

Critical engagement in informal settlements: lessons from the South African experience

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Abstract

This paper aims to present an approach to design thinking and teaching that takes the students and lecturers of design disciplines outside of the studio and university campus into contexts of deep complexity – informal settlements.

Conventional methods of architectural practice are deemed to be of limited use or value in informal contexts. These informally- and incrementally- developed contexts appear chaotic and of little architectural value at first glance but, when examined closer, intricate systems of decision-making and negotiation are revealed. The quality of spatial articulation that emerges could not have been achieved through formal planning and design processes. The informal process results in a distinctive spatial quality as well as complex and varied forms of ownership and habitation models.

The resultant fluidity and dynamism of these contexts offers critical lessons in design and the interaction between the different decision-makers/agents intervening at various levels of the built environment at any given time. As students and lectures engage with these contexts, employing tools such as structured mapping exercises, a better understanding can be achieved, as well as more appropriate design-decision making strategies for future interventions. By understanding the existing energies, activities and quality of routes, nodes and thresholds within these contexts, architects are better equipped to propose context-sensitive and sustainable solutions.

The intention is to better prepare students to engage in non-conventional professional practice – while the lecturers, and the institution to which they belong, are able to make meaningful contributions to a broader debate regarding the role of the profession and the professional in contexts of informality.

Through this process, it is also possible to provide much-needed services to identified vulnerable communities. However, the significance of the approach goes beyond that and involves the up-skilling of residents, the gathering of crucial data about the context, acquiring critical first-hand experience of the selected settlements; it also offers lessons on action research and knowledge on sustainable and socially-relevant technical solutions. The latter is achieved by identifying possible catalyst interventions, enabling the testing of development concepts through active build projects.

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1. Introduction

The current state of housing and human settlements in South Africa is of serious concern – the inequitable spatial economy of South African cities is far from being transformed into more integrated, inclusive and sustainable communities. The role of built environment professionals and their institutions in contributing to the country's spatial transformation is being called into question; the relevance of conventional practice and professional approaches is a topic for consideration – which also raises questions with regards to the relevance of education in schools of the built environment and architectural departments. (Eicker et al 2012; 11)

Hollis (2009) explains that the treatise of architecture “is a discourse on perfection, a word which derives from the Latin for ‘finished’...”. However, this is far from the reality of how the built environment has been conceived and constructed or how buildings have been inhabited and used during their lifetime. This has rendered institutional architecture of very limited influence in terms of the impact it has made on the lives of the majority of populations – especially in developing contexts. Dewar and Louw (2012; 54) explain how South African human settlements are performing poorly in terms of various variables that have negative consequences socially, environmentally and economically. They proceed to assess practice in the built environment disciplines and how the importance of spatial concerns, among others, and the lack of real inter-disciplinary investigation is hampering transformation (ibid; 55-57).

The role of architects, as traditionally understood, implies a service delivered based on a typical client/user relationship, which usually involves the design and delivery of a building through conventional methods, processes, financing and in line with current practice in the construction industry. However, these conventional approaches of architectural practice are being challenged, most critically in the context of South Africa's post-Apartheid re-development.

Current architectural practice has very limited reach, especially for people that inhabit informal settlements and large government subsidised residential projects. Due to the limitations of conventional education and modes of practice, as defined by the built environment's professional institutions, design professionals find themselves challenged when needing to engage in delivering a service to wider population groups outside of conventional and formal cities.

Currently 13.9% of South African households live in ‘informal settlements’ (SA Census, 2011). Architects often do not have the relevant understanding of contexts, technical know-how, the decision making strategies or the socio-cultural skills for engagement in informal areas. This observation is corroborated by Stephen Topham, National Upgrade Support Programme (NUSP), operating at national government level, who notes that current design professionals in South Africa have limited, to no experience in this field (Topham, 2009).

This reality demands that South African educational institutions develop teaching and learning strategies to equip design professionals with the skills needed to operate efficiently in contexts of informality. To facilitate such a shift in tertiary education, and ultimately to change professional practice, structured programmes need to be initiated early in undergraduate level and carried through into post-graduate programmes. These programmes should be formally recognised by local and national professional institutions and councils (Murray et al, 2007;44)

Alternative methods of architectural practice need not be limited to the informal sector. Alternative practice needs to be applied to all levels of human habitation; yet it is most needed in marginalised areas and communities.

2. The relationship between universities, proximate communities and professional bodies

Professional practice needs to be directed towards South Africa's most marginalised communities – contexts that pose great difficulties and challenges, yet also demonstrate immense potential; the latent energy found in informal settlements could be re-directed towards transforming these contexts into viable and unique neighbourhoods (Simone, 2004; 409). The duality between disaster and opportunity presents itself in the potential to self-organise and self-govern, as well as in the social capital inherent in the majority of informal settlements.

Informally-developed contexts can offer lessons in the built environment that might have been overlooked. While appearing to have little architectural value, intricate systems of decision-making and negotiation are at play, resulting in distinctive spatial qualities and complex and varied forms of ownership and habitation – judging by the sterile environments created through formal mechanisms and processes, where there is little participation and involvement of users and stakeholders, these lessons from incrementally-developed contexts need acknowledgement and perhaps they need to guide new thinking, professional practice and delivery mechanisms in the built environment in general, and in residential contexts specifically. Informal settlements may offer critical lessons in adaptive re-use, mixed use, intricate thresholds between public and private space, shared communal areas and pedestrian-scale developments.

Currently South African architectural professionals have had limited involvement in these processes and debates, while professional institutes are far from embarking on a structured and studied process of preparing their membership in terms of training or, at the very least, by offering some form of acknowledgement, recognition and professional validation for architects that operate in contexts of informality. Architects will generally gravitate towards work opportunities and the National Upgrade Support Programme (NUSP) is overseeing a massive upgrading initiative which intends to improve the lives of 400 000 households by 2014 (Topham, 2009). This is part of the government's outcome-based approach to delivery. It is unusual that professional bodies would not see this as an opportunity for jobs, and an incredible opportunity to contribute to the spatial transformation of South African settlements. If this is to be achieved, then the complexities of working on informal settlement upgrade

projects and the impact this has on conventional architectural practice, professional fee scales and addressing ethical dilemmas need to be well articulated, resolved and explored in depth.

Universities could play a significant role in the above investigations; long-term collaboration between universities and proximate communities could allow the study of alternative development approaches in a process that could be mutually beneficial. Such a relationship would allow the architectural studio to move beyond the confines of the university campus as the university develops stronger connections with the city and communities within the city. The city thus becomes the training ground, the laboratory where partnerships and networks are built, and where technical solutions are tested. This process could contribute towards the development of more enlightened approaches to professionalism – challenging elitist, expert-driven approaches and acknowledging and respecting local ways of doing. Development practice could therefore be improved through the access to, and the application of, the wealth of knowledge being generated at universities (Osman, 2007).

Working in informal contexts requires a very different set of skills than what is currently offered at South African Universities, including both technical understanding as well as dealing with complex socio-political dynamics. Universities could become the lead agents in this process – facilitating communication between professional bodies, community leaders and agencies that operate in the field. They could also initiate the investigation of neglected ethics issues and help develop professional guidelines for architectural practice in contexts of informality.

3. Engaging with informality – an “open” way of thinking and practice

One complex issue is deciding where, how and when to intervene in contexts that sometimes have no clear “core”, no clear spatial hierarchies or logic to the routes and access points. “While permanent and fixed components of the environment are crucial in achieving structure, robustness and identity, the adaptable, changeable and transitory is just as crucial in achieving more complex decision-making process and democratic environments. The balance/interface between the planned and unplanned needs a degree of disentanglement of physical and administrative systems at various levels of the environment, where change in one system does not disrupt the others.” (Osman, 2007).

The application of this “open way” of intervening in the built environment – which makes reference to Habraken (1998) and Kendall (2003) and other documents by various authors – needs to be studied in terms of Informal Settlement Upgrading. Open Building thinking “... is believed to be very relevant to addressing accessibility and affordability issues in South Africa as well as ensuring more participation and acceptance from the various role players...” (Osman, 2007). This way of thinking might lead to very diverse interpretations of “upgrading” and might entail the upgrading of shack building industries rather than the upgrading of shack dwellings or settlements.

The need for viewing the built environment at different levels, requiring careful management of the relationships between the agents that operate at those levels, as well as the need to “disentangle” those levels to allow for a degree of permanence without restricting the necessity for constant transformation becomes apparent.

This approach allows for the integration of informal settlement upgrades and the provision of low cost housing within strategies that address the development of complete housing eco-systems rather than isolating housing for the poor. It also allows for the development of housing models that make “business sense” by allowing for the involvement of small-scale construction industries in the delivery of the “lower level” of the built environment (the infill or fit out levels) while the large and more experienced companies deliver the base buildings, that is the more permanent component of the built environment. The idea here is to allow for constant transformation and innovations at the lower level of the environment – with more players being involved in decision-making at those levels – while ensuring the delivery of high quality and efficient base buildings and neighbourhoods.

4. Principles of Participatory Action Research (PAR) and catalyst interventions

In engaging with contexts of informality, an adaptive strategy allows for a gradual decision-making process where the way forward is based on the latest available information while also allowing for a degree of flexibility as new partnerships are established and a more accurate understanding for the dynamics of the study area is being achieved: “Start where the system is. Have empathy with the system and the people in it, particularly as it will not like being ‘diagnosed’.” (Coghlan & Brannick, 2005)

Strict pre-planning is difficult – this adds to the complexity of the process and professional engagement as fluid processes need to be reconciled with, sometimes, ridged administrative settings and funding mechanisms – this applies to both university settings as well as the various agencies that a professional architect would need to deal with in an informal settlement upgrade project. There is a need to train architects in “... developing methods of architecture-as-research, leading towards non formulaic, non-western-centric hyper adaptable manifestations of ‘cityness’” (Opper, 2012;16)

Participatory Action Research (PAR) is a widely used method. It attempts to render development assistance more responsive to the needs and opinions of local people, as alternative approach to development projects usually implemented through a technocratic process. The researcher is viewed as a change agent, who is required to be independent of macro-social organizations. In this process, research is transformed into interactive communal enterprise.

PAR is cyclical and reflective: the communication of results implies, not only communication to an academic audience, but also returning the knowledge to the participants. It is hoped that this approach will produce more socially meaningful research results and that it would democratize the research relationship (Babbie & Mouton, 1998).

When student groups are sent out into the study area, they are first required to undertake an observation and mapping exercise in order to intimately understand the context and the unique characteristics of the area. Potential partners are also identified through a sampling technique where leads, obtained during interactions with the community, are followed (Cohen, Manion & Morrison, 2000).

Participatory approaches in design can only be explored through real-life projects. This approach has, in the past, and may still, ultimately lead to questioning the very definition of architecture. Through explorative, action research it is hoped that the skills needed for operating in a changing professional environment can be achieved.

The idea of catalysts has been identified as being key in this process – the implemented projects are significant mostly in terms of process rather than simply a product or service to a particular community (Osman, 2007). The idea of catalysts was inspired by various writings – but mostly refers to concepts of “small change” in the book by the same name by Hamdi (2004). “... Teaching methods are enhanced and made more relevant, meaningful partnerships and networks are established and people are being educated and empowered through participation, skills-sharing and cultural and technological transfer. It needs to be recognised that this is a 2-way process and implies the creation of a mutual learning ground: from students/researchers/lecturers to local workers (skilled and unskilled), local entrepreneurs and the general community and vice versa.” (Osman, 2007)

Identifying where interventions could take place, what kind of intervention and anticipating the kind of influence it would have on the surroundings is critical – the aim being to put in place an architectural/spatial intervention which will generate a catalytic response, thus allowing more agents to become involved in the formulation of their immediate built environment.

This approach is not unprecedented, having a long rooted tradition in design schools most notably seen in Samuel Mockbee’s Rural Studio; “...of architecture that embraces not only practical architectural education and social welfare but also the use of salvaged, recycled, and curious materials and an aesthetics of place.” (Openheimer Dean, 2012). These types of studios have become quite popular with other international examples include the Global Studio Projects, Oxford Brooke’s Live Projects and Project H’s Studio H 8. These groups exercise socially-motivated design principles through active projects that not only educate the students, but aim to give support the communities they are actively involved with (Delpont Voulgarelis, 2012).

South Africa has seen its own interpretation of this socio-technical design approach in the University of Pretoria’s Housing and Urban Environments research field (HUE), which translates into learning modules at honours level, the University of Johannesburg and 26’10 South Architect’s Informal Studio, the University of Cape Town’s Hout Bay Washstands and the Cape Peninsula University of Technology’s St Michaels’s projects, to name a few. These are local universities engaging with communities through accredited studio projects and maintaining on-going engagement between stakeholders.

These initiatives sit in contrast to some European-based studios operating in African contexts who, in some cases, have been criticized for not establishing sustainable relationships with their design/build projects and the communities involved – perhaps raising some questions about the approach and results. Some of these concerns could be resolved by establishing better partnerships between local institutions and/or local Non-Governmental Organisations (NGOs).

Despite these potential shortcomings, small design/build projects are however very significant as vehicles for collaboration, development and learning – process and partnerships for ensuring their success however still need intensive investigation. It is also important to note that not all catalyst interventions need to be spatial in character – however, the ultimate impact and potential spatial responses need to be carefully considered.

5. Proposed processes of engagement

A structured process of engagement is crucial in order to manage expectations of all stakeholders involved as well as to remain true to the nature of the design problem – expectation-management being the key aspect for ethical engagement in vulnerable communities. Stakeholders need to clearly capture and share the purpose and extent of the exercise during the initial process, as well as practising ethical due diligence throughout the project duration. Ideally the project team should aim to “give something back” to the community in question (refer to Figure 1); this is preferably not in the form of monetary donation, but could take the form of useful data gathered or documentation to assist in future development.

The ideal first step in this process would be to strategize the framework of engagement; this would be done by first establishing a working relationship with niche social development groups or NGOs already involved with the context and through carefully considered discussions with parties involved in an open and clear manner – this is crucial in avoiding the creation of false or misleading expectations.

Once this framework has been established, the nature of the outcomes should be clearly understood and considered when determining the types of exercises to employ during the investigation period. This could begin with simple site visits, using guided walks with local members of the community as a brief introduction to the context.

These initial visits should not be too prescriptive and should rather be used as a foundation towards achieving a working relationship between the research team and the other stakeholders. Once these relationships are defined, more complex workshop exercises could then be employed such as land-use mapping, spatial analysis and other objective data collection processes; these can also become useful tools in further establishing trust and articulating the expectations of all involved.

This process is time-consuming – there are no shortcuts. However, these seemingly mundane exercises are crucial to build a solid working relationship amongst stakeholders. The benefits of the process are rewarding in that the time an architectural department

invests in building these long-term partnerships with proximate communities allows them to have access to living laboratories to explore alternative ideas on professionalism and practice and offers the in the architectural departments contexts where they may intervene over a number of years.

Understanding the complex layers of the context allows students/professional to propose sensitive interventions – these may be architectural and spatial in character, but they may also involve solutions that demand investigations across other disciplines and lead to interdisciplinary collaborations. This means that architectural departments would need to establish agreements and collaborations, not just with proximate disadvantaged communities, but also across faculties and departments within the university to ensure maximum efficiency and relevance in the training that they deliver to students as well as the service they offer partner communities.

The outcomes of these processes need not always be in the form of buildings or tangible products, but can also be produced as data which is presented as easily-accessible documents, web interfaces or other media devices which are of critical importance to stakeholder groups in terms of improving their negotiating power. An ideal process of engagement demands that possible interventions should be explained and work-shopped amongst stakeholder groups and ultimately shared with the broader local and professional community.

6. Participatory Action Research project examples

6.1 Slovo Park 2010/2012

The Slovo Park Project began as a small research initiative in the University of Pretoria's Housing and Urban Environments module of the architectural honours year. The process unexpectedly culminated in a joint built project with not only a physical product, but many other intangible outcomes that extended beyond simply another 'community project'.

The student group of Bennett, Casson, Fillipe, Hattingh and Makgabutlane started the project by undertaking research to better understand the socio-economic context and day-to-day life in Slovo Park. From this engagement process, a larger urban framework was proposed that sought to link Slovo Park to its neighbouring community; the students intended to contribute to the development of the neighbourhood while maintaining the existing sense of community that was identified during the research phase.



Figure 2: Slovo building strategies (Bennett 2012)

After this phase, the students were required to present individual theoretical projects on how Slovo Park should develop; these projects were also presented to the community during their meeting with government officials on-site.

The responses from the students showed great variation with some designing a processional route from the settlement to the adjacent cemetery, incorporating the myriad of African cultures and their relationship to death and others focussing on housing by the provision of 'housing clinics'. The projects were an attempt to capture the humble manner in which the inhabitants of informal settlements exercise their power in build their own houses yet also allowing residents to benefit from much-needed technical know-how.

When the students were offered an opportunity to work with the community to design and build an actual building, the initial designs proposed were far too large and costly to build in the allocated 8 week duration of the project. The student group decided that they would combine the principles from each project into the design of a social facility within a civic space – the Slovo Hall. This hall and civic area would provide the people of Slovo Park with a place to meet and strategize with regards to the future plans for Slovo Park. An existing dilapidated structure that housed the 1994 election station was chosen as the site for intervention – it was believed that this was where the first change in the area began and it therefore had historical significance.

The Slovo Hall was specifically designed with a larger future vision in mind and phased into five early Construction Phases and five larger Future Development Phases. This scheme was then taken to the community for further design assistance and workshopped amongst residents of Slovo.

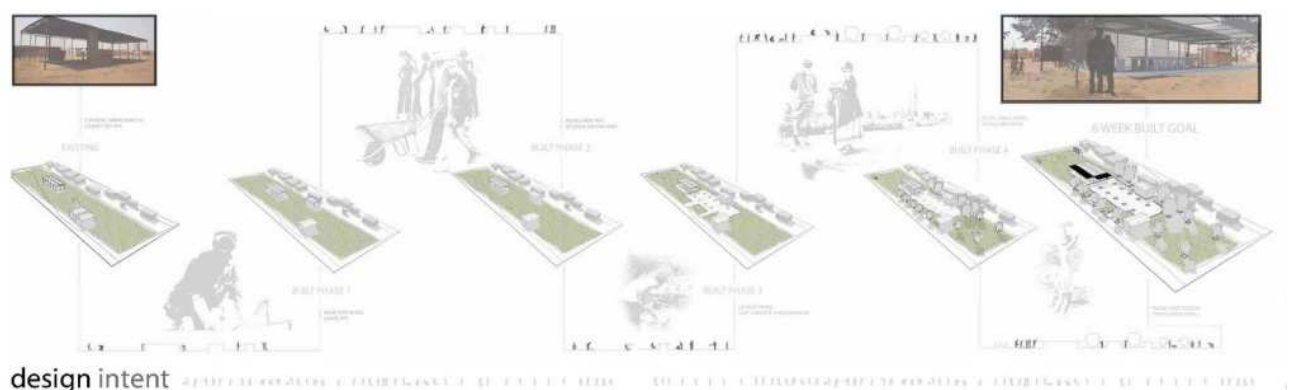


Figure 3: Slovo Building Strategy (Bennett 2012)

Building commenced in September 2010 with overwhelming support from the people of Slovo Park and local businesses. Each day varied from the previous – quick decisions had to be made as partnerships evolved, new patterns were identified and additional sponsors came on board. As more people joined the workforce and became involved in some or other way, the project dynamics were in constant transformation. The project was completed on

the 20th of November 2010 and opened with an exuberant day of celebration and deliberation when locals met and discussed the future of Slovo Park in their new hall.



Figure 4: Slovo Build Group 2010/2012; (Bennett 2011/2012)

The Slovo Park project introduced an alternative brief for architectural students, not only in the possible outcomes for the process, but also for the types of interventions that could be realistically implemented in short periods of time and with limited resources. The students involved were strongly influenced by the lessons learnt through this process. This became apparent in their dissertations in the following year, when several students challenged the current limited role played by the architecture profession.

This programme is still ongoing at the University of Pretoria where ex-students are directing new student groups in similar processes by building upon the relationships established from the initial process in 2010. This programme has laid the foundation for the establishment of a non-profit organisation, 1:1 – Agency of Engagement, which aims to facilitate processes which bring design professionals into the realm of informal settlements, partnering with communities and in developing viable intervention strategies.

6.2 Marlboro South 2012

The new master's programme at the architecture department at the Faculty of Arts, Design and Architecture (FADA), University of Johannesburg has been developed with an aim to achieve a reciprocal relationship of learning and exchange between the two domains of the design studio and the "field" (Oppen, 2012). Over the last two years, the programme coordinators have collaborated with selected professionals and various agencies engaging in informal settlements to develop innovative student briefs that broaden the definitions of architecture and architectural engagement – the Informal Studio.

One of the agencies that were identified for collaboration was the South African Shack Dwellers International Alliance (SASDIA) which operates as a collective of Non-Governmental Organisations (NGOs) and Community Based Organisations (CBOs) that support marginalised, often informally-settled, communities. The agency supports the development needs of these community groups through a network of settlements known as the Informal Settlement Network (ISN) and a woman's based saving scheme known as the Federation of the Urban Poor (FEDUP).

One of these community groups within the ISN, known as the Marlboro Warehouse Crisis Committee, represents the occupants of abandoned warehouse structures in the industrial belt that straddles the former township of Alexandra, known as Marlboro South. These residents are mobilised around issues of evictions and limited services in the area and work together in lobbying for support from government.



Figure 5: Marlboro Warehouse Communities (Bennett 2012)

A studio exercise was established between the University of Johannesburg's Architecture Department and the Marlboro Warehouse Committee facilitated through the South African SDI Alliance. Here meetings between the NGO, the University and the CBO were held before the studio to determine an administrative structure of how to manage a sensitive process in order to yield usable and honest results for the community groups as well as for the students learning process.

The agreement was to divide the students and community members into small groups and asked them to determine not only site-specific design intervention/solutions at a framework level, but also small-scale interventions that would presented this back to the community for feedback.

The studio was arranged with weekly meetings in both the settlement site and the university campus, thus allowing everyone involved to experience the spatial realities of participating groups. The project addressed design problems from the large-scale land-use analysis, participative mapping and site-scale mapping all the way down to the level of the individual living spaces of residents of Marlboro South warehouses. This was done in mixed teams of students and Marlboro residents under the guidance of the SASDI Alliance.



Figure 6: UJ Informal Studio - Marlboro (Bennett 2012)

Unfortunately, an impromptu eviction of several community sites by the City of Johannesburg made the issues of capacity and focus very difficult, as well putting the students at potential risk. The studio was therefore altered and the majority of participatory work happened on the university campus.

From an academic point, the studio was highly successful in exposing students to the various forms of the tangible and intangible professional support that designers can offer. It also allowed the student body to experience contexts, cultures and people that they had not interacted with before. This studio process revealed how important it is for these processes to be managed by larger social groups, as universities do not have the capacity or scope to support such large social movements or deal with evictions and the associated repercussions. At first, the large team sizes were difficult to manage, but once properly organised and coordinated, large quantities of data were very quickly sourced in a highly structured process. This proved invaluable in the ensuing lawsuit against the city, while creating a large volume of work which then informed the proposed design interventions made by the students.

7. Beyond the design studio

While the design studio exists as one of the most flexible and adaptable spaces to navigate the intricate and dynamic world of socio-technical design processes, it needs to be considered in terms of how professionals are required to operate in the 'real world'.

Identified 'living laboratories' allow universities to extend learning opportunities beyond the confines of the campus. If this process of engagement is to be successful, it needs to be well documented, agreements and intentions well articulated and communicated and the projects need to be set up in a manner that does not rely on individuals but addresses the wider interests of all parties involved.

The extension of the design studio into the city needs the support of both tertiary and professional bodies. The underlying ethos of these studios should not be one of entering an informal context and superimposing values of formality – but rather demonstrate a willingness to understand and 'un-learn' conventional professional practice in order to respond in ways that respect inherent energies and capacities of informal contexts. This approach ensures a key aspect that would ensure the sustainability of interventions made by a sense of ownership and authorship by the partner and recipient communities.

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