



CIB NEWS ARTICLE

International Council for Research and Innovation
in Building and Construction

Providing a global network for international exchange and cooperation in research and innovation in building and construction, in support of an improved building process and of improved performance of the built environment.

December 2007

Around the Task Groups and Working Commissions

W104 - Open Building Implementation

W110 - Informal Settlements and Affordable Housing

Report on Open Building Design Workshop – Exploring the Potential of Open Building Principles in the South African Context

held in Pretoria, South Africa, from 7-11 May 2007

by

Dr. Amira Osman

Introduction

The above workshop was hosted by the Housing and Urban Environments (H-UE) Research Field at the University of Pretoria in collaboration with CIB Working Commissions W104 and W110. The workshop was funded by the National Research Foundation (NRF) and was attended by a group of students nationally and internationally. The workshop programme included lectures by the visiting professors, 2 days of touring housing projects in Pretoria and Johannesburg as well as a 2 day design charrette.



Open Building in Housing

Open Building provides strategies for sustainable buildings and neighborhoods through the application of the concept of having distinct levels of intervention in the built environment and by promoting the idea that the design process should involve multiple participants, including the users of the building. Open Building enables built environments to last because they can adjust, meeting changing social and technical requirements. This is accomplished in part by organizing physical elements at any scale (building product to urban tissue) in such a way as to minimize their mutual interference. Perhaps Open Building's most important goal is to combine the freedom of choice and dignity of individuals in their work places, dwellings and communities, with the coherence and

stability of culturally appropriate buildings and neighborhoods.

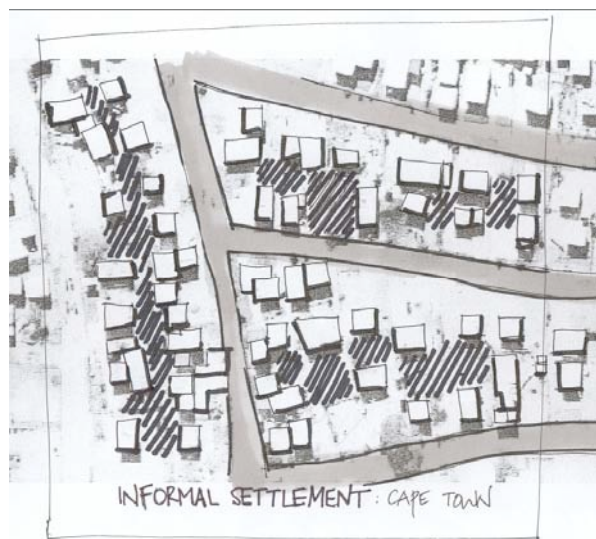
The goal of these workshops was to explore the application of Open Building principles to two sorts of housing situations in the Pretoria region. One is housing for households whose current income is low, and where incremental upgrading and development processes are the norm and need to be supported in various ways. The second situation is housing for households whose income is currently modest to high, where meeting consumer preferences now and in the future is the object – that is, “market-rate” housing.

The concepts of residential OB are relevant to all types of housing and all income levels. The 2 day tour of various important sites in Gauteng helped the participants to understand the housing context and challenges faced. The tour included a drive through Mamelodi Township (low density typical apartheid housing for blacks), through the wealthier suburbs in Pretoria East as well as government subsidized city housing in inner city. In Johannesburg the participants saw Elengeni and Brickfields Social Housing in Newtown, transitional Housing in Hillbrow, and also Melrose Arch where Gary White presented a talk on the urban design process for the development.

Lecturers and Students

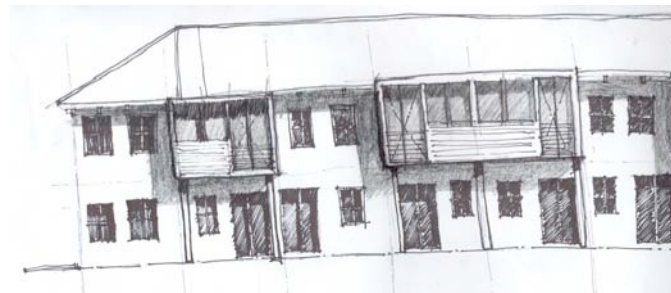
The workshop presenters were Prof. Stephen Kendall Ball State University, Director of Building Futures Institute, USA (W104 Commission on Open Building Implementation), who coordinated one charrette and Prof. Jorge Narvaez Andrade and Prof. Andrea Martin

Chavez both from the Universidad Autonoma Metropolitana Unidad, Xochimilco, Mexico (also W104 Commission on Open Building Implementation), who coordinated another design charrette. Prof. Liana Arrieta De Bustillos from UCLA, Director of Community Housing School, Venezuela. (W110 Commission on



Informal Settlements and Affordable Housing) also attended. All the lecturers presented various talks to the students during the course of the week. Prof. Kendall presented a school talk to about 150 people where students and visitors attended. Prof. De Bustillos and Dr. Osman also conducted a meeting in which the work of the W110 Commission on Informal Settlements and Affordable Housing was discussed. There was an exhibition of Open Building work up in the building for the duration of the workshop. The exhibition portrayed well-known Open Building projects, examples of work from Prof. Kendall's studio and was mostly a representation of the work of Frans van der Werf in the Netherlands.

The input of these lecturers and their interaction with the students were crucial to the success of the workshop. It was evident that the workshop left an impression on the students and hopefully it helped them change the way that they think about the environment in general and our interventions through design. With the Pretoria students this was apparent through the rest of the academic year in their projects, especially with 3rd year housing design, the honours housing elective and some of the Masters students who then proceeded to explore Open Building principles in their individual projects.



The students who attended the workshop were from various institutions: TUT, Pretoria; WITS, Johannesburg; University of Kwa Zulu Natal in Durban and University of Cape Town as well as the students of the University of Pretoria. There were also two young graduates from Belgium and Sudan.

The students presented their group projects on the final morning of the workshop. 2 groups worked with Prof. Kendall on the design of market housing in a site in Hatfield and the re-use of an old building at the Pretoria Zoo. 2 other groups worked on the development of a township site for lower cost housing with Prof. Andrade and Prof. Chavez. The final presentation was attended by lecturers from the Department as well as Prof. Gerald Steyn from the Department of Architecture, Tshwane University of Technology, TUT.



Conclusions from the Workshop

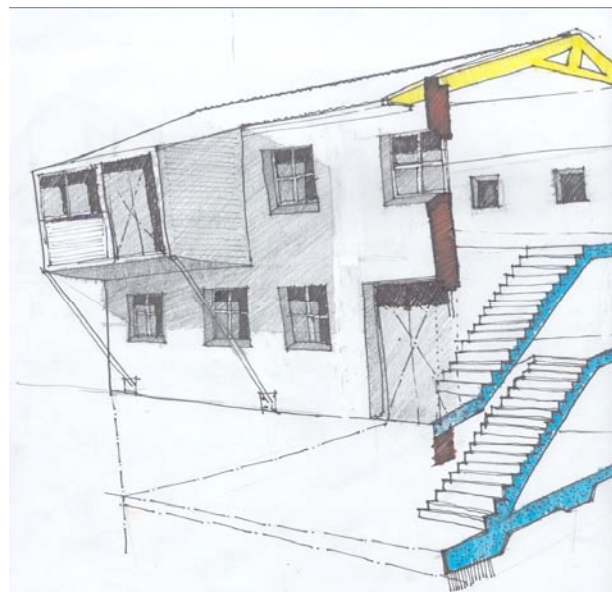
The application of Open Building principles from the urban design level to that of the building and the residential units is seen as a relevant approach to residential design in SA. It would solve some of the problems inherited from the Apartheid era through the designing of well-located social housing, the upgrading of existing workers' hostels into family units as well as the provision of social amenities. South Africa needs more rungs in the housing ladder with more options

being offered to people with varying income. Housing developments need to be designed to allow for participation and for them to be relevant for longer for different users or the same users with differing needs over time. Alternative ways of living and doing can be explored by adopting the Open Building approach.



It is believed that Open Building systems are an effective tool to achieve diversity and can accommodate for wider sectors of the population. Today, housing landscapes in South Africa, are mostly repetitive, regimented and inefficient settlement patterns. There is a need for the development of sustainable housing systems. Housing needs to be adaptable within a stable and robust support structure; at the urban scale (this urban support structure gives an environment its character, at the level of the residential block and within the individual unit. The aim is to allow for flexibility while not subtracting from an effectual urban identity. A careful adaptation of Open Building systems to the South African context may be the means to introduce in this potential for change without disrupting the stability and quality of the environment.

The concept of participation, as an accepted paradigm in development, is explored through methods that allow for user participation in design decision-making. Such design-aiding techniques optimise the contribution of role-players in housing through maximum transparency and effective communication.



Liaison with existing industries in townships is believed to offer opportunities for relevance and flexibility in design as well as support local entrepreneurship. The relevance of open building in different tenure forms is acknowledged, with the suggestion that aspects of the built environment be prioritised in terms of those which require more flexibility and those that are more likely to change over time.

This workshop has attempted to explore the above and to equip students that participated with skills and knowledge to enable them to explore the concepts further in their academic projects and hopefully, in the future through practice

Additional Information

For additional information about the CIB W104 meetings please contact the Coordinators: Stephen Kendall skendall@bsu.edu, Beisi Jia jia@arch.hku.hk, and Kasunobu Minami k-minami@sic.shibaura-it.ac.jp.

About the CIB W110 meetings please contact the Coordinators: Liana Arrieta de Bustillos lianaarrietabustillos@gmail.com, Happy Santosa massan@indo.net.id and Amira Osman amira.osman@up.ac.za.

You can find more information on the activities of CIB W104 or W110 at www.cibworld.nl/website - section Search under Databases/CIB Commissions. Click on Commissions and type W104 or W110 in the search field.

