Inclusive design and self-help housing



The role of self-help housing in a more democratic housing process. Egil Ljungkvist

1 Introduction

In many countries the housing sector is very strictly regulated and controlled. Official governmental branches and large private corporations are the main actors in the process of housing (Fichter & Turner, 1972) and have an overwhelming power do decide what can be built and how

During a 3 week field study in Manilla, Philippines an observable phenomenon (like in many other of the worlds cities), was self-built housing. Often in the form of slum dwellings, or informal settlements as they are usually referred to. In other word housing that in the eyes of the city or government are considered to be illegal. As a result of this, informal settlers are often stigmatised by the rest of society and become subjects of marginalisation. To assume that slum dwellers are completely separated from the formal sector is however not correct. According to Janice E. Perlman there is usually a strong social and cultural identity present in informal settlements and rather than straining the urban economy informal settlements serve as a supply of cheap labour and participate as consumers. (Perlman 1976)

While conducting interviews with government officials and local inhabitants in the Philippines it was noted that stigmatisation towards informal settlers, or perhaps rather a lack of understanding in the dynamics of informal settlements, was however still an issue. The reason is that a lack of understanding leads to inflexible housing situations that are unable to adapt to the needs of the dwellers, and housing situations that in my opinion will not contribute to the solution of the global housing crisis.

According to Lizarralde "the housing problem in developing countries is not actually a problem of missing or inadequate dwellings, and its solution is not merely the provision of shelters. Rather, it involves creating conditions in which people can live lives they have reason to value" (Lizarralde, 2014).

This paper will discuss the causes of Self-help housing, informal and formal, as well as its benefits and consequences. This will be done by analysing several examples of organized self-help housing (OSHH) as well as community driven projects and by a literature review, mainly analysing John Turners texts on self-help housing debate as well as criticism received from eg. Rod Burgess.

2 Literature Review

In the years following World War II and with funding from the newly formed World Bank a lot of effort and resources were suddenly available in the effort to solve the problem of housing for the urban poor in developing countries (The World Bank, 2020). As the United Nations had declared housing as a human right, government in developing countries started to invest in national policies and turnkey projects to combat the issue of housing in what can be seen as the first generation of housing policies. (Lizarralde, 2014) According to Lizarralde (Lizarralde, 2014) these were largely unsuccessful since they proved to be inefficient, resource heavy, corrupt, and ultimately failed to provide suitable locations and were not able to hit the target group in societies poorest individuals.

As a response to the failures of the first generation John Turner argue in "Freedom to build, dweller control of the housing process" that abiding by the principle that only the technicians and managers are able to properly define what good housing is goes against the interest of the vast majority of people in a lot of countries and is therefore in many ways undemocratic. Instead of working against the public interest in authoritarian and elitist ways, the government should better incorporate these people and private actors into planned cities by assisting rather than suppressing them. (Fichter & Turner, 1972)

Turner also suggest that instead of defining housing as a noun with a clear set of values, housing rather ought to be seen as the process of enabling the individual with the means to create their own desired living arrangement fitting to their own needs. (Fichter & Turner, 1972)

Except for the more democratic approach to housing were individuals can participate and define their own needs of housing major benefits of OSSH are cost reduction and affordability (Fichter & Turner, 1972). By contributing to the construction, the users can also build new knowledge and gain new proficiencies that can be of use to create income. If executed and facilitated correctly OSHH also gives a possibility for a stronger and more inclusive community. (Rodríguez & Åstrand, 1996)

Highly critical towards this seconds generation of housing philosophy Rod Burgess argue that while OSHH can achieve the same quality of housing as conventional building alternatives a lot of the other benefits of self-help housing are usually cancelled out by the top down approach present in many of the national projects (Jenkins, et al., 2007). Burgess argues that the view of housing as a product in capitalist countries is problematic and claims that the housing problem is caused by the need for profit and capital accumulation for developers, lands owners and banks. (Arroyo, 2013) (Jenkins, et al., 2007)

By organizing spontaneous self-help housing such as the ones in slums into the logic of capital accumulation, it is possible to increase productivity by lowering the cost of labour and in this sense increasing capital. Burgess also claimed that this becomes a form of double exploitation where workers can be contracted through self-help whereby valorisation and gentrification of land by slum upgrading can eventually cause increased tenure and forced displacement. (Jenkins, et al., 2007)

Turner also point out the fact that limiting social mixing by providing certain types of buildings and housing for only specific groups causes problems with segregation and marginalisation that later will cause increased costs. (Turner, 1967). Besides this, Lizarralde adds that several large-scale projects, especially involving strategies such as sites-and-services, where usually the government deliver the most important services and then let the dwellers construct their own housing on an assigned lot.

did not manage to accomplish desired goals and the new developments sometimes resulted in what barely could be called more than government supported slums. (Lizarralde, 2014)



Figure 1 Site-and-service implemented in Cape Town, South Afrika. Recovered from (Lizarralde, 2014)

3 Argument, Critique or Discussion

According to Turner (Fichter & Turner, 1972) housing ought to be defined as a process of enabling individuals with the conditions to live lives they can value. Both more Organized Self-Help Housing – OSHH which is assisted and facilitated by the government or an NGO & Spontaneous Self-help Housing – SSHH such as slum dwellings, can in this sense be described as tools for the individual to take action and control in a housing sector that has failed to address their own needs.

This in my opinion is an important distinction to make. SHH is not just a tool to provide cheap shelter for the urban poor, temporarily displaced and squatters. Instead OSHH should be seen as a possible solution to the problems that a lot of people face in regard to a conservative and inflexible housing sector which is failing to meet their needs.

One example of a very appreciated housing project using OSHH is the St Hannibal Christian Community (SHaCC) in Pasay, Manilla which we were able to

visit during our field study in the Philippines.

The project in Pasig incorporates 2,180 poor families previously inhabiting dangerous sites near riversides. (Baybay, 2008) By using interlocking concrete hollow blocks (CHB)the dwellers could be involved not only in the design process but also contribute to the construction, thus lowering the cost for the project.

The project was assisted by the NGO TAO-Pilipinas, Inc, which assisted with technical expertise and aiding with including the dwellers through Participatory Community Planning and Development (PCPD), taking into account users desires and need through workshops and discussions. (TAO Pilipinas, u.d.) The organisation also assists in livelihood training and community based solid waste management (CBSWM).In SHaCC families were taught how to create new products from recyclable material to use or sell. (Baybay, 2008) (TAO Pilipinas, u.d.)



Figure 2 Public square in SHaCC.



Figure 3 Adequate space for tricycles.

Burgess states that the eradication of traditional construction materials and land use patterns associated with informal settlements, is common in self-help housing and evidence of the practice of integrating informal activities into the formal economy to the detriment of the poor. (Jenkins, et al., 2007) Interesting to note is the more irregular layout and the density of the built area in SHaCC which implies that the dwellers actual interests and needs was given form in the design process.



Figure 4. Layout of SHaCC with surrounding slum dwellings.
Recovered from (Google, 2020).

Even though the same housing problems as in developing countries are not present in many western countries the practice of the government of prioritising capital accumulation instead of the interest and need of its people is still an issue. I would argue that the way urban densification is often prioritised by the government instead of well needed public areas to create more productivity, is an example of the undemocratic practices in the housing industry that Turner (Fichter & Turner, 1972) and Burgess (Jenkins, et al., 2007) highlight.

One example of the need for more democratic design is in Dalston, one of the most highly dense areas in London. Because of the vital need for an urban green area and the local governments lack of response, the initiative Dalston East Curve Garden was launched as an effort between the local community and NGOs transforming an abandoned lot near the old railway system into a green oasis. (Dalston Eastern Curve Garden, 2020) (J & L Gibbons, 2020)



Figure 5. Dalston Eastern Curve Garden.



Figure 6. Café driven by volunteers.

Since these user-initiated responses and grassroot movements often use urban land that is being neglected, they often find themselves in a legal grey zone where it can be difficult to gain a permanent permit. This exemplify also how laws and regulations of housing markets often disregard the interest of the common people and in that sense there is a huge need to create a less rigid rule-work and provide a system which allows for the user's needs and desires to take form.

[I]t is pointless trying to decide whether Zenobia is to be classified among happy cities or among the unhappy. It makes no sense to divide cities into these two species, but rather into another two: those that through the years and the changes continue to give their form to desires, and those in which desires either erase the city or are erased by it. (Invisible Cities, Italo Calvino(p. 30)) (quoted in (Lizarralde, 2014))

I think SHH could be an answer to these desires and is a way for the user to appropriate and create personal, social and economic growth. As mentioned even though the costs of self-help housing are considerably lower than traditional building methods, the technical quality is also comparable or often even surpasses that of professionally built housing. (Fichter & Turner, 1972) (Rodríguez & Åstrand, 1996)

It is however also mentioned by Rodríguez & Åstrand (1996) that the technical quality of self-built housing is often questioned, assuming that previous statements are correct it might just be a matter of time for the perception of SHH to change. The existing notions around technical quality and in some ways the question of accountability is however something that could impact the market value of SHH and in that sense also the effect possibility of economic growth through sweat equity.

An example that I consider responds to this problem quite well, is the "half a house" concept by Alejandro Arravena. The project draws on the ideas of site-and-services and provides the absolute essentials eg. foundation, plumbing and electrical wiring as well as public services such as roads. The project, Villa Verde in Constitución, Chile, initially provides only the essentials, just big enough to meet the requirements for low income housing in the city. In addition, the house also features an outer shell, constructed by professionals, that covers double the area of the pre-built house.

This shell serves to make expansion and growth possible for the dwellers possible while still guaranteeing the structural integrity of the house, able to withstand catastrophes such as earthquakes, which are common in Chile. (99% Invisible, 2016)





Figure 7. Villa Verde in Constitución, Chile by Elemental Recovered from 99percentinvisible.org 2020

Arravena talks about the need for all social housing to serve as an investment, both economically and socially. In most projects this is a default since the market value of housing tends to increase over time; in contrast to this, rigid and inflexible social housing projects have often served only as an expense for dwellers as well as contractors (Castillo, et al., 2016).

Arravena, just as Turner, also states that individual action through self-built environments, is a necessary process to achieve affordable housing and shelter. Not only for the urban poor but also for the middle-class as prices for housing increase. Families will always try to achieve their desired standard of housing and will do so either thanks to the design or despite the design. (Castillo, et al., 2016)

The need for affordability, appropriate housing and growth are all important aspect of housing. Involving the user through participatory design and OSHH can solve these aspects. If the design can manage to provide and guarantee a structurally sound building as well as incorporate the user's needs and desires (through community participation and user involvement) an opportunity for both social and economic growth is possible. A foundation for communal growth would also ensure the neighbourhoods longevity so that an eventual mix between socio-economic groups can be achieved, so to not create new segregated and marginalised areas.

5 The Role of Architects

The collaboration between the dwellers and professionals is one of the most important aspects in the effort to provide housing "in which people can live lives they have reason to value" as Lizarralde (2014) would put it. The architects should strive through both understand the needs and desires of the dwellers and also aim to assist in the process of implementing these interests in the design and in the construction. Participatory Community Planning and Development in the form of OSHH is an important part of this and studying successful projects such as SHaCC can help in this effort.

The reason spontaneous self help housing also in unfeasible is that it cannot properly guarantee structural integrity and therefor the dwellers in informal settlements are usually at immediate risk from disasters. Professional assistance in SHH it therefor very necessary and something that would also ensure safety and growth for current dwellers as well as future inhabitants of the building.

Bibliography

99% Invisible, 2016. 99% Invisible. [Online]

Available at: https://99percentinvisible.org/episode/half-a-house/

projects in developing countries, Lund: Lund University.

Arroyo, I., 2013. Organized self-help housing as an enabling shelter & development strategy. Lessons from current practice, institutional approaches and

Åstrand, J. et al., 1994. Materaux thermiquement isolants. Beton. Lund: LCHS.

Baybay, B. F., 2008. *Environmental Management for Resettlement Sites*, Lund: Lund University.

Castillo, P. et al., 2016. I built my own social housing: the rise of Chile's 'half-houses'. [Online]

Available at: https://www.theguardian.com/cities/video/2016/jun/16/built-my-own-social-housing-chile-half-houses-video

[Accessed 28 04 2020].

Dalston Eastern Curve Garden, 2020. About The Garden. [Online]

Available at: http://dalstongarden.org/about-2/

Evans, M., 1980. *Housing, Climate and Comfort*. First ed. London: Architectural Press.

Fichter, R. & Turner, J. F. C., 1972. Freedom to Build: Dweller Control of the Housing Process. New York: MacMillan.

Google, 2020. [Online]

Available at:

https://www.google.se/maps/place/St.+Hannibal+Empowerment+Center/@14.534 8893,121.0067996,719m/data=!3m1!1e3!4m5!3m4!1s0x3397c962c1fed7fd:0x8f8 2ceb9307fcb0e!8m2!3d14.5339513!4d121.0080042

[Accessed 07 05 2020].

J & L Gibbons, 2020. Dalston Eastern Curve Garden. [Online]

Available at: https://jlg-london.com/project.cfm?id=12

Jenkins, P., Smith, H. & Wang, Y., 2007. *Planning and housing in the rapidly urbanising world. Planning and Housing in the Rapidly Urbanising World*, London: Routledge.

Jenkins, P., Smitt, H. & Wang, Y. P., 2007. *Planning and Housing in the Rapidly Urbanising World*. First Edition ed. London: Routledge.

Lizarralde, G., 2014. *The Invisible Houses: Rethinking and Designing Low-Cost Housing in Developing Countries.*. New York: Routeledge.

Perlman, E. J., 2003. Marginality: from myth to reality in the favelas of Rio de

Janeiro, 1969-2002. Manchester: Chronic Poverty Research Centre (CPRC).

Rodríguez, M. & Åstrand, J., 1996. Organized Small-scale Self-help Housing.

Building Issues, Vol 8, Lund: Lunds University.

TAO Pilipinas, n.d. [Online]

Available at: http://www.tao-pilipinas.org/programs/

[Accessed 07 05 2020].

The World Bank, 2020. The World Bank. [Online]

Available at: https://www.worldbank.org/en/about/history