic experimentation or attention, unless that is what the client wants. Even then, an architect cannot forget people.

An architect shares knowledge that others may not have to create a physical infrastructure where human activity is not only fostered, but is the primary influence on his or her work.
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