Does an urban design laboratory process contribute to construction of assets that responds to social needs?

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Abstract

The last decade brought about significant changes to the social and political relationships in many developing countries. In Sub-Saharan Africa, there was a movement for multi-party democracy while in North African and Middle-Eastern countries, an "Arab" spring toppled governments. Parallels can be drawn between the emerging community social needs for a say in decision-making and the social movements that occurred in the western world in late 1960s.

This paper argues that the research and academic community should be at the forefront of place making process in response to newly emerging social needs of empowerment. It looks at the urban design laboratory process at Carnegie Mellon University in the USA and proposes that the methods and strategies could fit the newly found democratic spaces in Africa and the Middle East.

Keywords: Urban Design Laboratory, participatory process, empowerment, place-making, developing countries, social needs

1.1 Introduction

The social and political relationships within a community are constantly shifting, yet creates opportunities for redefining and developing new ones. This is more evident in countries in Sub-Saharan Africa and the North Africa and the Middle East where a wave of change swept through, as those in margins of society demanded a say in the decision-making processes over things that affected their lives. The field of architecture and urban design where policies enacted or ignored could have consequences on the everyday lives of the residents offer opportunities for the professionals to engage local communities as they address the social needs of shelter and the public realm among others.

This paper starts by reviewing literature on the social context that led to the uprising and links it to the issue of community assets. It then makes comments on the role of social policy in the construction of sustainable community and how the academic community could contribute to the process of building social capital. It then takes an example from the work of

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Urban Laboratory at Carnegie Mellon University to highlight the benefits of the participatory methods used there. The paper concludes with a discussion suggesting what the role of the methods used at the UL has on construction the social needs of a society.

The revolutions that occurred in the Middle East and parts of sub-Saharan Africa has been linked to a host of issues, Clark suggests they include the:

> "…lack of personal liberty due to the dictatorial regimes, rampart corruptions within those governments, economic disparities between the citizens, high youth unemployment, uncontrolled rise in the cost of essential commodities and lack of opportunities to participate in civil and political rights…" (2012, p.72).

These societal needs have an impact on the individual needs as can be seen from the reaction that erupted in Tunisia and eventually Egypt from a single event when Mohammed Bouzizi set himself on fire because of what he perceived as deprivation from the means of livelihood or economic survival (Martin, 2012).

His actions were an indicator of problems that had existed within the institutional structures of Tunisia and similar in other countries in the developing world, placed barriers to political decision making processes, the economic quest for independence and ability to provide for self and family. Martin (2012) argues that people in those countries could almost be forgiven for the fatalistic attitudes that existed for a long time preceding the events because only the needs of those close to the centers of power were met. The context is very similar to one that existed in the USA in 1950s and 1960s when decision on urban developments were made through an Urban Regime Coalition of influential business leaders based on their value judgment in disregard to the rest of the society. [Detailed discussions on Urban Regime Coalition can be found in Hunter, F. (1953). *Community power structure: A study of decision makers*, and Crowley, G., J. (2005) *The Politics of Place: Contentious Urban Redevelopment in Pittsburgh*.]

However, looking at the events of the Arab Spring, three distinct ingredients seem common; firstly, the existence of good communication channels used by the young savvy technophiles in social media such as Facebook and twitter to express opinions and as a platform for peer feedback. Secondly, there was societal network that had grown over time allowing for the building of trust. Castells argues that the new media created an emerging social need of freedom for the community, it was the "…social space where power lay and it empowered those on the fringe of the political locus to intervene more decisively on matters of social needs…" (2007, p.238). The use of social network enabled the mobilization of the masses to occur because the messages calling for the manifestation could be sent quickly and securely outside the authoritarian regime's control. There were several attempts by the governments to shut the Internet networks down, or jam wireless communications to no avail, [For detailed discussions on participation see Sanoff (2000) *Community Participation Methods in Design and Planning,* Alinsky, S. (1971) *Rules for Radicals: A Practical Primer for Realistic Radicals*].

Thirdly; the uprising was led bottom up at the grass roots level with no particular leadership structure, an essential component of its success allowing all to feel accountable for the all the communal decisions. Fourthly; the high percentage of unemployed urban youth [15-24 year olds] who were fairly well educated and were adept at using technology were able to "…spread the message of non-violent change…" as pointed out by Elman (2012, p.1). These tactics parallel those used during the Civil Rights Movement of the 1950s and 1960s in the USA. Elman subtly points out that the success of the uprising very much depended on the benevolence of non-partisan armed forces and where there was failure, the partisan forces were used for brutal reprisals, for example in Bahrain, and initially in Tunisia, Egypt and Yemen.

1.2 Community and Society Assets

The paper will now look at definitions of society and what are the assets used to meet those social needs. The ideal state of any society is utopian, where all human needs are met allowing for "…people to work and live together closely and cooperatively using a self-created and self-chosen social order…" (Kanter, p.1). It suggests the promotion of a way of life or vision of community where things are shared in a way that there is equitable benefits accrued by all.

Before interrogating the meaning of community engagement, it is important to frame how the term is understood within the paper. The definition of community is nebulous, and equally raises questions on who can and should participate in the process of constructing or transforming the environment. This is not new because there has always been a struggle between two views espoused by those who support individual rights versus those who support the collective rights. According to McMillan and Chavis (1986) there are five factors that influenced the sense of community scale:

> "…informal interaction (with neighbours), safety (having a good place to live), pro-urbanism (privacy, anonymity), neighboring preferences (preference for frequent neighbour interaction), and localism (opinions and a desire to participate in neighbourhood affairs)…." (1986, p.6).

The above factors were found to influence the desire to participate in affairs of the place, the willingness to assert the right to the city and the use of a new consciousness to question how things run. Ahlbrant and Cunningham (1979) carried out a study, which found out that people who are most satisfied with their locality were likely to contribute to its social structure. Therefore, a shared vision of a place, sense of place resulted in communities with active social structures, one willing to construct their assets so as to meet their social needs.

A community can therefore be defined using the geographical and territorial aspects, and the quality of human relationships irrespective of the location Gusfield (1975). McMillan and Chavis (1986) building on the above saw the community to have explicit and identifiable characteristics, that included the sense of belonging, influence in the sense of having a voice

to make a difference, integration, which relates to the first and finally shared emotional connection.

Heller (1989) saw the community as place, as relationships and as collective political power whose members strove to improve the quality of life within through voluntary participation. Fundamental to the ability to participate is the level of empowerment that the members have access to, giving them the sense of community, sense of place which in return contributes to the developments that would meet the society's social needs. Chavis and Wandersman (1990) reviewed how the sense of community was a catalyst for participation and concluded that there was a relationship between the individual's belief and their actions and outcomes from them. Other scholars pointed to the fact that the community members are able to take control of over their lives and are involved in democratic participation (Zimmerman and Rappaport, 1988). Therefore, the term community is used in this paper to mean a group of people that identify with the territory or geographical location and have claimed the rights to make perceptible influence to its management and are emotionally tied to the location through the various activities and relations.

1.3 Social Needs

The term social needs will now be defined and distinguished from human wants. The use of term human needs is fraught with ambiguities; it is subjective and has ethical value judgment connoted; in addition it is context dependent in that it is determined by norms or standards as pointed out by Doyal and Gough (1984). They further argued that the individual's and societal needs are closely tied, for instance the need for survival has through history led to the quest for human liberation, freedom from oppression, desire to be heard. While at the societal level, the individual need for survival is manifested through production, reproduction, political authority and communications that occur and which in turn form the framework through which human liberation occurs. Their work postulated that the success of human liberation requires an empowered citizenry, who are educated to be able to participate in the debates that would curtail the vested interests to allow for growth of the collective well being or sense of belonging.

Literature review reveals that the social needs of a society have been examined through the theory of social production functions, (Lindenberg, 1996, 2001; Ormel, 2002; Ormel, Lindenberg, Steverink, & Verbrugge, 1999) and is concern with the needs, goals and resources. The needs can be satisfied in various ways through the setting of goals and distribution or allocation of resources to them as argued by Steverink and Lindenberg (2006).

All communities have inherent assets that are the resources for meeting the social needs and include the people (local residents), emerging leaders, local institutions, informal community and neighborhood organizations, and existing community leaders who are committed to building a more vibrant community as pointed out by Beaulieu (2002). Therefore mapping of assets is important because evidence has shown that significant community development occurs when "…when the local residents are committed to investing themselves and their resources to the efforts…" McKnight and Kretzmann (1996, p.2). It is

therefore essential for capacity building to take place to bring all this assets into use, which raises a question of what is capacity building and how can this be achieved?

1.4 Methodology

The work presented here is from literature review on the uprising in North African and Middle-Eastern countries and has been correlated to content analysis of UL process of one project, Charm Bracelet carried out by the students at the School of Architecture at Carnegie Mellon University. Content analysis methodology involves the systematic reading of texts, images, and symbolic matters to give an intuitive, interpretive and systematic examination of the data (Rosengren, 1981). It allows for data even minute ones to be looked at closely using explicit rules that are applied equally to all units.

1.5 Urban Laboratory

The urban laboratory, (UL) is an institution that uses an alternative approach to the education and practice of architecture and urban design and rooted in larger social values that demands a proactive practitioner and is based on social architecture, (Onyango, 2011). It is typically housed in an activist university, one that is proactive in engaging the community and uses the city as the field of study thereby building the assets targeted at social needs. The UL, acknowledges that growth in knowledge comes from interested parties sharing various perspectives while also changing the internal representations as they respond to feedback from others.

1.5.1 Urban Laboratory at Carnegie Mellon University

David Lewis founded the Urban Laboratory at Carnegie Mellon University in 1963 and was the first urban design or architecture programmes that engaged communities in the design process. Lewis (2007) pointed out that the founding corresponded with the activities of Civil Rights Movement, one that empowered communities. Fundamental to the founding of the Urban Laboratory was; firstly, of a process that acknowledged that the *power of decision-making lies with the citizens* and is therefore a participative methodology is required. Secondly, it accepts that *not all citizens have the knowledge and skills that would give them the full capability to make that decision* and as such the methods must be underpinned by ethical values. Therefore, it calls for designers to take a moral stand by building the capacities of the community enabling them to fully participate in the design decisions that affected them. The next section will take one example of the studio project to examine how the UL process contributed to the construction of community assets and how it met social needs.

1.5.2 Charm Bracelet Project

It was located on the Northside of Pittsburgh and was a collaborative project in partnership with Pittsburgh Northside Community, Pittsburgh Children's Museum and the Urban Laboratory at CMU (Figure 1). The National Endowment for the Arts funded the project and in addition they received a Heinz Endowment grant for an International Idea Design

competition. The Charm Bracelet project was a catalyst aimed at "creating linkages among the varied cultural, educational and entertainment destinations spread across the Northside..." (Hutzell and Rico-Gutierrez; 2007, p.6).
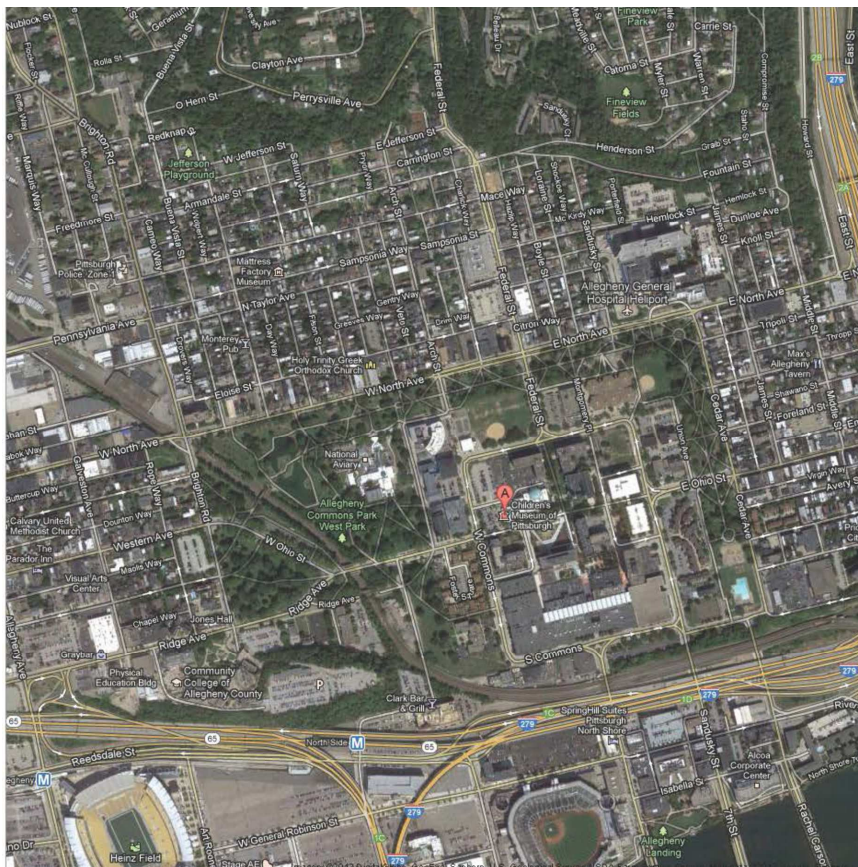

Figure 1: Location of Pittsburgh Children's Museum and Northside Community (Google, 2012)

The content analysis of the urban laboratory report revealed that emphasis was placed on addressing the pressing social needs of economic conditions (high poverty levels), social rights and political opportunities in participating in policy decisions that affected them. This perhaps relates to the booming economic conditions that existed in the mid 2000s and the economic disparities that were apparent between the residents of the Northside communities and even the destinations or charms (Children's Museum).

The baseline survey work was carried out by the students and was shared with the international design teams that had been invited to participate in a competition that they also participated in. The local community were engaged earlier in the process to identify and define the problem that the community faced, and to assess their existing assets. Hence, their participation brought the buy in factor into play, it gave the community the power to decide on what they considered as important assets (or charms) and how these were to be reorganized to address their pressing social needs of social integration, economic opportunities, safety at the park and others.

The four teams that participated were: Suisman Urban Design (collaboration between office from Santa Monica, California and Pittsburgh; Colab Architecture (collaboration between teams from New York and Pittsburgh); Muf Architecture/ art and Objectif (teams from London and San Francisco) and Pentagram from New York.

The first community meeting was used to "check and confirm" whether the designers got it right! David Lewis concurred when he pointed out that:

> "…conflicts over community design issues between the advocacy groups and the bureaucratic officials and technical specialists are caused by their different viewpoints…" (1979, p.28)

The perspective from which the scenario is viewed determined it's understanding as such one could argue that the citizens perhaps have a better view and understanding of their social needs, have greater clarity of the issues than the experts from outside and should ideally be party to any process that attempts to construct the community assets. This has necessitated a need for a different approach to designing communities, cities, and neighbourhoods, based on the local societal contexts, by collaborating with, and allowing the participation of, the local community.

The project was carried out using the collaborative model not only between the stakeholders and the students, but also with the students co-designing alongside the multi-disciplinary professional teams from both the US and abroad. This simulated real life project scenarios and enriched the learning experience of all the participants (community, students and the design professionals). The laboratory used a mixture of methods to address the issues, beginning with a top-down approach where community leaders and professionals led in identifying the key issues. This was followed by a bottoms-up approach involving the community in not only framing the questions and clarifying them but also in the use of the *charrete* process to work out the possible solutions.

There was great emphasis on community participation either directly or at some stage through the delegated power of the community leaders during the various forums. The engagement, that began at the outset of the process and continued through to the last community meeting where the final framework and detailed proposals were presented and celebrated. The tactics/ strategies used in the process of constructing community assets is therefore important.

The students used x-rays techniques to show the community before and after the intervention proposals, the 3D models and drawings; all showed understanding of the contextual issues, respect for typology and innovation through the use of light as the theme to connect the charms. The use of lighting as a feature has surely proven to be an innovative solution drawing communities out in the evening to use the new assets of public places created and has spurred other activities that met social needs of economic activities (food stalls, vendors, public realm etc.) along the routes. It has been catalytic indeed judging by the continued investments in the area and its growth with the Children's Museum continues

to invite the community to participate in annual projects to improve its vision and outlook based on adverts in 2011:

> **Urban Garden Art + Design Project**
> The Children's Museum of Pittsburgh and Team Laminates Co. (TLC) invite architects, artists, gardeners and designers to propose artistic / design solutions for a new community garden at the corner of Vinial Street and Spring Garden Avenue on the Northside. (2011, Children's Museum of Pittsburgh)

The consequence of the project is a shared community vision that has developed legs and grown into the community events lasting years since the Children's Museum got a new building as a part of the process. The reviews in Post-Gazette, Pittsburgh Courier, MetropolisMags has been positive. For instance:

> "Most design competitions pit one group against another to generate the best design for eventual construction. Here, however, Children's Museum Assistant Director Chris Siefert worked with architect Paul Rosenblatt, of Springboard Design, to select and work with teams whose variety of skills and perspectives would enrich the project in a more collective fashion." (Pittsburgh City Paper; February 22, 2007).

> "Siefert cites light installations, projects for an underpass, and museum/school partnerships as noteworthy proposals. "There are things that stand out--a strong idea for a public art program which would look at specific sites and curate events and installations over time," says Siefert. "One exciting idea is an annual treasure hunt across the whole district."

> (PopCity Media)

Figure 2: Charm Bracelet Project-2007 Urban Laboratory (Hutzell and Rico-Gutierrez, 2007)

2. Conclusion

The proposals in this UL were very innovative perhaps as a result of the higher degree of community involvement and also from the fact that the problems were jointly framed and therefore represented their vision (**figure 2**). This is perhaps due to the fact that for the first time there was a real project on board, and four professional teams were invited and the students had opportunity to not only provide the baseline data but to participate alongside them. The project has not only connected the community charms, but by strategic placing of the active functions and activities there has been increased surveillance, new places created, enhanced cohesion and businesses started along the paths connecting them

This would have been difficult to achieve without an empowered community efforts in collaboration with the Children's Museum, donor agencies (Heinz Foundation and the National Foundation for the Arts), and the university. It enabled firstly, the identification of community assets and needs, secondly defining what the pressing problems are, thirdly, deciding on what assets were to be funded. The process no doubt requires a lot of work and effort, creative solutions and the academic institutions have a lot to offer in the form of a large body of enthusiastic students and faculty eager and willing to take risks as the look for innovative solutions. This is an assets that is freely available to the community especially if one considers that in most cases the student body do not normally come from the local community where most pressing social needs are.
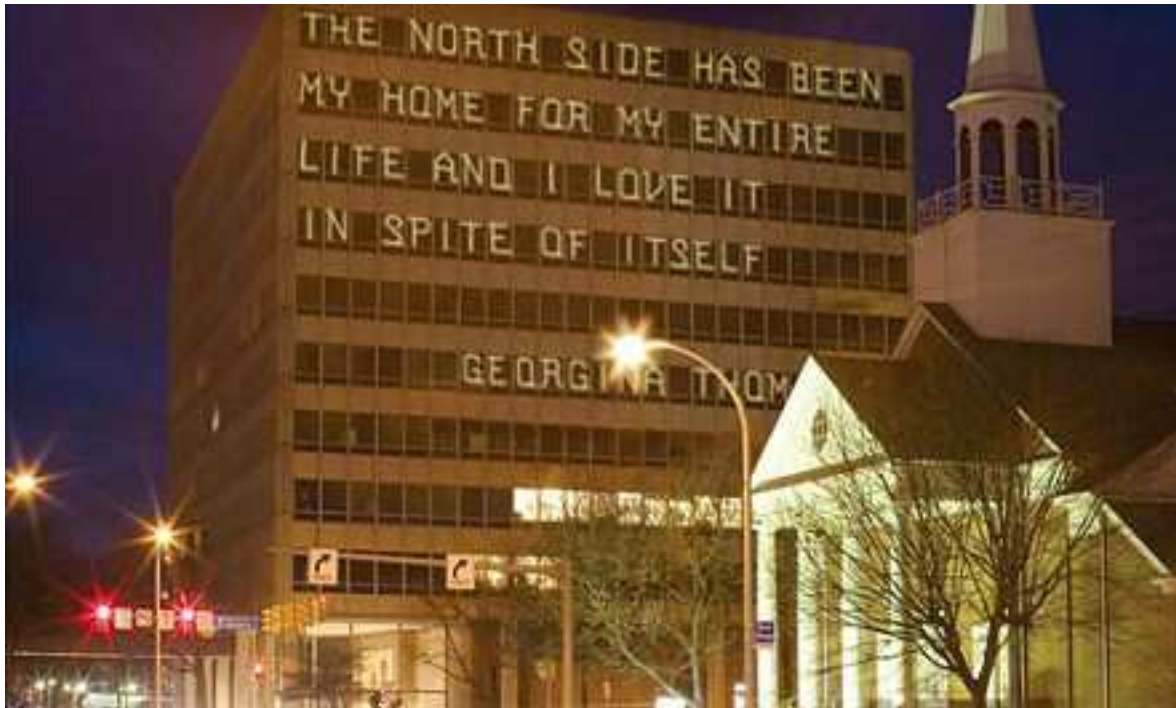
- ***Figure 3: Notes from above ground: Brett Yasko proposes displaying text messages in North Side window grids. Image courtesy of Brett Yasko.***

The choice of using a participatory methodology created a forum where the annual projects continually empower the community in identifying those tacit assets that exist and that can be used to address the pressing social needs over a period of time. It helped the community to see what could be possible, their future vision, the ability to engage not only design professionals working for clients in the area but also to stand up to the decision / policy makers if none of the local issues were targeted and addressed objectively.

The UL as a design program created opportunities for the school of architecture to collaborate with other allied schools within the university such as public health, public policy, business, law, real estate, finance among others to address societal needs. The emphasis in the process are multi-disciplinary, trans-disciplinary, collaborative, participation, capacity building, all arranged in a way that the community was at the center. It is only through such a process that the constructions of assets that address the societal needs are met. The countries in Sub-Saharan Africa, North Africa and Middle East will continue to grow rapidly in many areas and perhaps there is an emerging opportunities for partnerships between universities there and those in the western world.

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