

Term Paper:  
“Humanitarian Architecture: Concepts and Application”  
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Built Environment Design and Theory

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March 22, 2012

## Introduction:

Humanitarian design has become a popularized phenomenon in recent years, and it comes in all shapes and sizes. Whether due to economic downturns and the pursuit of idealists such as Cameron Sinclair, founder of “Architecture for Humanity”, or creating sleek, contemporary, and affordable housing such as “Studio 804,” it seems there has been an explosion of humanitarian architecture. Several trending publications have also come out recently depicting the work of design activists, to name a few: *Design Like You Give A Damn*, *Expanding Architecture: Design as Activism*, and *Beyond Architecture: Architecture and Human Dignity*. The popularization of humanitarian architecture has been especially noticeable in the wake of recent natural disasters (2004 Indian Ocean Earthquake and Tsunami, 2005 Hurricane Katrina, 2008 Wenchuan Earthquake, 2010 Haiti Earthquake, 2011 Japan Earthquake and Tsunami, etc.). The attention to the subject is positive; it draws the consideration and services of the architecture profession to the real problems out there. The humanitarian design phenomenon also begins to draw our attention to the other 98% of the built environment. The problem is, it makes us believe that the architecture and design professions can solve all of these problems the same way that humanitarian aid is used to provide disaster relief and assistance. This is a large problem, one that cannot be ignored and needs to undergo analysis. Furthermore, the new wave of humanitarian architecture and idealism leads us to believe that this is a new phenomenon with new solutions, but the ideas and conflicts of humanitarian architecture have been going on for decades, maybe just under a different guise of social architecture. What is humanitarian architecture and where

has it come from? This paper establishes the basis of humanitarian architecture, the definition, and the key concepts that define the practice of humanitarian architecture. It uses the concepts of 'craft' and 'replicability' along with these concepts as a lens to analyze and critique the current state (or practitioners) of humanitarian architecture.

#### Defining Humanitarian Architecture:

Herbert Simon defines design as “devising courses of action aimed at changing existing situations into preferred ones” (Alastair 5). Alastair defines design as “the act of deliberately moving from an existing situation to a preferred one by professional designers or others applying design knowingly or unknowingly;” he then defines design activism as “design thinking, imagination and practice applied knowingly or unknowingly to create a counter-narrative aimed at generating and balancing positive social, institutional, environmental and or economic change” (27). Using the logic of Simon and Alastair and applying it to the practice of architecture, architecture is tied to culture, society, economics, political forces, and the environment; architecture reflects the culture and traditions of a community. Demetri Porphyrios defines architecture as, “the imitative celebration of construction and shelter qualified by the myths and ideas of a given culture. Such myths might have to do with life, nature, or mode of production of a given society” (*The Relevance of Classical Architecture* 95). When practicing architecture, one is practicing art and designing the built environment, moving from existing situations to preferred ones. Architecture is both the process and the manifestation of the process. Humanitarianism elicits humanism, ethics, and justice it connects each

person at the core level of human nature, just for being another human. Placing humanitarianism in the realm of architecture elicits the notion that architecture connects and creates a built environment that links people at the core, human level; it is social, just, and ethical. Therefore, humanitarian architecture is improving the welfare and happiness of a population through the art and practice of designing the built environment that the population occupies. Through this process, humanitarian architecture can alleviate suffering and transform conditions into collectively preferred ones; it acts to create a built environment that is for the betterment of society. Humanitarian architecture is synonymous with social architecture; when learning from failures we create social architecture that implements the knowledge and cultures of the users. How has humanitarian architecture been practiced successfully? This paper argues that the true form of humanitarian architecture is seen through the practice of housing the poor and slum-upgrading, attempting to turn the lowest denominator of the built environment into a preferred one, which more often than not is moving from the worst conditions of the built environment to improved ones. The following covers some of the seminal works on social architecture and housing the poor in order to establish the key concepts of humanitarian architecture.

The concepts of humanitarian architecture:

Slums have to be looked at for their complexity and innovativeness; they are not hopeless, disorganized, spontaneous, and chaotic systems on the under belly of society (Lizarralde, Johnson, and Davidson). Slums are sophisticated and industrious, capable of producing shelter for millions of poor families worldwide;

they contain complex systems of enterprise and even act as incubators and catalysts for the individual seeking a better life (Turner, Chavez, Lizarralde et al.).

Buildings are manifestations of the collective. The term 'user' came into use in reference to welfare housing. Using the term allowed architects to have discussions about inhabitants as one, users, ignoring differences (Forty). Lefebvre states: "The word user has something vague and vaguely suspect about it. By making inhabitants into abstractions, inhabitants can't recognize themselves in space" (362). Lefebvre brings up the concern of space and segregation, something that has become an inherent part of social housing. Oliver-Smith speaks to the necessity to maintain cultural association in order to place people in culturally and environmentally adequate dwellings, he adds, "successful reconstruction also involves arranging houses on the ground, which itself may be socially categorized and valued, and filling such houses with specific people who are equally socially categorized and valued" (9). The notion of social space must be considered when creating new developments. Architects have to use their resources wisely and help people fight alienation, only then architecture realizes the potential in the user (Hertzberger 14).

Christopher Alexander furthers the concept of the house as a concrete expression of one's place in this world. When the family designs a house, a relation to the house is formed that is natural. The mass social housing alienates people and causes despair (Alexander et al.). Within humanitarian architecture, human feeling and human dignity must come first, "in which the housing process is reestablished as the fundamental human process in which people integrate their values and

themselves” (Alexander et al. 123). Production methods of housing in the modern world are too centralized and fail to adapt or prevent adaptation to fit the user’s needs. The building practices are controlled by businesses, government agencies, and industry. Decisions are made without the attachment to the project or being engaged in the experience of building. The production system in place defines a pattern of control; decisions are made remotely without regard to the location they impact (Alexander et al.). Howard Davis adds that people who create buildings themselves are creating buildings full of meaning and value; these are the use values they establish within their community (13).

Shelter is a necessity, a basic need of man; “the house is man’s affirmation in space” (Ward). When housing is created at an individual level and a community level, it provides the connection between the individual, community and culture (Turner, *Housing by People*). In practicing humanitarian architecture, the practitioner must realize these intricacies of social-housing. He/she must take notice that good housing is made through the social networks, cultural capital, and resources within the population, not from outside methods of top-down intervention. Generative design, which enables adaptation through incremental growth with feedback loops, facilitates this type of bottom-up housing (Uzzell). “When dwellers control the major decisions and are free to make their own contributions to the design, construction or management of their housing, both the process and the environment produced stimulate individual and social well being. When people have no control over, nor responsibility for key decisions in the housing process, on the other hand, dwelling environments may instead become a

barrier to personal fulfillment and a burden on the economy” (Turner, *Freedom to Build*). Allowing the user to become invested in their housing, through participation among other strategies, they become empowered and bring that much more success to the project.

Informal networks and linkages need to be increased within disadvantaged communities, in order to facilitate connections to resources outside of their means. Rather than just providing people with a professional design service, help them gain access to the resources that will most readily help them succeed (Turner, *Freedom to Build*). Humanitarian architecture needs to facilitate a process that begins to address these issues. As a part of the process of establishing networks, architects and builders need to understand how changes in building codes affect the quality of construction and safety and help direct any concerns of the self-builder with the formal, regulatory entities.

As a practitioner of humanitarian architecture one needs to work with the people, not for the people. Understand the language of the architect and the language of the client. It is a mistake to think that the architect, the developer, or the contractor knows how to build houses better than the people. One cannot assume he knows more just by his merits. It is better to assume the people you work with know more than you. It is a necessary understanding of process; you need to remove hegemonic institutions and stop considering housing as a product. Turner states: “when the house becomes a commodity supplied through paternalistic agencies, there is no room for the enjoyment of the process itself (*Freedom to Build*, 135). Decisions must come from below; complexities and abilities of the people are

overshadowed by regulatory structures. Turner expands on how important it is for the architect to understand, “the initiative, ingenuity, perseverance, and hope so evident in the housing action of such a large part of the population and in the face of so many difficulties” (*Freedom to Build*, 145). The professional has to take responsibility for the artificial, authoritarian barriers in the way. The squatters actually add to the urban fabric, and should be considered a part of the urban environment. In many instances, the urban poor make better use of their resources and are sometimes better housed than their wealthier counterparts (Turner, *Housing by People*).

Understanding the inherent abilities and resources within a community, the ability and ingenuity of people to self-build and create networks of resource, is essential to humanitarian architecture. In addition to this understanding, Hassan Fathy adds the importance of continuing traditional trades and craft within architecture for the poor, teaching communities to build using methods relevant to their cultural heritage and tradition (*Architecture for the Poor*). The reason for this is that architecture must exist in the living conditions within tradition as seen in a culture; buildings transplanted from outside become unsightly impositions (Fathy, *Architecture for the Poor*). Respecting the traditions in a building culture and maintaining the knowledge of the building craft enables one to create solutions that respond to culture and the environment; these are innovations. Furthermore, the humanitarian architect should not use his services for his own glory, but for that of the society he is working in, expressing a relevant contribution to the tradition and

advancement of a society's culture. Practicing these concepts enables humanitarian architecture to remain ethical and just.

Fathy further embellishes the need to understand that the population you are working with can know more than the architect. By looking through the proper lens, shantytowns demonstrate the resourcefulness and ability of people to create delightful housing from rubbish. It is equally important to realize that even when given the proper training and materials, the poor do not necessarily generate quality housing. Unfortunately, when given the resources and materials, many peasants will try to copy the housing of the rich and do so poorly; in effect a worse copy of a copy is created (Fathy).

One could argue that Fathy's teachings on architecture for the poor are discredited because his legacy, the New Gurna project, failed: the peasants of Gurna never moved in to the housing constructed, and the project was never completed. However, these lessons have been tested again and again, and they stand true. We see the implementation of strategies to involve the 'clients' in the education and practice of traditional methods in other projects as well. The economy of this process has led to a requirement for it to take place as part of several projects in Accra, Ghana and Lima, Peru. Fathy was eventually successful implementing his methods in the implementation of a social housing community for agricultural workers outside of Cairo, Lulu' at al-Sahara (Steele). Turner also had his failures; he designed a school using indigenous and traditional methods of construction with local materials. The client wanted a western concrete structure; when it came time to build, the client used Turner's design, but attempted to construct it using

concrete. Turner admits that his design was too idealistic and he should not have assumed it was what the client wanted. Humanitarian architecture needs to enable processes in which the architect and client are invested in the project at both ends, architect and user. This leaves us with the issues of ekistics; there are many pitfalls and obstacles in the way of the practical application of a theory and one has to be prepared for it (Fathy).

#### Replication versus Craft:

With the understanding of humanitarian architecture, the difference between 'craft' and 'replicability' is the best lens to use for critiquing the current work in the field of humanitarian architecture. Craft encompasses the vernacular traditions, culture, and generative design of a population. Turner states: "Genuine culture is a process of the refinement from the grass roots up" (*Housing by People*, 26). The craft seen in vernacular architecture, demonstrates the transformations a form has undergone through generations of tradition as it adapts culturally and environmentally, until it becomes the perfect structure for its environment. Craft additionally adds beauty to work. "Certainly one may make something according to habit – it will then be living and beautiful only by the residential virtue of the decisions one took when first trying to make that kind of object, and by virtue too of the minor decisions taken in the act of making the habitual movements of fabrication" (Fathy 23). The process of craft is lost when something is manufactured by machinery. The architect must respect and protect traditions, "to break a tradition in a basically traditional society like a peasant one is a kind of cultural

murder” (Fathy 25). Cultural pride and the respect of culture are essential to humanitarian architecture.

‘Replicability’ is the mechanical reproduction, as seen through the mass production of prefabricated housing or the car; it can be seen as creating products. Industrial production and mechanization are opposite tradition and culture. Buildings tend to be the man made capital that defines our social capital; it is the transformation into symbolism (Alastair). The state of replicability tends to be the creation of products that are consumer driven; it is the novelty-mania as Porphyrrios calls it. Lefebvre states: “It is obvious, sad to say, that repetition has everywhere defeated uniqueness, that the artificial and contrived have driven all spontaneity and naturalness from the field, and, in short, that products have vanquished works” (75). Porphyrrios demonstrates the problems that occur when systems of high-tech replication take charge. The relationship between humanism and replication is problematic; it leads to the fall of craft and the loss of the vernacular architecture of a population (“Introduction”, ii). Culture and tradition is negatively affected as the accumulated knowledge from generations of building practice are tossed out; even worse yet, the ability of craft and building technology to respond to the environment and culture is lost.

Furthering the idea of ‘craft’ one can consider the practice of humanitarian architecture as a way to form socially regenerative architecture. Borrowing from Christina Bollo (2012), “Socially regenerative architecture balances the individuals need with those of the collective – creates stability and security while allowing for change initiated and accepted by its inhabitants; and encourages social cohesion,

social mixing, and social inclusion.” “Regenerative architecture will seek to engage human institutions in the democratic reproduction of life-enhancing places” (Moore 381). Decentralization, such as the decentralization of technology, and democratization have helped slum dwellers to gain access to resources and improve their built environment (Chavez). Potentially, humanitarian architecture is synonymous with regenerative architecture, enabling the continuous enhancement of social housing. At the very least, humanitarian architecture should serve the humble everyday needs of men.

Analysis of current Humanitarian Architecture: The problems of novelty-mania:

The intentions of architects who practice humanitarian architecture quickly fall flat on their face when they walk in, assuming they know more than those whose housing they are working on. If one does not follow the logic demonstrated previously, they are working blindfolded. “Very often, images and testimonies of disaster survivors and newly homeless families in newspapers and on the television inspire well-intentioned architects, industrial designers, and engineers to propose emergency shelters, [often produced by industrialized methods] that seek technical efficiency for rapid mass production.” (Lizarralde, Johnson, and Davidson 6). It furthermore should not be assumed that affected people will accept and occupy housing units that are provided after a disaster. If the housing does not respond to their needs, why should they use it? Misplaced intentions exemplify the need to follow an established doctrine of humanitarian architecture before being able to act.

Many people who consider themselves practitioners of humanitarian architecture are souring the practice through arrogance. Dan Rockhill, founder of

Studio 804, believes that the architect has sole priority and does not want to work with or hear the needs of the client; each of his projects is a demonstration of modern architecture and advanced technologies that enable innovative projects to be affordable. Studio 804 is a nonprofit organization set up by Rockhill, which provides a design build studio for graduate students in the school of architecture at the University of Kansas ([www.studio804.com](http://www.studio804.com)). Many of their projects are purposed in the recovery of Midwest towns ravaged by tornadoes. Putting Studio 804's work through the lens demonstrates that their projects are high-tech impositions on society and are not responsive to the communities needs. As Porphyrrios states: "Architecture has nothing to do with 'novelty-mania' and intellectual sophistries" ("The Relevance of Classical Architecture" 96). Studio 804's claim to 'affordable modern' seems to be an imposition of what one thinks is best for a community. Seen through the established lens of humanitarian architecture, their work is not responsive to the community and is not a responsible form of humanitarian architecture.

The Building Sustainable Communities (BaSiC) Initiative, another organization that facilitates student, design-build projects demonstrates another problem of the current state of humanitarian architecture. The BaSiC Initiative is an academic learning program that evolved from a University of Texas foreign study program in Mexico (Aquilino). The BaSiC Initiative demonstrates issues that surround similar organization, including Studio 804, the Rural Studio (University of Auburn), and many more. In the schematic design and design development phase, the programs demonstrate the successful use of participatory or collaborative

design through the use of charettes and open-door policies, but they tend not to involve the community or user-clients in the finalization of designs, construction, or management of the project. Alexander, Chavez, Fathy, Turner, & Ward show there is a value in teaching the user skills to construct and/or renovate housing in order to create a more affordable and sustainable process. Even if this process clashes with the current regulative standards, the organization should find a way to mitigate the concern. Furthermore, these organizations tend to be more concerned with the empowerment of the student through humanitarian architecture than the empowerment of the community. It is important for the students to experience architecture as a cultural activity, but it is more important for humanitarian architecture to help the community, reifying their culture and exemplifying the traditions and resources within. The humanitarian architect must be humble.

“Metropolis Books” is the publisher that put out the books, *Design Like You Give A Damn*, *Expanding Architecture: Design as Activism*, and *Beyond Architecture: Architecture and Human Dignity*, covering the topic of humanitarian architecture. Their popularization of the term and current social movement has caught the attention or at least the gaze of students, practitioners, and academics in the field. As stated previously, drawing people’s attention to the issues of humanitarian architecture is positive; however, by drawing so much attention to specific projects and popularized organizations, they are missing the more significant fact that this movement is not new, nor is it specific to their purposes. Organizations such as the Asian Coalition of Housing Rights and the firm Assai, demonstrate current, healthy strategies of humanitarian architecture. Through the lens, these organizations are

practicing humanitarian architecture, in many ways, superior to that of the organizations described by the litany of Metropolis's books. Another book, *The Scope of Social Architecture*, which was published in 1984 provides just as useful if not more useful examples of projects than those previously mentioned, and it teaches the established principles and lessons learned from years of practice. We can learn from the principles and lessons these projects brought us. It may be even better if books like these were republished with the lessons learned.

Another problem with the current state of 'humanitarian design' lies in the problem of 'soft design'. Many of the solutions tend not to be 'real'. There is a need to look in depth at the root of the problem and not just graze the surface. Many so-called humanitarian architects are guided by modernist faith in the emancipatory properties of science and invention. Just as David Brooks had it wrong with the problems of Haiti, and why a natural disaster is not in itself a disaster without the societal ramifications of vulnerability (Brooks). The failure to recognize individual assumptions of foreign intervention is demonstrated in the post-disaster recovery of Haiti.

We need to house the poor in improved conditions, conditions that improve their health and wellbeing and increase the use value of the established housing. Participatory design is not always successful, especially when dealing with often traumatized and unqualified, low-skill workers. In these cases it will be necessary for an expert in the generative process of design and development to lead the project from the top-down (Salingaros et al.). Move away from high tech prefab, mass production to housing by the people. "Instead it means that real decision

making power over design, planning, and financing and management of the project form individual users must form part of that participation.” (Lizarralde et al.13). More recently this has developed into what is termed owner-driven approach or a user-driven approach in which agencies provide housing finance and technical expertise and the rest is up to the owner. You need to develop social capital and cultural capital. Provide housing that the person is ready to have in which he can afford and will be able to maintain

Conclusion: Moving toward a new practice:

Humanitarian architecture must use advanced knowledge and training for the betterment of society through the best means possible. Humanitarian architects must choose craft over replicability. In order to understand what will bring welfare and happiness, one must have an understanding of the society. Ask the question: ‘What do you know?’ not ‘What do you want?’. “Why, in other words, are the ‘problems’ so universally defined in terms of what people ought to have, instead of in realistic terms of what people could have?” (Turner, *Freedom to Build* 151). Not any architect or person trained or educated in architecture can work in humanitarian architecture. There is an additional set of skills, experiences, and education that are necessary for one to properly practice humanitarian architecture in order to truly benefit the population living in the affected built environment. To some extent humanitarian architecture implies agency, linking it to activism in order to bring about change and social, cultural, and or political transformation. In improving the welfare and happiness of a population, it is inherent that humanitarian architecture must be respectful and responsive to the cultures and

customs of societies and use the collective knowledge and processes of the society in order to empower the community.

In relation to post-disaster recovery and the current state of humanitarian architecture, Gámez and Rogers argue “What is needed is an architecture of change – an architecture that moves the field beyond the design of buildings and toward the design of new processes of engagement with the political forces that shape theories, practices, academies, policies and communities” (Bell 18). A new school of thought is under way, much in the way Turner suggests a new school of the built environment, and we need to create a new department of humanitarian architecture under this school (Turner, *Housing by People*).

In conclusion, humanitarian architecture is a process with the purpose of helping the lowest common denominator of the population rise up from the bottom-up, providing the increase in welfare through improving the built environment. The differences between ‘craft’ and ‘replicability’ can be used as lenses to establish whether or not a project is a work of humanitarian architecture. It works from within these communities and fosters their culture, tradition, abilities, and resources. Humanitarian architecture requires a new set of practitioners who are trained in the proper concepts, are humble and capable of motivating a community. Possibly a new school of the built environment is under way that will facilitate the education and growth of humanitarian architecture.

For future thought:

To what degree can one incorporate cultural and regional style without being a native of the intended destination of the design? This just becomes an imposition

of one's ideology even with consideration for the cultural and societal implications of the project. This brings into light the idea of a critical regionalism, arguing that the insertion of a project such as the Jean-Marie Tjibaou Culture Center by Renzo Piano, which is arguably an imposition of western ideals and foreign interpretation of the culturally relevant. How to intervene with out overstepping culture, how to intervene at ground level without reaching out with an agenda, how to intervene with out creating influence of your own background? Potentially this could be avoided by learning from the culture you work in and experience. Use endogenous patterns of everyday life, endogenous methods, and endogenous participation. Do not make it your project; make it theirs. Go in blind and absorb the culture, place and time.

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