Architecture and Urbanism in the Global South

Mark Olweny

Conference Chair

Faculty of the Built Environment, Uganda Martyrs University

BACKGROUND

As we enter the second decade of the current millennium, we find ourselves in a world where the majority of humanity resides in urban areas. As urbanisation continues, we can pose questions about the future of these urban areas and the decisions that need to be taken to ensure that these centres are sustainable into the future.

There is increased interest in urban areas of the Global South. They could, arguably, be viewed as efficient and sustainable, not entirely by design, but by default, brought about by circumstances unique to them. This state of affairs is fast changing as many urban areas take on the architecture and urban infrastructure that changes the way people live and work, and consequently may impact on their future viability as well as their sustainability.

The state of architecture and urbanism in the Global South presents us with a unique opportunity to evaluate global challenges related to urban sustainability from a new perspective. Are there lessons for architects, landscape architects and urban designers alike, based not on the ensuing debate revolving around the here and now, but rather, the needs of the next generation, and future of architecture and urbanism? Can there be a productive transfer of best practice principles between different cities across the globe? The ever-increasing number of inter-country exchange programmes, studio projects, and design-build projects set in the Global South, from India, to South America and across Africa, suggest that there are lessons that can be taught and learnt. These projects, set to help urban and rural societies with infrastructure and technological transfer, also aid the transfer of knowledge back to the participants, related to sustainable futures at different scales - from individual buildings to the district and urban-scales.

As we think of the nature of urban areas across the globe, how can we ensure they are sustainable into the future? How can the rapid growth of urban areas in the Global South, often erratic and based on unsustainable practices and principles, seek to avoid the inevitable negative consequences of such growth? Further still, what lessons from the Global South would be useful to cities in the Global North?

THE CONFERENCE

The conference aimed to address these aspects of urban development with emphasis on the principles of sustainability as they relate to architecture and urbanism. It provided a forum to examine and discuss architecture and urbanism and to stimulate debate and discourse on the future of the same in the context of sustainability. Papers were double blind refereed as abstracts and full papers.

THE PROCEEDINGS

The papers in these Proceedings are organised under themes of **Sustainability and Urbanism, Design for Sustainability, and Education for Sustainability**. Pages are numbered consecutively beginning with the first paper and continuing in the order of the table of contents. They are digitally published on the Conference Proceedings cd. Files on the cd are labelled by the first authors' name in **bold** font in the table of contents.

Papers in these proceedings should be cited in the following format, or equivalent:

Author, I., Author, I. and Author, I. (2012) Paper title, *Sustainable Futures: Architecture and Urbanism in the Global South*, Faculty of the Built Environment, Uganda Martyrs University: Kampala, pp. firstpage - lastpage.

Sustainable Futures: Architecture and Urbanism in the Global South Kampala, Uganda, 27 – 30 June 2012

Contents Sustainability and Urbanism Community based upgrading of informal settlements for rental housing: The case of Mathare IVA, Nairobi, Kenya Stephen O. Diang'a

Stephen O. Dialig a	
Resettling displaced residents from regularised informal settlements in Dar-	9 - 17
es-Salaam, Tanzania: Challenges faced by house owners	
D.L. Magembe-Mushi and J.M. Lupala	
Strategic planning for urban sustainable development: Challenges and	18 - 27
opportunities facing selected towns in Western Kenya	
G.J. Cheserek, P. Syagga and W.H.O. Olima	
Approaches to sustainability in the Global North and Global South: Sharing	28 - 36
lessons on sustainable water systems	
Celia Way, Emilia Melville, Joanne Beale and Zareen Sethna	
Sanitation – a neglected essential service in the unregulated urban	37 - 44
expansion of Ashaiman, Ghana	
Adrien Mazeau, Rebecca Scott and Benedict Tuffuor	
Development of a Green Building Rating System for Nigeria	45 - 53
Michael Adegbile	54 50
Maximising the benefits of green building while reducing the risk and cost	54 - 59
of green building certifications	
Farizan d'Avezac de Moran Greening Building Codes in Egypt	60 - 69
Karim M. Ayyad and Mostafa Gabr	00-09
The use of the clean development mechanism (CDM) tool to improve	70 - 76
development in Africa	10 10
Opaluwa Ejiga and Okedele S. Olaniyi	
Uganda's new urban policy: participation, poverty, and sustainability	77 - 82
Andrea M. Brown Heritage and modern regionalism in Khartoum	83 - 91
Fathi Bashier	02 - 91
Social influence on architectural styles in Egypt (1952-2012)	92 - 97
Karim Ayyad and Mostafa Gabr	•_ •.
Sustainability in traditional African architecture: a springboard for	97 - 105
sustainable urban cities	
Opaluwa Ejiga, Obi Paul and Osasona O. Cordelia	
The roots and fruits of gated communities in Lagos, Nigeria: social	105 - 112
sustainability or segregation?	
Adetokunbo Ilesanmi	
Landscape planning: A bioregional conservation tool in Lower Ogun River	113 - 120
Basin	
Tunji Adejumo	404 407
Experimental prototypes for emerging housing constructions in Addis	121 - 127
Ababa, Ethiopia	
Dirk Donath Leading with landscape: a regenerative strategy for Johannesburg's inner	128 - 135
	120 - 133
city Graham A Young	
	126 142
Umujyi: Cities and human settlements in Rwanda Toma Berlanda	136 - 142
Sustainable Urbanism in rural growth regions – A case study in Rwanda	143 - 150
Astrid Weisel	145 - 150
"The art of city building" issues and practice in East Africa	151 - 158
Clive Richards	101 - 100

pages

1 - 8

Design for Sustainability

Design for Sustainability	pages
Designing for sustainability in cultural landscapes: The Kaya Kinondo	159 - 166
Forest of the Mijikenda Community, Kenya	
Nthiwa Carolyne Wanza and Mugwima B. Njuguna	
Culture and environment as generators of sustainable design: the case of	167 - 176
Hoachanas Village, Hardap Region, Namibia	
Sampson Umenne and Victor Chirwa	
Green Globalization as an Approach for Sustainable Development in the	177 - 181
Developing World	
Karim Ayyad and Mostafa Gabr	
The role of design in urban transformations: towards a sustainable	182 - 190
integration of informal settlements in the urban context. Case-study Toi	
Market, Nairobi.	
Georgia Cardosi	
The Impact of population growth on the Ecosystems and Biodiversity of	191 - 195
Kampala: Lessons for Sustainable Urban Development	
Aloysius Byaruhanga and Leonard Ssozi	
From Africa to Alaska: A case study of culturally-sensitive and	195 - 204
environmentally friendly designs in polar-opposite regions of the world.	
Timothy Reidy	

Education for Sustainability

Lost opportunities and emerging possibilities: The place for collaboration in	205 - 210
the built environment	
Alex Ndibwami	
Reality Design and Slow Prototyping as Methods in Sustainability Education	211 - 218
Susanne Gampfer	
As if the future matters: Teaching design for sustainable communities	219 - 223
Terry Williamson, David Jones, Susan Shannon and Antony Radford	
Nigerian architectural education in a sustainable age	224 - 231
Michael Adegbile	
Hands, Eyes and Feet: Approaches to an Architectural Education	232 - 237
Garret Gantner	
Building tomorrow: A sustainable future starts in the classroom	238 - 243
Whitley Esteban and Aimee P.C. Buccellato	
Impact design: A sustainable design process for primary schools in Africa	244 - 249
Michael Garrison	
Post-disaster shelter: A studio-based response to emergency shelter in	250 - 254
natural disaster zones.	
Nina Hamilton	
Sustainability at a Distance: Design for the Open University of West Africa	255-262
Joseph Dahmen and Daniel Roehr	