



Second International
Conference
on
Cities, People and Places

ICCPP - 2014

Oct 31st - Nov 2nd 2014
Colombo - Sri Lanka

‘Reinventing Cities & Places’

Programme and
Abstract

Cities
People
Places



Department of Architecture
University of Moratuwa, Sri Lanka

**SECOND INTERNATIONAL URBAN DESIGN CONFERENCE
ICCPP-2014**

'Cities, People and Places'

'Reinventing Cities and Places'

31 October - 2 November 2014

at

Sri Lanka Foundation Institute
Colombo, Sri Lanka

Organized by

Department of Architecture
University of Moratuwa
Sri Lanka

With Associated Partners

University of Leuven, Belgium
University of Alberta, Canada
University of Luebeck, Germany
University of Bahrain, Bahrain



© Department of Architecture, University of Moratuwa. 2014
ISSN: 2345-9549

All rights reserved. Reproduction of this volume or any parts thereof may be made only after obtaining the specific approval of the publishers. The publishers are not responsible for any opinions or statements made in the papers.

Edited by: Janaka Wijesundara, Ranjith Dayaratne
Published by:
Department of Architecture, University of Moratuwa, Sri Lanka

Tel : +94 11 2 651 047
Fax : +94 11 2 651 047
Email : iccpp2014@uom.lk
Web : www.iccpp.lk

CONTENTS

Messages	5
Keynote Speakers	9
Organizing Committee	13
Scientific Committee	13
Conference Information	14
Conference Programme	15
Conference Session Plan At-A-Glance	18
Detailed Session Plan	21
Paper Abstracts	39
Acknowledgements	89
Sponsors and Partners	91

MESSAGES

Prof. A.K.W. JAYAWARDANE
Vice Chancellor
University of Moratuwa



I am pleased to send my best wishes to the International Conference on Cities, People and Places 2014, organized for the second time by the Department of Architecture of the University of Moratuwa.

The Department of Architecture has been producing human resource expertise in Urban Design through the conduct of its Masters Degree program since 2009. This conference is another major contribution by the Urban Design Program of the Department towards initiating a discourse among the international urban designers, planners, and those who are interested in researching, working and practicing in the areas of public realm improvements and enhancing the living standards of the people of cities.

Cities all over the world are constantly under pressure to meet ever increasing demands of people, who are primary users of our built environments. The equilibrium between social, economic and environmental milieu in our cities are always under threat, and any imbalance would lead to chaos and disorder. The existing infrastructure in cities are struggling to cater to the extra burden, with large amounts of resources being wasted in finding ad hoc solutions to cater to these demands. With the unprecedented volume of post-war development work currently being undertaken by the Government, the issues related to city development in Sri Lanka create even greater significance.

Conference theme this year, 'Re-inventing Cities, People & Places' aims to address a wide array of inter-related aspects of cities and urban environments from functional aspects and city making technologies to quality of living and character of places providing an opportunity for all participants to gain firsthand acquaintance on the multidisciplinary aspects of urban planning, urban design, urban architecture, urban infrastructure, sustainable planning, design and construction, urban landscape, urban conservation, sociology, art and many other related disciplines. Considering the expertise of the participants and the wide range of topics presented, I have no doubt that the conference will be of great benefit to all.

I would like to take this opportunity to congratulate the organizers and participants for their contributions, and wish this conference a great success.

Prof. P.K.S. MAHANAMA
Dean of the Faculty of Architecture
University of Moratuwa



It is a great pleasure for me to have the opportunity to write this message to the proceedings of ICCPP 2014; the Second International Urban Design Conference organised by the Department of Architecture, University of Moratuwa. The research culture in the Faculty of Architecture has been growing over the years and faculty has acquired recognition through teaching, research and consultancies. Research activities are carried out at three level, i.e. Faculty level, Department level and Individual level. Major mode of presenting research carried at each level is to hold the research conferences on a theme related to build environment. In this endeavor, the Department of Architecture of the Faculty of Architecture, University of Moratuwa in association with its international and national academic partners has organized an International Conference on “Reinventing Cities & Places”(ICCP) in this year to provide a platform for wider range of research and scholarly work carried out by local and international researchers and practitioners who are involved in Architecture, Building Sciences, Environmental Design, Urban Design, Engineering, Facilities Management, Landscape architecture, Life Style and Product design, Project Management Technology and urban Planning.

The theme of this year’s International symposium is the “Reinventing Cities and Places. “As a result of the modernization and globalization new transformation in built environments especially in cities has been experienced in all over the world. The prominent issues of this trend include the loss of identities of places and the socio-cultural inferences, over emphasis on technology and communication, imbalances on natural systems and resultant natural disasters and failure to adopt for global economic crises. Some of these issues are revealed in Sri Lankan city development process too. Therefore, it is important to discuss these issues at a greater depth in order to bring out the intellectual discourse at this conference. It will also deliberate on the emerging issues related to the Cities, People and Places and outline the future directions to create sustainable cities where we live in.

I am sure that the Second International Urban Design Conference organised by the Department of Architecture would be an important milestone to expand the prospect of research carried out by the staff and students of our faculty.

I wish ICCPP Conference 2014 all success!

Dr. U.G.D. WEERASINGHE
Head of the Department of Architecture
University of Moratuwa



It is with immense pleasure that I am sending my message for the conference proceedings of ICCPP 2014. The success of the first ever ICCPP conference held in 2013 prompted us to conduct the conference as an annual event, and the response from prospective participants from around the world this year is a clear indication of the need for a regular forum of this significance.

The main focus of the ICCP 2014 conference is on reinventing cities and places, an apt theme highlighting a global need for cities that are sustainable and fulfill the needs of the populace. Further, the magnitude of post-conflict development in Sri Lanka requires contributions from professionals of diverse disciplines, with urban designers being called upon to bear a significant portion of the responsibility. The postgraduate program in Urban Design in Moratuwa University is striving to fulfill this national need, and the ICCPP conference would be the ideal forum for the deliberation of numerous facets in dealing with cities, people and places. It has also given the opportunity to a large number of participants to contribute towards the success of this years' conference as well.

While appreciating the efforts of the organizing committee, we hope that all participants make the maximum benefit out of the wide array of presentations to be made by academics, researchers and professionals at this conference.

KEYNOTE SPEAKERS

Prof. KIM DOVEY
Professor of Architecture and Urban Design,
University of Melbourne, Australia



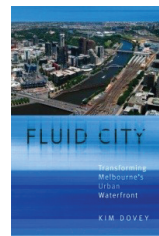
Kim Dovey is an Australian architectural critic and Professor of Architecture and Urban Design at the University of Melbourne, Australia, where he has served as Associate Dean, Head of Urban Design and Head of Architecture and teaching urban design theory. He has a PhD from the University of California, Berkeley and has taught at Berkeley, RMIT and Melbourne.

His research on social issues in architecture and urban design has included investigations of housing, shopping malls, corporate towers, urban waterfronts and the politics of public space. His research is broadly focused on theories of 'place' and practices of power, covering a broad range of social issues in architecture and urban design. Books include 'Framing Places: Mediating Power in Built Form' (Routledge 1999, 2008) 'Fluid City' (Routledge 2005), 'Becoming Places' (Routledge 2009) and 'Fluid City: Transforming Melbourne's Urban Waterfront' (UNSW Press/Routledge 2005).

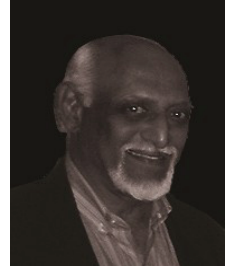
Current research projects include those on urban place identity, urban 'character' and informal settlements, creative clusters, transit-oriented urban design and the morphology of informal settlements. He has engaged in substantial mass-media broadcasting on his research work and major urban and architectural developments in Melbourne.

Selected publications

- Dovey, K (2005) Fluid City: Transforming Melbourne's Urban Waterfront, London: Routledge (ISBN 0415359236 (pbk.))
- Dovey, K (2008) Framing Places: Mediating Power in Built Form, 2nd ed, London: Routledge (ISBN 978-0-415-41635-1 (pbk))
- Dovey, K (2010) Becoming Places: Urbanism / Architecture / Identity / Power, London: Routledge (ISBN 978-0-415-41637-5 (pbk.))



Arch. Plnr. Dr. LOCANA GUNARATNA
Gunaratna Associates, Sri Lanka



Dr. Locana Gunaratna is an architect and a town planner and currently working as a Partner, Gunaratna Associates, Chartered Architects, Engineers and Planning Consultants in Colombo. He has studied architecture at Architectural Association School of Architecture in London and was a Fulbright Scholar in the USA from 1971 to 1973 when he did a Masters Degree in City Planning (*MCP*) in Harvard University in Cambridge Massachusetts. He also was a Research Fellow in Special Program in Urban/Regional Studies of Developing Areas in Massachusetts Institute of Technology, Cambridge Massachusetts. He has obtained a PhD from the University of Colombo.

Dr. Gunaratna is a fellow of National Academy of Sciences, Sri Lanka (*FNASSL*), Honorary Fellow of Sri Lanka Institute of Architects (*FIASL*), Honorary Fellow of Institute of Towns Planners Sri Lanka (*FITPSL*) and member of Sri Lanka Economics Association. He has been serviced as a president of National Academy of Sciences, Sri Lanka, Sri Lanka Association for the Advancement of Science, Institute of Town Planners Sri Lanka, Sri Lanka Association for the Advancement of Science and Sri Lanka Institute of Architects and the Founding Chairman of Education Committee (1985-88), Architects Regional Council for Asia (*ARCASIA*).

Publications (selected)

- **Book** “*Spatial Concerns in Development: A Sri Lankan Perspective*”(Atlantic Publishers, New Delhi 2006)
- **Book** “*Shelter in Sri Lanka: 1978-1991*” Co-author (National Housing Development Authority, Colombo 1991)
- **Papers** (numerous)

PROF. SARATH KOTAGAMA
University of Colombo, Sri Lanka



Sarath Kotagama is the Professor of Environment Science at the University of Colombo. He obtained his BSc. with Honors in Zoology at the University of Colombo in 1974, and done a PhD on the feeding and behavioral ecology of Rose-ringed Parakeet at the University of Aberdeen in 1982. Prof. Kotagama has been a lecturer in Zoology both at University of Colombo and The Open University of Sri Lanka since 1974.

He has done extraordinary service to Sri Lanka as an ornithologist and Environmentalist. He received the President's award for Environment and was also awarded the "2003 Distinguished Service Award for Environment Education and Journalism" by the International Society for Conservation Biology. He is the leading ornithologist in Sri Lanka.

Kotagama has conducted several scientific studies and rendered his services to several government and non-governmental institutions as a zoologist, biologist, environmental scientist, and conservationist. The endemic toad *Bufo kotagamai* is named after Kotagama for the honour.

He is a former Director, Department of Wildlife Conservation of Sri Lanka. Currently he is the Scientific Adviser to the Ministry of Wildlife Resources Conservation. He is also the Chairman of BirdLife Asia, and Council member of BirdLife International.

ORGANISING COMMITTEE

University of Moratuwa

Chairman Dr. Janaka Wijesundara

Members Dr. Gamini Weerasinghe
Prof. Samitha Manawadu
Arch. D.P. Chandrasekara

Technical Committee

Pricil De Mel
Radeeka Lakshani
Thushara Thejani
Rasanga Nirmani
Samitha Fernando

SCIENTIFIC COMMITTEE

Prof. Frank Schwartze	University of Luebeck, Germany
Prof. Sandeep Agrawal	University of Alberta, Canada
Prof. Koen De Wandeler	University of Leuven, Belgium
Prof. Luca Molinari	"L. Vanvitelli", Naples, Italy
Prof. Kapila Silva	University of Kansas, USA
Prof. L S R Perera	Sultan Qaboos University, Oman
Prof. Rohinton Emmanuel	Glasgow Caledonian University, UK
Prof. Sam Hammer	University of Boston, USA

CONFERENCE INFORMATION

International conference on 'Cities, People & Places' –ICCPP-2014

The event is organized by the Department of Architecture of University of Moratuwa in collaboration with joint international academic institutions and is held on 31st of October and 1st of November 2014 at the Sri Lanka Foundation Institute at No. 100, Sri Lanka Padanama Mawatha, Independence Square, Colombo 07.

Conference Secretariat

Department of Architecture,
University of Moratuwa Katubedda
Sri Lanka.

Tel : +94 11 2651047

Fax : +94 11 2 651 047

Email : iccpp2014@uom.lk

Web : www.iccpp.lk

Language

The official language of the conference is English. There will be no simultaneous translations.

Dress code

Conference – business, lounge or national

Dinner - smart casual

Registration

Conference delegates can collect their materials at the registration desk at the Sri Lanka Foundation Institute in Colombo. Opening times of the registration desk will be from 3.00 pm to 6.15 pm on 31st Of October from 8.30 am to 5.30 pm on 1st November 2014.

Secretariat room

During the conference, the secretariat room is located at the Sri Lanka Foundation Institute in Colombo where the main conference is being held. The opening hours of the secretariat will be from 8.30am – 7.00 Pm on 31st October to 1st November 2014.

Certificate of Attendance

A certificate of attendance will be issued to all participants after the conference sum up.

Awards

The paper presentation award and the best presentation award will be awarded during the conference cultural dinner.

Liability

The organizing committee is not liable for personal accidents, loss or damages to private properties of registered participants during the conference. Participants should make their own arrangements with respect to personal insurance.

Disclaimer

Whilst every attempt be made to ensure that all aspects of the conference mentioned in this announcement will take place as scheduled, the organizing committee reserves the prerogative to make last minute changes should the need arise without prior notice.

Day 1

Friday, 31 October, 2014

INAUGURATION

03:00 p.m.	Arrival of Guests and registration
03:30 p.m.	Arrival of the Keynote Speakers
03:35 p.m.	Arrival of the Chief Guest
03:45 p.m.	Procession Proceeds to Auditorium
04:00 p.m.	Lighting of the Traditional Oil Lamp
04:10 p.m.	National Anthem
04:15 p.m.	Ceremonial Inauguration of ICCPP- 2014 Theme Video Presentation
04:20 p.m.	Welcome Address by the Conference Chair- ICCPP2014
04:30 p.m.	Address by the Head of the Department of Architecture
04:35 p.m.	Address by the Dean of the Faculty of Architecture
04:40 p.m.	Address by the Vice Chancellor of the Moratuwa University
04.50 p.m.	Keynote Address -1, Archt. Plnr. Dr. Locana Gunaratna, Gunaratna Associates, Sri Lanka.
05.10 p.m.	Keynote Address -2, Prof Kim Dovey, Professor of Architecture and Urban Design, University of Melbourne, Australia
05:40 p.m.	Keynote Address – 3, Prof. Sarath Kotagama, University of Colombo, Sri Lanka.
06:00 p.m.	Address by the Chief Guest
06:15 p.m.	Vote of Thanks by Archt. D.P. Chandrasekara
06:30 p.m.	Tea
06:45 p.m.	Sri Lankan Cultural Event
07.45 p.m.	Conference Dinner
08.45 p.m.	END of the Program (Day 1)

Day 2

Saturday, 1 November, 2014

SCIENTIFIC CONFERENCE

- 08.30-08.45a.m. Conference Registration
- 08:45-08.55a.m. Arrival of the Keynote Speakers and the Chief Guest
- 08.55-09.00a.m. Procession Proceeds to Auditorium
- 09:00-09.05a.m. Lighting of the Traditional Oil Lamp
- 09:05-09.10a.m. National Anthem
- 09.10-09.15a.m. Theme Video
- 09.15-09.20a.m. Welcome speech by the Conference Chair
- 09.20-09.50a.m. Key note Address 1: Archt. Plnr. Dr. Locana Gunaratna (Sri Lanka)
- 09.50-10.30a.m. Key note speaker 2: Prof Kim Dovey (Australia)
- 10.30-11.00a.m. Key note speaker 3: Prof. Sarath Kotagama (Sri Lanka)
- 11.00-11.15a.m. Tea break
- 11.15-12.45p.m. Parallel Sessions- Session-1A, 1B, 1C, 1D
- 12.45-01.45p.m. Lunch
- 01.45-03.15p.m. Parallel Sessions- Session-2A, 2B, 2C, 2D
- 03.15-03.30p.m. Tea break
- 03.30-05.00p.m. Parallel Sessions- Session-3A, 3B, 3C
- 05.00-05.05p.m. All participants get together at the Main Auditorium
- 05.05-05.50p.m. Discussion, concluding remarks
- 05.50-06.00p.m. Vote of thanks

END of the Program (Day 2)

Day 3

Sunday, 2 November 2014

CULTURAL TOURS – (Tour registration required)

06.00a.m. – 06.30p.m. Tour Option 1- Sigiriya Archaeological/Site and cultural tour

06.00a.m. – 06.30p.m. Tour Option2- Geoffrey Bawa Gardens, Architecture, Galle-Southern tour

END of the Program (Day 3)

SESSION PLAN AT-A-GLANCE

DAY 1

Friday, 31st October 2014 - Inauguration

Time	
15.00 - 15.30	Arrival of Guests and registration
15.30 - 15.35	Arrival of the Keynote Speakers
15.35 - 15.45	Arrival of the Chief Guest ²
15.45 - 16.00	Procession Proceeds to Auditorium
16.00 - 16.10	Lighting of the Traditional Oil Lamp
16.10 - 16.15	National Anthem
16.15 - 16.20	Ceremonial Inauguration of ICCPP- 2014
16.20 - 16.30	Theme Video Presentation
16.30 - 16.35	Welcome Address by Dr. Janaka Wijesundara, Conference Chair- ICCPP2014
16.35 - 16.40	Address by Dr. Gamin Weerasinghe, Head of the Department of Architecture, Moratuwa University, Sri Lanka
16.40 - 16.50	Address by Prof. P.K.S. Mahanama, Dean of the Faculty of Architecture, Moratuwa University, Sri Lanka
16.50 - 17.10	Address by Prof. Ananda Jayawardane, Vice Chancellor of the Moratuwa University, Sri Lanka
17.10 - 17.40	Keynote Address -1: Archt. Plnr. Dr. Locana Gunaratna, Gunaratna Associates, Sri Lanka
17.40 - 18.00	Keynote Address -2: Prof. Kim Dovey, Dept of Architecture and Urban Design, University of Melbourne, Australia
18.00 - 18.15	Keynote Address -3: Prof. Sarath Kotagama, University of Colombo, Sri Lanka
18.15 - 18.30	Address -By The Chief Guest ²
18.30 - 18.45	Vote of Thanks by Archt. D.P. Chandrasekara, Department of Architecture, University of Moratuwa, Sri Lanka
	Tea
18.45 - 19.45	Sri Lankan Cultural Event
19.45 - 20.45	Conference Dinner
20.45	END of the Program

SESSION PLAN AT-A-GLANCE

DAY-2 Saturday, 1st November 2014 - Scientific conference

08:30 - 08:45	Conference Registration				
08:45 - 08:55	Arrival of the Keynote Speakers and the chief Guest				
08:55 - 09:00	Procession Proceeds to Auditorium				
09:00 - 09:05	Lighting of the Traditional Oil Lamp				
09:05 - 09:10	National Anthem				
09:10 - 09:15	Theme Video				
09:15 - 09:20	Welcome Address by Dr. Janaka Wijesundara, Conference Chair - ICCPP2014				
09:20 - 09:50	Key note speaker 1- Archt.Plnr. Dr. Locana Gunaratna, Gunaratna Associates,Sri Lanka				
09:50 - 10:30	Key note speaker 2- Prof. Kim Dovey, Dept of Architecture and Urban Design, University of Melbourne, Australia				
10:30 - 11:00	Key note speaker 3- Prof. Sarath Kotagama,University of Colombo, Sri Lanka				
11:00 - 11:15	Tea break				
11.15 - 12.45	Session 1A - Creating Better, Livable Cities	Session 1B - Re- Inventing Urban Spaces	Session 1C - Education for Re-inventing the city	Session 1D - Travelling and Walking the City	
11.15 - 11.35	BNGL - 04	IN - 01	USA - 02	SL - 03	
11.35 - 11.55	SL - 11	BG - 01	IND - 01	IN - 06	
11.55 - 12.15	IR - 01	SL - 18	MLY - 02	BHR - 01	
12.15 - 12.35	BNGL - 05	FR - 01	PK - 01		Q&A
12.35 - 12.45	Q&A	Q&A	Q&A		Q&A
12.45 - 13.45	Lunch				
13.45 - 15.15	Session 2A - Social & Spatial Dynamics of Cities	Session 2B - Sensual Experiences of the city	Session 2C - Post-conflict Reconstruction in cities	Session 2D - Managing and Controlling Development	
13.45 - 14.05	SL - 14	SL - 04	IN - 12	SL - 20	
14.05 - 14.25	BG - 03	SL - 12	SW - 01	TW - 02	
14.25 - 14.45	AUST - 01	BNGL - 07	PHL - 01	SL - 13	
14.45 - 15.05	SL - 19	SL - 07		THD - 02	
15.05 - 15.15	Q&A	Q&A	Q&A		Q&A
15.15 - 15.30	Tea break				
15.30 - 17.00	Session 3A - Theorizing and Philosophizing city	Session 3B - City and Community	Session 3C - Socially inclusive Cities		
15.30 - 15.50	SL - 06	TW - 01	GHN - 01		
15.50 - 16.10	BG - 02	SL - 08	CA - 01		
16.10 - 16.30	IN - 05	THD - 03	GHN - 02		
16.30 - 17.00	Q&A	Q&A	Q&A		
17.00 - 17.05	All participants get together at the Main Auditorium				
17.05 - 17.50	Common Discussion and concluding remarks by Prof. Ranjith Dayaratne, University of Bahrain				
17.50 - 18.00	Vote of thanks by Archt. D. P. Chandrasekara, Department of Architecture, University of Moratuwa				

SESSION PLAN AT-A-GLANCE

DAY-3 Sunday, 2nd November 2014 - Cultural Tours

Time	Tour Registration required
06.00 - 18.30	Tour Option 1- Visiting Sigrinya Archaeological / Cultural Site in North Western Province
06.00 - 18.30	Tour Option 2- Visiting Geoffrey Bawa Gardens and Architecture, Galle Heritage City-Southern Tour

DETAIL SESSION PLAN

DETAILED SESSION PLAN

Saturday, 1 November 2014

Session 1A

Theme : **Creating Better, Livable Cities**
Session Chair : **Archt. Prof. Nimal de Silva**
Session Co-Chair : **Archt. Varuna de Silva**
Venue/Time : **Hall no: 1 / 11.15 - 12.45**

Time	Paper ID, Title and Author(s)
11.15 - 11.35	BNGL 04- Towards Creating Better Cities: Problems and Potentials of Transit Oriented Development as Community Development Tool in Dhaka Nabanita Islam
11.35 - 11.55	SL 11 - Creating Public Spaces for All: Learning From public Spaces in Colombo Anam, Abdul Azeez
11.55 - 12.15	IR 01- Towards Creating Child-Friendly Cities: Allocation of Urban Spaces to Children in Mashhad, Iran Bahar, Manouchehri, Katayoon, Alizadeh
12.15 - 12.35	BNGL 05- Learning from Precedents: Emerging Urban Planning Practices towards Livable Communities in Dhaka Nawrose Fatemi, Nabanita Islam
12.35 - 12.45	Final Discussion and award of certificates of attendance

DETAILED SESSION PLAN

Saturday , 1 November 2014

Session 1B

Theme : Re- inventing Urban Spaces
Session Chair : Archt. Plnr. Dr. Surath Wickramasinghe
Session Co-Chair : Mrs. Nadeeka Jayaweera
Venue/Time : Hall no: 2 / 11.15 - 12.45

Time	Paper ID, Title and Author(s)
11.15 - 11.35	IN 01 - Place Making Journey: Transition in Urban Public Open Spaces from Ancient to Modern Age Seemantini Soraganvi
11.35 - 11.55	BG 01- People, not bricks, create communities and cities Anne Leemans
11.55 - 12.15	SL 18- The Role of Collective Memory in Shaping Public Squares; The Case of Republic Square, Male' City Fathimath Shaheen, Janaka Wijesundara
12.15 - 12.35	Green is Beautiful© Sibila Jaksic
12.35 - 12.45	Final Discussion and award of certificates of attendance

DETAILED SESSION PLAN

Saturday, 1 November 2014

Session 1C

Theme : Education for Re- inventing the City
Session Chair : Prof. Lal Balasooriya
Session Co-Chair : Archt. Niroshan Gunawardhana
Venue/Time : Hall no: 3 / 11.15 - 12.45

Time	Paper ID, Title and Author(s)
11.15 - 11.35	USA 02- A Phenomenological Approach to Engage Students in Learning Urban Ecology Samuel Hammer
11.35 - 11.55	IND 01- Enhancing Private Open Spaces in Indonesian Cities: Preparing Children as Future Change Agents Mediastika, Christina E, Nurdiah, Esti A., Julistiono, Eunike K.
11.55 - 12.15	MLY 02- Digital Archiving of Architectural Heritage Human Esmaeili, Peter Charles Woods, Harold Thwaites, Khairul Hazrin bin Hashim
12.15 - 12.35	PK 01- Re-Thinking a City Born Housing: For the RMG Workers N.M.Esa, Khan
12.35 - 12.45	Final Discussion and award of certificates of attendance

DETAILED SESSION PLAN

Saturday, 1 November 2014

Session 1D

Theme : Travelling and Walking the City
Session Chair : Prof. Samitha Manawadu
Session Co-Chair : Dr. Milinda Pathiraja
Venue/Time : Hall no: 4 / 11.15 - 12.45

Time	Paper ID, Title and Author(s)
11.15 - 11.35	SL 03- People Places: Attributes that Enable a Convivial Walk Trail in Diyatha Uyana, Kotte, Sri Lanka Ayodhya Jagodaarachchi, Amanda Rajapakse
11.35 - 11.55	IN 06- Role of Geometry and Physical Elements on a Footpath in Defining Spaces, Influencing Events and Engendering Movement Patterns Rohit Lahoti
11.55 - 12.15	BHR 01- Sit Alshai - Tea lady; Events Taking Place in El meshtal Street Suha, Babikir Hasan
12.15 - 12.45	Final Discussion and award of certificates of attendance

DETAILED SESSION PLAN

Saturday, 1 November 2014

Session 2B

Theme : Enhancing Sensual Experiences of the City
Session Chair : Archt. Plnr. Pali Wijerathne
Session Co-Chair : Archt. Dr. Senaka Dharmathilake
Venue/Time : Hall no: 2 / 13.45 - 15.15

Time	Paper ID, Title and Author(s)
13.45 - 14.05	SL 04-- Reduction of Traffic Noise Due to Improved Road Conditions: Evidence from Matara & Hambantota, Sri Lanka S.M.N. Sethunga, J.A.P. Bodhika , W.G.D. Dharmaratna
14.05 - 14.25	SL 12- Architecture of Fear': An Analytical Investigation on 'Negative Impression' in Architectural Design Articulated by 'Integrated Spatial and Space-Related Aspects' Nipuni Dayasagara, Prasad Botejue, Senaka Dharmatilleke
14.25 - 14.45	BNGL 07- Urban Green Space in a High-Density City: User Expectations, Accessibility and Experience in Context of Dhaka Nawrose Fatemi
14.45 - 15.05	SL 07- The Effect of Street Canyon Geometry on Outdoor Thermal Comfort in Colombo N. G. R. Perera, W. M. S. B. Weerasekara
15.05 - 15.15	Final Discussion and award of certificates of attendance

DETAILED SESSION PLAN

Saturday, 1 November 2014

Session 2C

Theme	: Experiments with urban regeneration and post- conflict Reconstruction
Session Chair	: Dr. Dhammika Herath
Session Co-Chair	: Dr. Rasanga Wijethunga
Venue/Time	: Hall no: 2 / 15.30 - 17.00
Time	Paper ID, Title and Author(s)
13.45 - 14.05	IN 12- Reinventing Cities and Rebuilding Lives: A Case of Development Induced Displaced in Kochi, Kerala S Irudaya Rajan , Ann George
14.05 - 14.25	SW 01- Development Evictee’s in Colombo: Outcomes of Urban Displacement and Relocation from a Wellbeing Perspective Dhammika Herath, Rajith Lakshman, Asela Ekanayake
14.25 - 14.45	PHL 01- Promoting Socially INCLUSIVE Infrastructure Investments in Asian Cities - The Case of Wastewater Management in Colombo Eva Ringhof, Dilan Kumara
14.45 - 15.15 attendance	Final Discussion and award of certificates of

DETAILED SESSION PLAN

Saturday, 1 November 2014

Session 2D

Theme : **Managing and Controlling Development**
Session Chair : **Prof. Ranjith Perera**
Session Co-Chair : **Lsp. Archt. Eng. Susirsa Udalamaththa**
Venue/Time : **Hall no: 4 / 13.45 - 15.15**

Time	Paper ID, Title and Author(s)
13.45 - 14.05	SL 20- Creation of Appealing Road side Landscapes Using Elements of Prospect and Refuge Value G.N. Samarasekara , N.B.G. Imali
14.05 - 14.25	TW 02- The Institutional Fix of Historic Revitalization Behind Property-Led Urban Regeneration: the Comparison between Taipei and Hong Kong Lan, Cassidy I-Chih , Xian, Shi
14.25 - 14.45	SL 13- Collaborative Facilities Management in Urban Regeneration Projects: Problems and Potentials Nilmini Weerasinghe, Yasangika Sandanayake, Prathibhani Bandusena
14.45 - 15.05	THD 02- Impacts of the Crown Property Developments in the City of Bangkok: Two Case Studies Montouch Magluntong
15.05 - 15.15	Final Discussion and award of certificates of attendance

DETAILED SESSION PLAN

Saturday, 1 November 2014

Session 3A

Theme : **Theorizing and Philosophizing City**
Session Chair : **Archt. Prof. Chitra Weddikara**
Session Co-Chair : **Archt. Suresh Edirisooriya**
Venue/Time : Hall no: 1 / 15.30 - 17.00

Time	Paper ID, Title and Author(s)
15.30 - 15.50	SL 06- Effect of Street Canyon Materials on the Urban Heat Island Phenomenon in Colombo N. G. R. Perera , K. P. P. R. Samanthilaka
15.50 - 16.10	BG 02- Social Resilience and Urban Growth Exploring Urban ‘Strategies’ and ‘Tactics’ in Bangkok and Colombo Koen, De Wandeler
16.10 - 16.30	IN 05- Urban Policy Changes in Chandigarh: Fallibilism or Fatalism Sohan Lal, Saharan, Manjari, Chakraborty
16.30 - 17.00	Final Discussion and award of certificates of attendance

DETAILED SESSION PLAN

Saturday, 1 November 2014

Session 3B

Theme : **City and Community**
Session Chair : **Plnr. Hemantha Jayasundara**
Session Co-Chair : **Arch. Janaka Dharmasena**
Venue/Time : **Hall no: 3 / 13.45 - 15.15**

Time	Paper ID, Title and Author(s)
15.30 - 15.50	TW 01- Relationships Between Community As An Eco-Museum and Sustainable Community Development: Lessons from Tainan, Taiwan Heng Zhang , Chu-Yao Peng, Ru-Hui Zhang
15.50 - 16.10	SL 08- Relevance of Threshold Spaces in Low-Income Communities of Colombo for Sustaining Social Ties Dilini, Gunathillaka, Shaleeni B A Coorey
16.10 - 16.30	THD 03- Sustainable Housing Design Through Local Community Participation: Case study of Soi wat Lung Ban Community, Samut Songkhram Municipality, Thailand Kundoldibya Panitchpakdi
16.30 - 17.00	Final Discussion and award of certificates of attendance

DETAILED SESSION PLAN

Saturday, 1 November 2014

Session 3C

Theme : Experiments with urban regeneration and socially inclusive Cities
Session Chair : Dr. Dhammika Herath
Session Co-Chair : PInr. P. Prabhakaran
Venue/Time : Hall no: 3 / 15.30 - 17.00

Time	Paper ID, Title and Author(s)
15.30 - 15.50	GHN 01- Order Begets Accountability, Disorder Begets Criminality: A Fundamentally True Reflection of Crime Geographies in Urban Ghana? Martin Oteng-Ababio, Adobea Yaa Owusu, George Owusu, Charlotte Wrigley-Asante
15.50 - 16.10	CA 01- Safe and Inclusive Cities: Research to Reduce Urban Violence, Poverty and Inequalities Jennifer Salahub, Navsharan Singh
16.10 - 16.30	GHN 02- Privatisation of Security: Built-Environmental Manifestations in Accra and Kumasi, Ghana George Owusu, Charlotte Wrigley-Asante, Martin Oteng-Ababio, Adobea Yaa Owusu
16.30 - 17.00	Final Discussion and award of certificates of attendance

ABSTRACTS OF THE PROCEEDINGS

SECOND INTERNATIONAL URBAN DESIGN CONFERENCE
ICCPP-2014

'Cities, People and Places'

Theme:

'Reinventing Cities and Places'

Edited by

Dr. Janaka Wijesundara
Dr. Ranjith Dayarathne

Department of Architecture
University of Moratuwa
Sri Lanka

CONTENTS OF ABSTRACT

Towards Creating Better Cities: Problems and Potentials of Transit Oriented Development as Community Development Tool in Dhaka Nabanita Islam	40
Creating Public Spaces for All: Learning From public Spaces in Colombo Anam, Abdul Azeez	41
Towards Creating Child-Friendly Cities: Allocation of Urban Spaces to Children in Mashhad, Iran Bahar, Manouchehri, Katayoon, Alizadeh	42
Learning from Precedents: Emerging Urban Planning Practices towards Liveable Communities in Dhaka Nawrose Fatemi, Nabanita Islam	43
Place Making Journey: Transition in Urban Public Open Spaces from Ancient to Modern Age Seemantini Soraganvi	44
People, not bricks, create communities and cities Anne Leemans	45
The Role of Collective Memory in Shaping Public Squares; The Case of Republic Square, Male' City Fathimath Shaheen, Janaka Wijesundara	46
A Phenomenological Approach to Engage Students in Learning Urban Ecology Samuel Hammer	47
Enhancing Private Open Spaces in Indonesian Cities: Preparing Children as Future Change Agents Mediastika, Christina E, Nurdiah, A., Julistiono, Eunike K.	48
Digital Archiving of Architectural Heritage Human Esmaeili, Peter Charles Woods, Harold Thwaites, KhairulHazrin bin Hashim	49
Re-Thinking a City Born Housing: For the RMG Workers N.M.Esa, Khan	51
People Places: Attributes that Enable a Convivial Walk Trail in Diyatha Uyana, Kotte, Sri Lanka Ayodhya Jagodaarachchi, Amanda Rajapakse	52

Role of Geometry and Physical Elements on a Footpath in Defining Spaces, Influencing Events and Engendering Movement Patterns Rohit Lahoti	54
Sit Alshai - Tea Lady; Events Taking Place in El Meshtal Street Suha, Babikir Hasan	56
City as a Performative Place: Asala Perahara and the Spatial Dynamics of Kandy Wasana, de Silva	57
Invisible Architecture; Integrating Subterranean Brussels in Active Neighbourhood Revitalization Asiri Dissanayake	58
Art, Cities and Social Enterprise Grace McQuilten	59
Sustaining Sense of Place of Kandy, Sri Lanka: The Role of Commercial Spaces M.N.F. Nushra, U.G.D. Weerasinghe	60
Reduction of Traffic Noise Due to Improved Road Conditions: Evidence from Matara & Hambantota, Sri Lanka S.M.N. Sethunga, J.A.P. Bodhika, W.G.D. Dharmaratna	61
Architecture of Fear': An Analytical Investigation on 'Negative Impression' in Architectural Design Articulated by 'Integrated Spatial and Space-Related Aspects' Nipuni Dayasagara, Prasad Botejue, Senaka Dharmatilleke	63
Urban Green Space in a High-Density City: User Expectations, Accessibility and Experience in Context of Dhaka Nawrose Fatemi	64
The Effect of Street Canyon Geometry on Outdoor Thermal Comfort in Colombo N. G. R. Perera , W. M. S. B. Weerasekara	65
Relationships Between Community As An Eco-Museum and Sustainable Community Development: Lessons from Tainan, Taiwan HengZhang , Chu-Yao Peng, Ru-Hui Zhang	66

Relevance of Threshold Spaces in Low-Income Communities of Colombo for Sustaining Social Ties	67
Dilini, Gunathillaka, Shaleeni B A Coorey	
Sustainable Housing Design Through Local Community Participation Case study of Soiwat Lung Ban Community, SamutSongkhram Municipality, Thailand	68
Kundoldibya Panitchpakdi	
Creation of Appealing Roadside Landscapes Using Elements of Prospect and Refuge Value	69
G.N.Samarasekara , N.B.G. Imali	
The Institutional Fix of Historic Revitalization Behind Property-Led Urban Regeneration: the Comparison Between Taipei and Hong Kong	70
Lan, Cassidy I-Chih ,Xian, Shi	
Collaborative Facilities Management in Urban Regeneration Projects: Problems and Potentials	72
Nilmini Weerasinghe, Yasangika Sandanayake, Prathibhani Bandusena	
Impacts of the Crown Property Developments in the City of Bangkok: Two Case Studies	74
Montouch Maglumtong	
Effect of Street Canyon Materials on the Urban Heat Island Phenomenon in Colombo	75
N. G. R. Perera , K. P. P. R. Samanthilaka	
Social Resilience and Urban Growth Exploring Urban ‘Strategies’ and ‘Tactics’ in Bangkok and Colombo	76
Koen, De Wandeler	
Urban Policy Changes in Chandigarh: Fallibilism or Fatalism	77
SohanLal, Saharan, Manjari, Chakraborty	
Reinventing Cities and Rebuilding Lives: A Case of Development Induced Displaced in Kochi, Kerala	78
S Irudaya Rajan , Ann George	
Development Evictee’s in Colombo: Outcomes of Urban Displacement and Relocation from a Wellbeing Perspective	80
Dhammika Herath, Rajith Lakshman, Asela Ekanayake	
Promoting Socially INCLUSIVE Infrastructure Investments in Asian Cities – The Case of Wastewater Management in Colombo	82

Eva Ringhof, Dilan Kumara

**Order Begets Accountability, Disorder Begets Criminality:
A Fundamentally True Reflection of Crime Geographies in Urban Ghana?** 84

Martin Oteng-Ababio, Adobea Yaa Owusu, George Owusu,
Charlotte Wrigley-Asante

**Safe and Inclusive Cities: Research to Reduce Urban Violence,
Poverty and Inequalities** 85

Jennifer Salahub, Navsharan Singh

**Privatisation of Security: Built-Environmental Manifestations in
Accra and Kumasi, Ghana** 87

George Owusu, Charlotte Wrigley-Asante, Martin Oteng-Ababio,
Adobea Yaa Owusu

“Green is Beautiful”© 88

Sibila Jaksic

PAPER ABSTRACTS

TOWARDS CREATING BETTER CITIES: PROBLEMS AND POTENTIALS OF TRANSIT ORIENTED DEVELOPMENT AS COMMUNITY DEVELOPMENT TOOL IN DHAKA

Nabanita Islam*

Dept. of Architecture, University of Asia Pacific, Dhaka, Bangladesh

ABSTRACT

Peter Calthorpe saw Transit Oriented Development (TOD) as a neo-traditional guide to sustainable community design, rather than an excuse for new infrastructure development. Coming to Dhaka, it has become a mega city with more than ten million inhabitants, and its population is projected to reach 16 million by 2015. Lack of sufficient public transport facilities to support this growing demand and efficient transport management paired with increasing automobile dependency resulting into serious traffic congestion in addition to air pollution induced health hazard, reduced productivity and additional stress on city dwellers. Considering this situation the government of Bangladesh has identified priority issues such as improvement of mass transit system (buses and rail transportations). But in spite of all the detail technical guidelines regarding the transit networks, little evidence has been found regarding how the surrounding community is going to be affected or benefited due to this new transit infrastructures and how these changes can be guided. This is where this paper considers to critically investigating the problems and prospects of mass transit system in Dhaka and potential of TOD as a promising concept for strengthening the local communities. The investigation has been based on examining documented evidences such as national guidelines, international case study and informal social survey in one of the busiest influence zones along the proposed mass transit corridors. The findings focus on the positive perspectives of the local community supporting the TOD and some of the policy and institutional barriers that might hamper the benefits TOD application may yield in the context of Dhaka.

Keywords: Mass transit, Transit oriented development, community development, Dhaka

* Corresponding Author: Nabanita Islam; E-mail- nabanita@uap-bd.edu

CREATING PUBLIC SPACES FOR ALL: LEARNING FROM PUBLIC SPACES IN COLOMBO

Anam, Abdul Azeez*
City School of Architecture, Colombo, Sri Lanka

ABSTRACT

In the wake of heavy investment on public space in and around Colombo it is the responsibility of designers to ensure that public funds are utilized for the creation of context-appropriate public spaces which satisfy the expectations of all its users.

A study was carried out to understand the difference in use and enjoyment of public space by the different socio- economic groups that constitute society today to help decipher the values they associate with it.

The cases chosen for the study were Galle Face, Independence Square (IPS) and Diyatha Uyana.

The analysis of qualities provided at each place in conjunction with the composition of its users and their opinions, helped identify the attributes of public space that appealed to different socio-economic groups.

The study proceeded to identify commonalities and differences in preference amongst these urban social groups, to understand if public space may be neutral; so it suits all, irrespective of our differences.

Keywords: urban, public space, spatial quality, neutrality, socio-economic group, inclusivity

* Corresponding Author: Anam Abdul Azeez; E-mail- anam.a.azeez@gmail.com

TOWARDS CREATING CHILD-FRIENDLY CITIES: ALLOCATION OF URBAN SPACES TO CHILDREN IN MASHHAD, IRAN

Bahar, Manouchehri*

Faculty of Art and Architecture, Science and Research Branch, Islamic
Azad University, Tehran, Iran

Katayoon, Alizadeh

Department of Geography, Mashhad Branch, Islamic Azad University,
Mashhad, Iran

ABSTRACT

Children are the future contributors and decision makers of the world. They are equal citizens with the same rights as adults and are valued as citizens of today, rather than future citizens or citizens of tomorrow. The day is coming when the majority of the world's children will grow up in cities and towns. Every year, the world's urban population increases by approximately 60 million people. Most of this growth is taking place in low- and middle-income countries. Asia is home to half of the world's urban population. It is now thought that six out of 10 of our future children will grow up in cities, in poverty, at risk. Yet, most cities are largely unfriendly to children and have governments that take few steps to address children's needs and assess children's priorities. This paper aims to review the urban facilities per capita assigned to children in the urban spaces of Mashhad city. In this study, the desired information collected by referring to the documents and based on these information the conclusion has been made. The findings indicate that the rate of facilities per capita assigned to the spaces for children in the development plans of Mashhad do not meet the needs of this part of community. Therefore, pay attention to the needs of children in the development plans of Mashhad and moving toward child-friendly city can provide better living conditions not only for children but also for all citizens.

Keywords: Child-friendly City, Children, Urban Spaces, Urban Development Plans, Mashhad

*Corresponding Author: Bahar Manouchehri; E-mail- bahar.manoochehri@yahoo.com

LEARNING FROM PRECEDENTS: EMERGING URBAN PLANNING PRACTICES TOWARDS LIVABLE COMMUNITIES IN DHAKA

Md. Nawrose Fatemi, Nabanita Islam *

Department of Architecture, University of Asia Pacific (UAP), Dhaka,
Bangladesh

ABSTRACT

The objective of this paper is to reveal the shift of thoughts in city planning in terms of livability demonstrated in one of the newly planned satellite towns of Dhaka city. Ever since the emergence of the term 'livable cities' back in 1980's by IMCL (International Making Cities Livable LLC), considerable amount of research and practice have been oriented towards understanding how the contemporary cities should grow or be planned for livability, in terms of physical, socio-economic and cultural aspects. Cities around the globe demonstrate diversified vision, policies and strategies for achieving these desired goals. This paper takes Dhaka city as a case study to critically investigate the intentions and attempts of urban planning and design practice focused on the livability aspects of the city. The human settlement of Dhaka city can be traced back as early as the 12th century. Till then, the city received attention, negligence, natural calamity, political instability and went through a number of philosophical views as well as planning proposals for its development. In all its efforts, the intrinsic components of livability were much less emphasized due to the major thrust on city's physical constraint, limited land resources along with negligence in detail area and neighborhood planning. But recent efforts in one of the newly planned satellite town Purbachal shows evidence of change in the traditional paradigm of planning practice. The ultimate objective of this paper is to reveal the points where the proposed master plan of Purbachal succeeded or failed to embrace the principals of livability learnt from earlier precedence of greater Dhaka city. The findings of this paper have been extracted from the studio exercise of Urban Design Studio of the Department of Architecture, University of Asia Pacific. The study was mainly based on case study, examining documented evidence and map & model study along with expert interview.

Keywords: Livability, Livability dimension, Livability Indicators, Livable Community, Satellite townships, Planning Initiatives,

* Corresponding Author: Nabanita Islam; E-mail- nabanita@uap-bd.edu

PLACE MAKING JOURNEY: TRANSITION IN URBAN PUBLIC OPEN SPACES FROM ANCIENT TO MODERN AGE

Seemantini Soraganvi*

SMAID Architecture College, Anand, Gujarat State, India

ABSTRACT

Urban planning and design has proven to be an important element in shaping life styles, solving problems and giving new ways of living in the urban arena. The quality of urban life is one of the big goals that the field tries to reach. Urban open spaces are known to enhance the quality of urban life. So, every city needs these spaces. The planning and design of urban open spaces have been practiced in different parts of the world in different ways. The practice and use of these spaces differed from place to place as well as from time to time. A good approach in the planning and designing of these spaces is to first study the past and current trends of urban open space usage in a place. The paper covers a general history and development of urban Square from Ancient to Modern Age and tries to demonstrate transition occurred in design. The development and current use of this space will indicate the direction of urban open space trends in the city. This will in turn help the future approaches in planning and design of such spaces. So, the paper includes the sustainable approaches for design of urban squares for better community interaction in urban life.

Keywords: Urban Square, study, past and current trends, transition sustainable approaches.

* Corresponding Author: Seemantini Soraganvi; E-mail- seema_sorganvi@yahoo.com

PEOPLE, NOT BRICKS, CREATE COMMUNITIES AND CITIES

Anne Leemans

Fontana identity & design, Belgium

ABSTRACT

The Tsiluba word TSHISALU [Congo] for public square, market -- refers to a space yet more exactly to the activities of people on the square. The Amharic 'megenangna' (መገናኛ) and the Turkish 'meidan' refer to a meeting square and carry the connotation of gathering of people. The Tamil word 'Ambalama' (originally a resting place for travelers in Sri Lanka, now also a village meeting place) also refers to the use that is made of the place. We can conclude from this that these terms do not first refer to a built, structured or constructed environment, but rather to the use people make of a such a space: gather, talk, discuss, propose, agree, buy, sell, have fun, or even disagree. Similarly the Zulu and Xhosa words 'indaba' refer to a conference, gathering of people under a tree in the village. These words are not neutral. Semantically they carry an image or emotion. In this sense building on traces from the past encourages city dynamics, inclusiveness and social cohesion.

Physical public space is the region, the heterotopia, where to men and women should have free and safe access and where generations and cultures learn to observe, know and communicate with one another. In this public space formal and informal (not illegal) can interact and structure and convention can meet, adopt or clash with spontaneity and creativity.

Squares and piazzas combine the function of observation point, market, meeting and/or as a transit and waiting hub for busses and taxis and will allow visitors to pass-by, communicate and connect. It is also the meeting place where explicit and implicit rules are to be observed. Simultaneously it is the space which requires coherent planning with regards to the surrounding built environment.

Key Words: Communities, Cities, Squares

THE ROLE OF COLLECTIVE MEMORY IN SHAPING PUBLIC SQUARES; THE CASE OF REPUBLIC SQUARE, MALE' CITY

Fathimath Shaheen, Janaka Wijesundara*
University of Moratuwa, Sri Lanka

ABSTRACT

It is a seeming paradox that the balance between society and built environment has a constant change as we evolve repeatedly, and our collective identity mean to facilitate new public spaces to boost our public life, as well re-shaping existing spaces. The public spaces we design directly or indirectly influence to our behavior, experiences and social interactions which in turn reflect how we respond to our built environment. Even though urban designing and planning paly wider role of this evolving procedure, sometimes some proposed design does not respond to the vital role of public spaces and unknowingly break the relationship between man and his environment by incorporating some ambiguous attributes.

This research aims to study the relationship between collective memory and public squares and the influence of public collective memory to shape and re-shape, to revitalize and utilize today's public squares. The qualitative and quantitate data to answer the research questions were gathered by conducting user survey, visual documentation and interviewing with community focus group.

As a cases study, a particular example is the Republic Square of Male' city, where once the strong sense of community seen, however today the square, seems to be an isolated piece of public realm. By combining the theoretical background with qualitative research and quantitative methods, the paper aims to provide a better understanding on the underlying issues and possible solutions. Findings indicate that the success of the public squares is based on the experiences and rationalities of the urban past as evidenced by the historical continuity which characterizes the relationship between collective memory of its people and the public spaces.

Key Words: Collective Memory, Public Space, Public Square, Male', Sense of Belonging, Revitalizin

* Corresponding Author(s): Fathimath Shaheen and Janaka Wijesundara; e-mail: _fshahyn@gmail.com ; jawij@yahoo.com

A PHENOMENOLOGICAL APPROACH TO ENGAGE STUDENTS IN LEARNING URBAN ECOLOGY

Samuel Hammer
Boston University, Boston, USA

ABSTRACT

Urban ecology is a complex interaction of humans, the built environment, and nature. The challenge is to teach this complexity effectively, no matter which students we are addressing in a university setting. How can we help students face challenges to learning this difficult material within constraints of time, physical conditions, and conceptual difficulty? A meaningful study of urban ecology should take students out of their comfort zone to engage with questions of complexity. Methodologies such as observation, contemplation, and serious play encourage critical thinking and help students tackle complex concepts that require abstract reasoning. These behaviors structure and guide an aesthetic experience that subsequently informs the cognitive-rational science of urban ecology. Observation in its many forms sets the stage for all further learning activities. Reflection allows students to develop ideas about their own learning and consider new perspectives. Serious play, which includes in-class model-building, excites students to work in a hands-on, collaborative environment. Finally, social media provide a tight focus for communication, encouraging students to "instantly" share their discoveries in a visual context while using the vocabulary of science. These methodologies and the abstract reasoning they generate can be carried forward for use in subsequent projects, in which student innovation and designing-outside-the-program are rewarded.

Keywords: Ecology, abstraction, complexity, phenomenology

ENHANCING PRIVATE OPEN SPACES IN INDONESIAN CITIES: PREPARING CHILDREN AS FUTURE CHANGE AGENTS

Mediastika, Christina E. *, Nurdiah, Esti A. and Julistiono Eunike K.

Department of Architecture, Petra Christian University, Indonesia

ABSTRACT

House expansion in many Indonesian housing has triggered lack of private open space and thus lack of rainwater absorption space. This causes inundation and flood during rainy season. Earlier research showed that housing expansion was driven by increasing of family member which supported by increasing of family income. House owners' awareness of private OS was sufficient, but their knowledge was limited. Awareness alone is not enough to fix the problem. In addition, directly repair OS deficiency that has happened today is not practical. Thus, assigning the younger generation to become an agent in fixing this problem is an ideal concept. A program using fun-learning methods, such as creating mockups is planned. Approximately 770 students participated in this program and this study concluded that children absorb the knowledge well and expected to be excellent future change agents in improving the quality of their places and cities. This is demonstrated by the very alive discussion and the mockups that fulfilled what has been taught. Seventy percent was designed in well condition (ie. OS availability, vegetation, and windows for air circulation and natural lighting) and 20% was designed in excellence with creative and unique OS and building's façade.

Keywords: private open space, children, fun learning, mockups, change agents

* Corresponding Author: Christina E. Mediastika; E-mail: eviutami@petra.ac.id

DIGITAL ARCHIVING OF ARCHITECTURAL HERITAGE

Human Esmaeili* , Peter Charles Woods

Faculty of Creative Multimedia, Multimedia University, Cyberjaya

Harold Thwaites, Khairul Hazrin bin Hashim

Centre for Creative Content and Digital Innovation, University of Malaya,
Kuala Lumpur

ABSTRACT

Malaysia is experiencing disappearance of some of its post-independence architecture due to redevelopment. Historical buildings that could have been archived as national heritage have been demolished, tagged for demolition or currently are being demolished. Suleiman Courts, the first high-rise residential buildings in Kuala Lumpur were demolished in 1986. Pekeliling Flats, the first prefabricated low-cost housing in Malaysia and second high-rise residential buildings in Kuala Lumpur are now being demolished. Even the first drive-in restaurant in Malaysia is tagged for demolition regardless of the historical memories for its loyal fans. Other historical buildings are deteriorating in use without considering the importance of preservation.

One example is the oldest geology department in Malaysia located in University of Malaya, Kuala Lumpur, which had a unique method of construction at the time it was built. The building is still in use but has been insensitively modified from its original state. In this situation digital archiving seems to be an alternative that at least keeps the records of a historical building before it is too late. It is important to clarify that digital archiving of architectural heritage is not solely because buildings are being demolished. A project 'Malaysia Post-Independence Architecture Atlas' is being carried out by University of Malaya, in collaboration with Multimedia University.

This project aims for available data to be digitally captured and archived for future purposes.

In the first stage 30 target buildings (selected based on their cultural importance) were successfully archived. The main priority after digital capture was to categorize the collected data in a way that can be used by

* Corresponding Author: Human Esmaeili; E-mail- human.esmaeili@gmail.com

different audiences. The following is a summary of steps taken in this project by reviewing different aspects of digital archiving of architectural heritage.

Keywords: Architectural Heritage, Digital Archiving, Capturing, Virtual Reconstruction

RE-THINKING A CITY BORN HOUSING: FOR THE RMG WORKERS

N.M. Esa, Khan*
Studio ESAABRAR,
University of Asia pacific (UAP)

ABSTRACT

Most garment workers in Dhaka city live in inhuman conditions in the informal settlements under poverty and in a very unhealthy and miserable condition; and within this filthy situation they are paying almost half of their earnings as rent. These are the people who contribute to the success of garment economy in Bangladesh. Yet their role in the economy and their rights are overlooked by the government and the garment owners. Among these, habitation and lack of domestic spaces is one of the major concern. A widespread negligence towards the RMG worker's housing need inhibit the prospect of finding a viable solution to this problem. Public housing schemes hardly cater for the RMG workers, and its limited provisions are grossly inadequate. Given this background, this paper has conducted a research work on the existing habitation need of the RMG workers and at the end of the study, some initial recommendations have been placed to improve the present conditions of the garment worker's housing and their situation related with habitation, domestic spaces and spaces surrounding their living areas.

Keywords: Dhaka, RMG, housing, habitation, domestic spaces, urbanization

*Corresponding Author: N.M. Esa Khan, email: esacbrar@yahoo.com

PEOPLE PLACES: ATTRIBUTES THAT ENABLE A CONVIVIAL WALK TRAIL IN DIYATHA UYANA, KOTTE, SRI LANKA

Ayodhya Jagodaarachchi, Amanda Rajapakse*
Department of Architecture, University of Moratuwa

ABSTRACT

Introducing 'green walk-trails' to urban environments in Sri Lanka has become a popular intervention in the recent practice of urban development. People have embraced these trails as they fulfil the need for breathing-places/lungs associated with open green areas. In addition to beautification of the urban fabric, walk-trails serve a larger purpose of offering urban residents the opportunity to relax, rejuvenate and achieve mental and physical wellbeing.

In order to fulfil such objectives walk-trails need to be 'convivial' places. Conviviality is an all-encompassing concept that emphasises the importance of fine grain, local nuances and adaptability that is the root of a more humane approach to urban development that encourages positive social interaction. Conviviality is 'place-specific' and based on an amalgamation of Geographical, Physical and Sensorial attributes.

The objective of the study was to explore key attributes that contribute towards enabling a convivial walk-trail in the specific context of "Diyatha Uyana", Sri Lanka. Based on the theoretical framework established to analyse conviviality, the analysis was 'User-centred' and 'Place-centred' to explore the qualitative aspects in depth.

The main data gathering technique of the study was through narrative-mapping which incorporated cognitive maps supported by a narration. Data gathered were analysed via content-analysis in order to come-up with necessary interpretations.

It was found that the sensorial experiences were generated by the specific geographical and physical attributes, the vitality and dynamism in the way they combined and enabled unique micro contexts within the overall place. This enables strong visual and non-visual perceptions of the place. Such perceptions are key motivating entities that attract people to

*Corresponding Author: Amanda Rajapaksa; E-mail – amandaraj@gmail.com

a public place, which is a decisive factor in the successful usage of public places.

Key words: conviviality, place-centered public spaces, green walk-trails.

ROLE OF GEOMETRY AND PHYSICAL ELEMENTS ON A FOOTPATH IN DEFINING SPACES, INFLUENCING EVENTS AND ENGENDERING MOVEMENT PATTERNS

Rohit Lahoti*

Visvesvaraya National Institute of Technology, Nagpur, India

ABSTRACT

Physical environment is one of the factors that influences the activities and spaces formed to a varying degree and in many different ways. Footpaths form a significant micro-place of the physical urban environment. Primarily, a path for pedestrian accessibility and acts as an important public place for the city. In the scenario of socio-economic conditions in developing countries, owing to high poverty rate, unemployment and rural-urban migration, it is beneficial for people to adopt the informal way of using this entity of footpath. Moreover, due to the lack of efficient monitoring, footpaths, in this part of the world, have multiple utility factors, mainly social, economic and cultural.

The paper explores the role of the physicality of the footpath in the manifestation of spaces – tangible/intangible and the diverse activities. The quest is into identifying the meaningful relationship of geometry and multiple physical elements on a footpath with the quality of the public realm generated. The physical elements are analysed with reference to the context of certain Indian cities.

These physical elements have been qualitatively documented by means of surveys and a subjective understanding through observations of the sites taken for study.

A comprehensive understanding of these elements in the public realm revealed their influence in regulating certain movement patterns. The justifications for a particular path being more frequented are a matter of function and aesthetics rather than just intuition. This micro-understanding of various physical elements and the behaviour patterns observed on footpath can help in long-term street planning measures, at various scales. The paper highlights vital approaches in providing certain design opportunities with respect to the physical elements and the geometry of the footpath, thus improving the public realm of the street and of the place.

* Corresponding Author: Rohit Lahoti; E-mail- rohitalahoti43@gmail.com

Keywords: Footpath, urban design, physical elements, geometry, behaviour pattern, physicality, spaces, events, movement patterns, economic, social, cultural.

SIT ALSHAI - TEA LADY; EVENTS TAKING PLACE IN EL MESHTAL STREET

Suha Babikir Hasan
University of Bahrain, Bahrain

ABSTRACT

Sit Alshai is a Sudanese local term that means the lady who sells tea, coffee and other drinks to passersby. There are many issues related to the Tea Lady, as she represents the socio-economic changes in the Sudanese community. These ladies get an income by appropriating parts of the streets of the city and transforming them to temporary cafes where people drink tea and socialize for a while. The authorities however do not approve their business and many times both the government and opposition parties use them as political leverage. The paper will investigate this phenomenon and the effects of it on the urban society. The Tea Ladies can be found in many places in Khartoum where this happens, mostly concentrated in the centre. However this paper will focus on documenting Tea Ladies located on one street in Khartoum, El Meshtal Street. The road has been chosen specifically because of its rising importance in the past years and because it is located in an upper-class neighbourhood. The existence of the Tea Ladies on that street symbolizes juxtaposition on that street that is worth being studied and documented.

Keywords: Adaptation – Informalities – Juxtaposition – Khartoum – Placemaking – Reprogramming

CITY AS A PERFORMATIVE PLACE: ASALA PERAHARA AND THE SPATIAL DYNAMICS OF KANDY

Wasana de Silva*

Department of Architecture, University of Moratuwa, Sri Lanka

ABSTRACT

Traditional cities are dynamically re-enacted through regular performances and rituals. Kandy city is described within this performative phenomenon in order to understand the dynamics of the place. Phenomenology is the research methodology. A theoretical framework, synthesizing key concepts of place, sense of place, dwelling, Chora, becoming, non-representational landscape theory and performance theory is developed and used to examine performance of the Asala perahara ritual process in Kandy city. Case study findings illustrate that, Asala perahara marks geometrical patterns, in the landscape connecting different locations, rituals, people and the invisible dimensions of the place. Unfolded place within this cultural drama, experiencing natural – cultural setting and body performances is a dynamic process. Spiritual experience is significant in these ritual performances and built forms, inseparable from people and the place. Analysing of Asala perahara explains that city is understood as an inside enclosed by three mountains, reflected in the city form and architecture of Kandy. This reveals important guide lines for city conservation and developments.

Keywords: Sense of place, Chora, Performing place, Asala perahara, Nuwara (Kandy: a traditional city concept)

* Corresponding Author: Wasana de Silva ; E-mail- wasanade@yahoo.com

INVISIBLE ARCHITECTURE; INTEGRATING SUBTERRANEAN BRUSSELS IN ACTIVE NEIGHBOURHOOD REVITALIZATION

Asiri Dissanayake*

Department of Architecture, University of Leuven, Belgium

ABSTRACT

Brussels is a city with immense potentials and opportunities. Being at the heart of Europe, it is coherently connected with rest of the world both physically and figuratively. However, these opportunities and connections constantly attract people from around the world; giving way to a heterogenic society of diverse ethnicities and cultures. This heterogenic society creates a strong tension in some quarters of Brussels – especially when there is a prominent arrival magnet as with the case of neighbourhood Fontainas with Brussels south railway station in close proximity. As with any infrastructure project, the proposed metro and tram station of Lemonnier, is a potential for not only the neighbourhood of Fontainas but also for entire metropolis of Brussels. The proposed MetCom program incorporating the Brussels underground gives these commonly mono-functional mobility infrastructure projects a new meaning; transforming them into effective urban public spaces. Introduction of this proposed novel logistic system for urban freight transportation allows new possibilities for the use of existing unused space within the metro stations as well as in the adjoining gray buildings. The project not only helps revitalize the neighbourhood by introducing a new economy but also encourages better interaction of the heterogenic society by providing a place for activity. The project however does not create an architectural object; on the contrary, it creates an invisible architecture.

Keywords: Invisible Architecture, Neighbourhood revitalization, Brussels, Logistic system, Mobility infrastructure

* Corresponding Author: Asiri Dissanayake; E-mail- asiridi@gmail.com

ART, CITIES AND SOCIAL ENTERPRISE

Grace McQuilten*

Centre for Art, Society & Transformation, RMIT University, Australia

ABSTRACT

This paper explores the potential role of art-based social enterprises in contributing to sustainable urban development. It considers the examples of two social enterprises on opposite sides of the globe, and with contrasting relations to the “urban”; the Pacific Women’s Weaving Circle in the heart of inner-city Melbourne, Australia and Dzidefo Women’s Cooperative which traverses the rural context of Kpando, Ghana, with urban markets in Africa and the USA. Both enterprises use the vehicle of art to create opportunities for communities facing economic and social hardship. This paper approaches the field of social enterprise with a cross-disciplinary perspective that combines empirical, art historical and cultural studies methodologies to provide a deeper and more nuanced understanding of how communities manage the complexities of simultaneously pursuing economic, artistic and social development goals. At the point of rapid growth in this field, it considers the conditions for success, and potential risks, of art-based social enterprises in different geographic and urban contexts internationally.

Keywords: art, cities, development, social enterprise

* Corresponding Author: Grace McQuilten; E-mail- grace.mcquilten@rmit.edu.au

SUSTAINING SENSE OF PLACE OF KANDY, SRI LANKA: THE ROLE OF COMMERCIAL SPACES

Nushra, M.N.F., Weerasinghe, U.G.D.*

Department of Architecture, University of Moratuwa, Sri Lanka

ABSTRACT

Developing a historically important city, while retaining the essence of that place is a crucial issue confronted by architects, urban designers and planners worldwide. It should neither be a repetition of elements nor total disregard of conservational norms: if that city is an urbanized living city, many facets such as public services, commercial activities and conservation issues require consideration. Understanding the sense of place is considered as the means of ensuring healthy and sustainable development in a historical city. Sense of place is always related to human interaction with places and is reflected in commercial spaces, which have the potential of creating an identity to a city. Therefore the objective of this research is to explore the sense of place in commercial spaces of a living historical city.

Key words: historical city developments, urban conservation, sense of place

* Corresponding Author: Weerasinghe, U.G.D.; E-mail- gamini.weerasinghe@gmail.com

REDUCTION OF TRAFFIC NOISE DUE TO IMPROVED ROAD CONDITIONS: EVIDENCE FROM MATARA & HAMBANTOTA, SRI LANKA

S.M.N. Sethunga*, J.A.P. Bodhika, W.G.D. Dharmaratna
Department of Physics, University of Ruhuna, Matara, Sri Lanka

ABSTRACT

“Road traffic noise” is becoming a serious problem for civilians living close to roads with heavy traffic in Sri Lanka. According to the statistics of Department of Motor Traffic, Sri Lanka, the total number of registered vehicles has been increased up to 5.07 million by the end of July-2013. The increase of motor vehicles with inadequate road conditions would contribute to enhance the noise pollution. Previous studies had found that some citizens living in urban areas exposing to heavy noise have developed hearing disorders. This matter has been often overlooked in developing countries, in contrary, some developed countries which have better road conditions, have started to use materials that produce low tire noise and good sound absorption surface layers for roads. In this study, a comparison of noise level is performed before and after the improvement of road conditions in selected urban areas in southern region of Sri Lanka. All measurements were carried out before and after rehabilitation and widening of respective roads. B&K Type-2250 hand held analyser was used to measure noise level and experiments were carried out in 2013, before the rehabilitation, and 2014, after the rehabilitation, respectively. Traffic volume of the roads studied was counted manually. Noise data were recorded at distances of 200 m for Class A and 400 m for Class B roads along the sides of selected roads. A-weighted equivalent continuous sound pressure level at each location, L_{Aeq} , for 15 minutes time period was measured. An internationally recommended IMMI noise mapping software was used to map the noise distribution. Noise maps constructed before and after the rehabilitation of roads were compared. The average noise levels in the vicinity of Class A and Class B roads studied have decreased the noise level by 0.35 - 12.03 % after widening/improving the roads. The maximum drop of noise contour for Class A highway was found to be 3.5 dB or 6.2 % even with the increase of traffic volume by 61.5% during the period studied. For Class B roads a maximum of 5.8 dB or 12.0 % drop of traffic noise level was recorded. The width of the highest noise contour (having $L_{Aeq} = 75-80$ dB) was decreased by 74.3 % and 30.3 % for Class A and Class B roads respectively. It can be concluded that widening and improving the

* Corresponding Author: S.M.N. Sethunga.; E-mail- nsethunga@gmail.com

conditions of the roads have effectively reduced the traffic noise pollution, even though the volume of traffic has been increased. It also proves the importance of using noise maps for the development and redesign of cities as the removal of noise-pollution could contribute so much to better quality of life in Sri Lankan urban cities.

Keywords: Road traffic noise, Noise level variation (NLV), Noise map, Road improvements, L_{Aeq} value

‘ARCHITECTURE OF FEAR’: AN ANALYTICAL INVESTIGATION ON ‘NEGATIVE IMPRESSION’ IN ARCHITECTURAL DESIGN ARTICULATED BY ‘INTEGRATED SPATIAL AND SPACE-RELATED ASPECTS’

Nipuni Dayasagara, Prasad Botejue, Senaka Dharmatilleke
Department Of Architecture, University Of Moratuwa, Sri Lanka

ABSTRACT

Architecture of fortification; iron bars and iron spikes, cinder blocks and barking dogs, razor ribbon wires, glass spines and security alarms- The city has been armed with apparent evidences all over the city. The built fabric has been transformed into an ideal representation of ‘contemporary fears’ of citizens. Often people scare to use lifts, narrow walkways, rear staircases, darken basements, high roof tops or largely open public places. In such places they fear being murdered, abused, abducted, or stabbed.

The investigation primarily measures the ‘required sense of safety’ in an urban public realm with respect to the architectural design principals, spatial and space related aspects. The four case studies of the research will be focused on ‘public buildings’ filling the ‘research gap’ within the field of study existed between two main levels of ‘city fabric’ and ‘individual dwelling’. The research outcome reveals the ‘controlling power’ of ‘fear in space’ that has influenced user psychology and behavior accordingly, including 21 integrated architectural aspects behind the cause.

Concurrently, the investigation emphasizes possible design interventions to diminish such negative impressions composing ‘positive motives’ which supports public cohesiveness, interaction and free movements in built-sphere in which architectural design becomes a ‘tool’ in order to manipulate ‘sense of safety’.

Keywords: space based fear, Negative Impression, Spatial Science, integrated design Aspects, architectural space psychology

URBAN GREEN SPACE IN A HIGH-DENSITY CITY: USER EXPECTATIONS, ACCESSIBILITY AND EXPERIENCE IN CONTEXT OF DHAKA

Nawrose Fatemi*

Department of Architecture, University of Asia Pacific (UAP), Dhaka,
Bangladesh

ABSTRACT

This paper starts from the debate with 'the problem of the simplistic notion that more green spaces are required when density is increased is that it does not consider the characteristics of people living in higher density environments'. In Dhaka, a critical imbalance has been observed between users' need and aspiration of the urban green space use and the available quantity they benefit from. The City possesses only 0.12 acres greeneries and open areas per thousand population, while it needs to devote a range between 6.25 and 10.5 acres of total open space per thousand population, according to NRPA (National Recreation and Park Association recommendation). With the phenomenal rise in the level of urbanization and urban growth, the City suffers the loss of its precious open space for urban infill. And the gap between the amount of open space required for a healthy living and the amount of open space available continues to widen. As the City is densely developed, it leaves little scope to have more open spaces inside. Consequently, concentration should be paid in retaining, up keeping and exploiting the potentials of existing urban open spaces, greeneries, and lakesides and improve their quality for urban life. This paper analyzes the urban green space use and their potentials by a correlational study between DHANMONDI Lake & Lakeside Green Spaces and HATIRJHEEL & Lakeside Green Spaces. And a number of observations, interviews and informal questionnaire survey on the users has been conducted to study the user accessibility, their expectations and the manifestations of these user-perceptions in the day-to-day use.

Keywords: Urban Green Space, High-Dense City, User Perceptions, Accessibility, Physical Use

*Corresponding Author: Nawrose Fatemi, email: nawrose@uap-bd.edu

THE EFFECT OF STREET CANYON GEOMETRY ON OUTDOOR THERMAL COMFORT IN COLOMBO

N. G. R. Perera* , W. M. S. B. Weerasekara
Department of Architecture, University of Moratuwa, Sri Lanka

ABSTRACT

Although life in the equatorial tropics is largely an outdoor phenomenon, modern urban development has by and large failed to facilitate such living in a climatically pleasant manner. The approach then, should be an attempt to make the equatorial urban outdoors thermally comfortable. (Emmanuel, 1993)

The primary approach to the research is to quantify and compare the thermal comfort implications of critical canyon geometry in warm humid Colombo. It explores street canyons that are currently existing as well as projected under the Sri Lanka, Urban Development Authority Development (UDA) Plan for 2020. Thus, the task is twofold; to report on the thermal comfort effects of the most widespread urban canyons in the city, and secondly to project the change that will occur with the growth of Colombo's built fabric, therefore canyon geometry.

The urban fabric simplified using the Local Climate Zone (LCZ) system and surveyed shows the most predominant street canyons essentially encompass the compact low-rise and mid-rise areas of the city. The research reveals that thermal comfort cannot be achieved within the existing and projected urban canyons, for the peak time of the day.

Keywords: Outdoor Thermal Comfort / Urban Heat Island (UHI)/ Urban Morphology/ / Sky View Factor (SVF) / Height to Width Ratio

*Corresponding Author: E-mail – nareinperera@gmail.com

RELATIONSHIPS BETWEEN COMMUNITY AS AN ECO-MUSEUM AND SUSTAINABLE COMMUNITY DEVELOPMENT: LESSONS FROM TAINAN, TAIWAN

Heng Zhang^{*}, Chu-Yao Peng, Ru-Hui Zhang
National Cheng Kung University, Tainan, Taiwan

ABSTRACT

Increasingly serious environmental degradation has given new emphasis to the need for sustainable development. Such development takes the community acts as the basic unit for holistic implementation. One emerging development approach is referred to as the “eco-museum” strategy which seeks to strengthen a community based on its unique resources, create economic benefits, and protect local heritage. This study describes the application of the eco-museum strategy to 36 communities in Tainan, Taiwan, in an attempt to identify elements of best practice and to develop a model for other the development of eco-museums in other communities.

In a multidimensional scaling analysis, the study uses landscape, culture, lifestyle, and human resources as items to build the research framework. A questionnaire was applied to survey 36 communities in Tainan to identify community characteristics which lend themselves to the successful implementation of the eco-museum approach.

The results suggested that the Chi-Chih community could serve as a model for eco-museum development. Through cognitive map analysis, the distribution points of each community type are found to impact development feasibility and controls. It is expected that the eco-museum strategy will increase local residents’ interaction with their distinct cultural and environmental resources, and facilitate the development a “think globally, act locally” Mindset.

Keywords: Eco-museum, sustainable community, MDS, perceptual map, ideal point

^{*} Corresponding Author: Heng Zhang; E-mail- changlin@mail.ncku.edu.tw

RELEVANCE OF THRESHOLD SPACES IN LOW-INCOME COMMUNITIES OF COLOMBO FOR SUSTAINING SOCIAL TIES

Dilini, Gunathillaka^{*}, Shaleeni B A Coorey
Department of Architecture, University of Moratuwa, Sri Lanka

ABSTRACT

Low income communities in Colombo represent life styles that are established through interdependency and strong social ties. Inadequate resources, land and services are some reasons for interdependence and strong social bonds act as mechanism for facing day to day challenges. Threshold spaces are observed within these settlements where social activity, exchange and interaction take place. They play an important role as spaces where social ties are reinforced. Hence the existence and function of such spaces are critical in sustaining these communities.

However during resettlement such socio spatial relationships and the threshold spaces are ignored and the opportunity for social ties is lost. Hence this paper aims to identify and acknowledge the threshold spaces existing in low income settlements. Further the architectural elements that shape such spaces are explored and understood for shaping future settlements.

Data is collected in three selected cases in the Kotahena area. A variety of threshold spaces were observed in these cases. The spatial formations and architectural elements in threshold spaces were explored using maps, sketches and photographic studies. The social activity and interactions were explored using systematic observations, activity maps and interviews. Ten residents were interviewed from each case. This research will be beneficial to identify how different qualities such as, separation, connection, communication, differentiation, transition, interruption, continuity, boundary and crossing in threshold spaces have been gained without interfering with social relationships and by composing architectural elements in various ways to the satisfaction of the commune.

Keywords: Threshold Space, Social ties, Low Income Community, Colombo.

* Corresponding Author: Dilini Gunathillaka; E-mail- dilinigunathillake@yahoo.com

SUSTAINABLE HOUSING DESIGN THROUGH LOCAL COMMUNITY PARTICIPATION: CASE STUDY OF SOI WAT LUNG BAN COMMUNITY, SAMUT SONGKHRAM MUNICIPALITY, THAILAND

Kundoldibya Panitchpakdi*

Department of Housing, Faculty of Architecture, Chulalongkorn
University, Bangkok, Thailand

ABSTRACT

This article describes a three-year process of local participation in the sustainable housing design in Soi Wat Lung Ban Community, which was selected through a participatory process. Adapting Hamdi's (1996) Participatory Action Planning (PAP) concepts, the research team collaborated with members of 14 communities and government agencies. This article is an evaluation of the process to implement a model of architectural design for vernacular housing and factors, which were obstacles to successful outcomes.

Keywords: community, participation, Eco-housing, local wisdom, sustainable housing design.

* Corresponding Author Kundoldibya Panitchpakdi; E-mail – kpanitchpakdi@gmail.com

CREATION OF APPEALING ROADSIDE LANDSCAPES USING ELEMENTS OF PROSPECT AND REFUGE VALUE

G.N. Samarasekara*

Department of Civil Engineering, Faculty of Engineering, Sri Lanka
Institute of Technology

N.B.G. Imali

Department of Civil and Environmental Engineering, Faculty of
Engineering,
University of Ruhuna

ABSTRACT

Aesthetic improvements to roadside landscapes present many challenges to the road professionals. Lack of documented knowledge of local landscape preferences force them to import design treatments that may not evoke any preference feeling within the locals. Landscapes with high prospect/ refuge values show high preference levels. Prospect can be defined as being able to see/understand more information while Refuge is defined being able to have a refuge. This study is aimed to identify preferable roadside design elements due to the high prospect/ refuge value associated. In an experiment participants viewed a set of 15 streetscape videos and identified prospect and refuge landscapes giving reasons for selection. Using, a standard qualitative content analysis two, three-step hierarchical conceptual models were developed to describe prospect and refuge landscapes.

The prospect symbols were evoked from natural and artificial landscape elements. At a more detailed level many Sri Lankan specific symbols were identified for the designers to work on. These included presence of coconut/ mango trees or painted structures, bus stand, fruit stalls, fish stalls. The refuge symbols resulted from natural & artificial landscape elements, space demarcation, road safety items, well designed & constructed roads, well maintained roads, place to stay, activities, road boundary demarcation, road structures, separated walking spaces. The outcomes of this work can be extended to design preferable roadside landscapes that are meaningful to road users.

Keywords: Prospect, Refuge, Roadside Landscape Symbolism, Design Elements

* Corresponding Author: E-mail – ganganlk@yahoo.com

THE INSTITUTIONAL FIX OF HISTORIC REVITALIZATION BEHIND PROPERTY-LED URBAN REGENERATION: THE COMPARISON BETWEEN TAIPEI AND HONG KONG

Lan, Cassidy I-Chih*

Department of Real Estate and Built Environment, National Taipei
University, Taipei, Taiwan

Xian, Shi

Department of Public Policy, City University of Hong Kong, Hong Kong

ABSTRACT

Since the 1990s, the content of urban redevelopment has been sharply transformed and including vibrant elements from economic to cultural, historic, social, and environmental considerations, which is termed as the transformation from bulldozed reconstruction to sustainable regeneration. In addition, the agencies involving in the process of redevelopment have been broadened and blurred the boundary between public and private sectors. With the rise of intercity competition, the public-private-partnership (PPP) has taken as the modus operandi to implement the governing capacity of entrepreneurial city and the foundation to achieve successful redevelopment appealing to private actors – not only businessmen, developers and, financiers but also NGOs, tourists, and talents. The paper argues that the logic of urban regeneration is often property-led and requires non-economic elements (e.g. culture, creativity, history, green, and water) enlarging the niche of property market in that they can help upgrade the added values of property-led regeneration. Meanwhile, non-economic elements are functioned as a new institutional fix to alleviate the internal contradictions of entrepreneurial governance in general and property-led regeneration in particular to legitimize the pro-business agenda behind the mechanism. We take Taipei and Hong Kong as the cases to illuminate the argument. Both cities have undergone the heavy burden of living due to the fancy property speculation since 1990s and face the contestations from grassroots level for community livability. We particularly focus on two policies – the Urban Regeneration Station (URS) in West Taipei and Revitalization of Industrial Buildings (RIB) in East Hong Kong to explore how the property-led ideology has embedded in the experiments of historical revitalization and what are the problems these policies have encountered.

* Corresponding Author: Cassidy I-Chih Lan; E-mail: yichilan@gmail.com

Keywords: historical revitalization, urban regeneration, property development, public-private-partnership

COLLABORATIVE FACILITIES MANAGEMENT IN URBAN REGENERATION PROJECTS: PROBLEMS AND POTENTIALS

Nilmini Weerasinghe^{*}, Yasangika Sandanayake
Department of Building Economics, University of Moratuwa, Sri Lanka

Prathibhani Bandusena
Department of Town & Country Planning, Sri Lanka

ABSTRACT

Urban areas are now being regenerated in great extremes to match with the local and global demand in Sri Lanka. Upgrading infrastructures, land and buildings are highly pressurized in urban regeneration projects given that it is critical to the economic, social, environmental, and cultural well-being of a country. However, there is a question of the sustenance of urban regeneration projects due to limited public funds and other resources. Collaborations between authorities responsible for urban development & maintenance and the private/public sector organisations in facilities management could be a solution for the above issues in Sri Lankan context, which has not been articulated yet. This study therefore aims to investigate the applicability of collaborative approach as a solution to stimulate the participation of private and public sector organisations in terms of facilities management in the regeneration project. The aforementioned aim was achieved through the literature review and case study methodology. Beira Lake Urban Regeneration Project (Phase I & II) was selected as the case study to determine the applicability of collaborative Facilities Management concept to Sri Lankan context. Observation and semi-structured interviews were carried out with the executives who are in responsible for urban development & maintenance and public/private sector organisations in the regenerating area. Case study revealed that the collaboration between Public Authorities (Urban Development Authority & Municipal Council) and private organisations in urban regenerations would uplift the value of physical environment and infrastructures of inner city. Further, Public Authorities can allow private organisations to use car park, recreation facilities, open spaces, and other developments with the agreement of maintaining and developing above facilities. On the other hand, private organisations would fulfill organisational requirements while contributing to corporate social responsibilities. It can be concluded that both Public

* Corresponding Author: Nilmini Weerasinghe; E-mail- nilminiweerasinghe@gmail.com

authorities and private organisations can mutually benefit from the collaborative FM in urban regeneration projects.

Key words: Urban, Collaboration, Facilities Management

IMPACTS OF THE CROWN PROPERTY DEVELOPMENTS IN THE CITY OF BANGKOK: TWO CASE STUDIES

Montouch Maglumtong*

Housing Department, Faculty of Architecture, Chulalongkorn University,
Bangkok, Thailand

ABSTRACT

This paper is a report on part of a research project commissioned by the Crown Property Bureau, Thailand (CPB). CPB is a quasi-government agency responsible for managing the real property of the Crown of the Kingdom of Thailand. Its main duty is to manage this estate in an efficient, yet equitable way. In Bangkok, CPB lands amounts to nearly 20 per cent of the total municipal area. Therefore, the agency's land management policy not only affects socio-economic situation and living environments of CPB lands alone, but also broader planning and urban development of the city. Land development options can follow three options: 1) by the Crown Property Bureau itself, 2) in collaboration with private developers, and 3) in partnership with government projects. "The paper will illustrate and compare each of these land development options through case-studies that clarify the CPB strategic goals, achievements in socio-economic terms and impact on the wider neighborhood and urban development."

Keywords: Urban Redevelopment, Land Sharing, Regeneration Policy Bangkok, Low-income Communities, Community Participation, Housing Typologies

* Corresponding Author: Mr.Montouch Maglumtong; E-mail- curunior@hotmail.com

EFFECT OF STREET CANYON MATERIALS ON THE URBAN HEAT ISLAND PHENOMENON IN COLOMBO

N. G. R. Perera* , K. P. P. R. Samanthilaka
Department of Architecture, University of Moratuwa, Sri Lanka

ABSTRACT

An Urban heat island (UHI) is best visualized as a dome of stagnant warm air, over the heavily built-up areas of the city. These have been observed practically all over the world and Colombo, Sri Lanka is no exception. It is known that the replacement of natural surfaces and radiation trapped in 'street form' urban canyons is one of the primary drivers of this phenomenon.

This study quantifies and compares the local warming effects caused by materials used in street canyons in the warm, humid climate of Colombo.

A process of ascertaining street canyon materials by survey and simulation using a simple force restore model, the Surface Heat Island Model (SHIM) generate data for specific urban canyons and the respective local warming effects they cause.

Aluminium cladding in buildings, showed the highest and the lowest intensity. The highest UHI intensity of 2.87°C was recorded In LC22-commercial. While, the lowest UHI intensity of 1.78 °C can be seen at LC23-sea front zone.

Analyses highlight the predominant material occurrence and discuss implications for nocturnal UHI amelioration, in warm, humid, Colombo, Sri Lanka.

Keywords: Urban Heat Island, Warm Humid Tropics, Street Canyon Materials, Local Climate Zone, Surface Heat Island Model, Colombo, Sri Lanka

*Corresponding Author: E-mail – nareinperera@gmail.com

SOCIAL RESILIENCE AND URBAN GROWTH EXPLORING URBAN 'STRATEGIES' AND 'TACTICS' IN BANGKOK AND COLOMBO

Koen, De Wandeler*

Faculty of Architecture, KU-Leuven, Belgium

ABSTRACT

This paper contends that re-inventing the city involves a level of 'social resilience' that permits to face the challenges presented by urban development at moments of growth as well as in times of adversity and crisis.

It is a conceptual exercise that largely draws on the distinction which the French anthropologist Michel de Certeau between 'tactics' and 'strategies'. He described 'tactics' as everyday practices through which large parts of the population respond to power 'strategies' imposed on them from above. While tactics and strategies may sometimes clash, synergy between them is crucial to build 'social resilience' and make city life more sustainable.

To illustrate this claim, the paper ventures into a comparison between the urban discourses that were circulating in Bangkok in the booming early-1990s and an exploratory observation of similar trends in contemporary Colombo. Whilst two decades and vastly diverging historical backgrounds separate these contexts, the urban development strategies deployed in both situations are marked by strong economic growth and a booming real estate sector. In spite of political turmoil, social resilience in Bangkok has manifested itself in 'tactical urbanisms' that range from dissatisfaction and confrontation to consensus-building and cooperation. In view of Sri Lanka's recent past of armed conflict, the paper cannot offer such clear-cut insights on Colombo. Instead, it advances a series of logical presumptions by way of final reflection and invitation for further research.

Keywords: social resilience, tactical urbanism, Bangkok, Colombo

* Corresponding Author: Koen De Wandeler; E-mail- koen.dewandeler@kuleuven.be

URBAN POLICY CHANGES IN CHANDIGARH: FALLIBILISM OR FATALISM

Sohan Lal, Saharan*

Chandigarh College of Architecture, Chandigarh, India

Prof. Manjari, Chakraborty**

Birla Institute of Technology, Mesra (Ranchi), India

ABSTRACT

Since last two decades, some of the major urban policy, legislation and building regulation changes have been made in Chandigarh, which are having a major impact on the physical and the visual fabric of the city. This paper, which is a pre formative guideline for author's further research is an attempt to understand these policies and urban regulation changes and how are these going to affect the future growth of the city?

Some of the regulations may be required to keep the pace with time while others have been made as part of public demand or few of them may just be for speculative purposes but all of these are going to have some effect on the city character.

This paper highlights some of the major changes in the original master plan of the city which could have some irreversible impact that could take a long time to restore the concept. It is an initial exploration by author in the field of city regulations. A change in land use or in building regulations is an attempt to make the city lively and growth oriented for citizens, but are these changes really helping or not is another important aspect to be understood.

Keywords: Chandigarh, Urban controls, Building regulations, visual character, urban policy

* Corresponding Author (s) : Sohan Lal, Saharan ; E-mail- saharansohan@hotmail.com; Manjari, Chakraborty; E-mail- dr_manjari@bitmesra.ac.in

REINVENTING CITIES AND REBUILDING LIVES: A CASE OF DEVELOPMENT INDUCED DISPLACED IN KOCHI, KERALA

S Irudaya Rajan, Ann George
Centre for Development Studies, Kerala, India

ABSTRACT

Post liberalisation, the state of Kerala well known for human development achievements, has been increasingly encouraging foreign capital investment to boost its economic investment and growth, leading to a series of visible changes in the city landscapes across state. This paper examines these changes in Kochi, where the recent two decades has seen the launch of several mega development projects like that of commissioning of special economic zone and an international transshipment container terminal. As the city and its suburbs witness dramatic changes, including that of new highways and railways crisscrossing isolated village and islands, reclamation of land in the backwaters (Kochi is a city partially surrounded by the backwaters) for both projects and rehabilitation, this paper examines the lives of those people most affected by these changing geographies, namely those displaced by these projects. What this study with its particular emphasis on examining displacement-poverty –inequality nexus finds is that while the broad picture is that of the suffering of the displaced (who are mostly poor) but it is also of their reclaiming dwelling, livelihood and seeking possibilities within the changes of the city. While the displaced themselves seek their little gains, they point at the spiralling gap between rich and poor as the rich leverage these changing geographies to suit their real estate interests. While being quite helpless about the amplified inequality contained in these changes, they however stood firm on their demand for some participation in the benefits of the development projects. The displaced of three of the six projects make the categorical demand of land for land in the same village in their rehabilitation package. The persistent struggle and agency of the people have yielded results to varying extent in the different projects.

The resettlement experiences of the displaced talks of an interweaving of both opportunities and struggles. As people resettle themselves in their now fine looking houses, their narratives ask us to look beyond the obvious signs of progress at their accumulated indebtedness and the associated vulnerability. The study covering the lives of displaced across the city in several project also finds that the experiences of the displaced are different within the same city depending on several micro factors of their context and the specific geographies of displacement and

resettlement, underscoring the importance of using a heterogeneity framework to understand the rebuilding of lives in reinventing cities.

Keywords: Urban development, effects on urban communities, displacement-poverty, Kochi

DEVELOPMENT EVICTEE'S IN COLOMBO: OUTCOMES OF URBAN DISPLACEMENT AND RELOCATION FROM A WELLBEING PERSPECTIVE

Dhammika Herath*

International Centre for Ethnic Studies, School of Global Studies,
University of Gothenburg, Sweden

Rajith Lakshman

University of Sussex

Asela Ekanayake

International Centre for Ethnic Studies Colombo

ABSTRACT

The current government which came into power in 2005, embarked on a grand and much advertised multifaceted development programme in the country with a special focus on Colombo. The capital has since been witnessing a massive urban regeneration programme which, among other things, includes city beatification, tourist hotels, urban facilities, recreation facilities, a port city and apartment complexes for both the rich and the poor. Colombo has thus seen the heavy imprint of the development industry which has taken significant interest in prime lands in Colombo.

In many cases, the last remaining prime lands are those which houses Colombo's slum and shanti dwellers. Both the government and the private investors have shown remarkable interest in claiming these lands for development purposes. Hence, urban regeneration programme had in some cases led to the eviction of large numbers of people, especially, those living in slums and shanties. Policy makers and implementers consider displacement as 'inevitable and necessary'; if development benefits for many to become a reality, a few would have to make 'sacrifices'. This has been a global phenomenon which has also seen the emergence of a Development-Induced Displacement and Resettlement Regime (DIDR) in order to manage displacement and relocation without causing suffering for the affected. This paper, by examining four DID communities and two slum communities in Colombo, prioritises the voices of the 'affected/benefitted' people by delving into their own reflections on the outcomes of eviction and relocation and tries to understand the outcomes through their own measures. Rather than

* Corresponding Author: Dhammika Herath; E-mail- dhammika.herath@globalstudies.gu.se

trying to use externally imposed measures of success, the emphasis of this paper is to examine how the 'affected or benefitted' people feel the change and how this reported change can be discursively compared with the slum dwellers who are yet to undergo planned relocation experiences. The study uses 40 in-depth interviews and survey of 900 respondents in Colombo.

Keywords: Urban regeneration, urban slums, community displacement, relocation of urban poor

PROMOTING SOCIALLY INCLUSIVE INFRASTRUCTURE INVESTMENTS IN ASIAN CITIES - THE CASE OF WASTEWATER MANAGEMENT IN COLOMBO

Eva Ringhof

Cities Development Initiative for Asia (CDIA) / Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH, Philippines

Dilan Kumara

Cities Development Initiative for Asia (CDIA),
SEVANATHA Urban Resource Center (SURC), Sri Lanka

ABSTRACT

While infrastructure services are meant to serve all citizens, some designs tend to neglect the needs of the poor, women and other vulnerable groups. To ensure that traditionally marginalized populations have equal access to infrastructure services and can derive the associated benefits, it is essential that these groups are consulted and empowered to contribute to identifying priorities and solutions for urban infrastructure projects. The Cities Development Initiative for Asia (CDIA) and its partner cities in the region are committed to systematically integrating a pro-poor and inclusive project design.

CDIA's approach is to ensure equitable and affordable access for all citizens when designing projects that specifically target the urban poor as beneficiaries is not possible. This approach is known as inclusive and targeted. As important as it is to provide infrastructure to the poor, so too is the process through which it is provided. Significant efforts need to be undertaken at the city-level to reduce the trend of increasing inequality in Asia's urban areas. Municipal decision makers, government officials, and sector specialists need to understand that pro-poor infrastructure development will not only reduce poverty, but will also improve the local environment, and increase local economic dynamism and competitiveness.

In Greater Colombo (Sri Lanka), CDIA is currently providing technical support in association with the Asian Development Bank (ADB) for a Pre-Feasibility Study (PFS) on improved Wastewater Management. Rapid urbanization with limited sewerage coverage, underserved settlements and waste generation has resulted in pollution of water bodies and groundwater resources. The environmental situation poses a serious threat to the social and health conditions of the dwellers, in particular the urban poor. In order to provide a cleaner and healthier environment,

seven CDIA consultants are addressing these issues by ensuring a sustainable wastewater network in the future and facilitating access to sanitation services in an inclusive way.

Keywords: Urban infrastructure, affordable urban development, urban poor, Sri Lanka

ORDER BEGETS ACCOUNTABILITY, DISORDER BEGETS CRIMINALITY: A FUNDAMENTALLY TRUE REFLECTION OF CRIME GEOGRAPHIES IN URBAN GHANA?

Martin Oteng-Ababio*, Charlotte Wrigley-Asante
Department of Geography & Resource Development, University of
Ghana, Legon

Adobea Yaa Owusu, George Owusu
Institute of Statistical, Social & Economic Research (ISSER), Department
of Geography & Resource Development, University of Ghana, Legon

ABSTRACT

The quest to understand societal vulnerability to crime in cities has advanced in recent years, but examining intra-city spaces and crime remains a major challenge. A significant setback relates to the lack of disaggregated crime data at the community level. Drawing on qualitative data collection including 50 key stakeholder interviews, complemented with police data and those extracted from the media, our paper illustrates how a combination of different data sources can potentiate new insights into the representation of crime within cities. Through mapping and comparative analysis of crime spots in four selected cities in Ghana, our results show that overall, crimes are less selective in community contexts. Again, most cities today have eroded any sense of safety by an ever-palpable, albeit subterranean, anxiety. These findings implicitly show that traditional predictors of incidence of crime do not always operate in expected direction. In conclusion, we highlight the unfairness of such stereotyping and caution that it may be a dangerous turn for policy makers and city authorities' analysis of crime-causality to take.

Keywords: Criminality, Spatiality, Urbanity, Human Safety, Ghana

* Corresponding Author: Martin Oteng-Ababio; E-mail-moababio@yahoo.com

SAFE AND INCLUSIVE CITIES: RESEARCH TO REDUCE URBAN VIOLENCE, POVERTY AND INEQUALITIES

Jennifer Salahub*, Navsharan Singh

International Development Research Centre Ottawa, ON, Canada

ABSTRACT

While cities are the engines of economic growth, they are also a crucible for the extremes of poverty, inequality and violence in what Muggah calls “the urban dilemma” (2012). There is insufficient research on the urban poverty-inequality-violence nexus especially concerning developing countries, which currently experience high economic growth. Interventions to reduce or prevent urban violence have in the past come largely from the global North with little known on which work and which don’t. (Muggah 2012)

To begin filling these evidence gaps and support a cadre of Southern upcoming researchers to contextualize and test existing theories and develop new ones, Canada’s International Development Research Centre and the UK’s Department for International Development are funding fifteen research projects exploring the drivers of urban violence, how they relate to poverty and inequalities, and discerning what works and what doesn’t to prevent or reduce violence in cities. Based in South Asia, sub-Saharan Africa and Latin America, the **Safe and Inclusive Cities** initiative tackles a range of urban violence issues including homicide and interpersonal violence, structural violence, the role of institutions and public spaces, access to services, social cohesion, and gendered violence.

This presentation will constitute a prelude to the panel on Sri Lanka and India and engage the conference theme as it provides an overview of the rationale for research on the urban dilemma and situates the panel presentations in a broader program that addresses the challenges of how to create cities in which residents feel safe, have access to services, and are included in decision-making processes in meaningful ways. It will provide a brief overview of the main gaps in the literature, drawing on the Safe and Inclusive Cities baseline study, *Researching the Urban Dilemma* (Muggah 2012) in addition to insight into emerging preliminary findings from across the projects, with particular focus on the four projects in South Asia, including the project featured in the balance of the panel.

* Corresponding Author: Jennifer Salahub ;E-mail- jsalahub@idrc.ca

Keywords: Safe and Inclusive Cities, Urban violence, poverty

PRIVATISATION OF SECURITY: BUILT-ENVIRONMENTAL MANIFESTATIONS IN ACCRA AND KUMASI, GHANA

George Owusu* , Adobea Yaa Owusu

Institute of Statistical, Social & Economic Research (ISSER), Department of Geography & Resource Development, University of Ghana, Legon

Charlotte Wrigley-Asante, Martin Oteng-Ababio

Department of Geography & Resource Development, University of Ghana, Legon

ABSTRACT

Growing urbanisation in Ghana is associated with changing residential building designs characterised by high walls with (out) barbed wires; metal burglar-proofed windows and doors; foreign-breed security dogs; surveillance equipment, etc. These are now a common sight in middle and upper-class residential neighbourhoods of large Ghanaian cities, particularly Accra and Kumasi. In these large cities, the relatively high incidence of crime and the fear of crime in broad terms have led to a boom in security-conscious building designs, and the increasing presence of gated-communities and the high walls associated with 'self-contained houses'. Based on interviews conducted among city police officers, planners and opinion leaders as well as focus group discussions in 6 different socio-economic neighbourhoods (low, middle and upper-classes) in Accra and Kumasi, the paper examines target hardening and its implications for achieving an inclusive society in urban Ghana.

This study has closer affinities to Oscar Newman's defensible space concept and the idea of "Crime Prevention through Environmental Design" (CPTED). The paper argues that while the defensible space CPTED concept has been widely applied in Western cities and elsewhere to restructure the physical layout of communities and to reduce crime through community efforts, there are marked differences in the Ghanaian context. In particular, households' response to crime through target hardening has the tendency in the long-term to weaken ethnic and social cohesions, with limited or no impact on community crime incidence and physical layout of neighbourhoods.

Keywords: Urbanisation, Cities, residential neighbourhoods, urban crime

* Corresponding Author: George Owusu; E-mail- gowusu@ug.edu.gh, geowusu@yahoo.com

“GREEN IS BEAUTIFUL”©

Sibila Jaksic

“SIGNES”-Urban Design Office, Paris

ABSTRACT

The idea that nature is also infrastructure isn't new. But it's now more widely understood to be true. Nature can be harnessed to provide critical services for communities, protecting them against flooding or excessive heat, or helping to improve air and water quality, which underpin human and environmental health.

Using nature as infrastructure is known as “Green infrastructure”.

It occurs at all scales. Green infrastructure can be a centerpiece of smart regional and metropolitan planning; ensuring communities have a livable environment, with clean air and water. Green infrastructure can be designed to address the needs of wildlife, which are increasingly threatened by climate change, providing systems of **corridors or greenways** to enable movement through human settlements. Green infrastructure is also **park systems, urban forests and wetlands**. Trees and plants are a critical piece in green infrastructural systems and shouldn't be discounted in favor of other technologies. Lastly, at the site-scale, smart communities are using green infrastructure for transportation systems (green streets), and green roofs, which can bring the benefits of nature to the built environment.

Green infrastructure is crucial to combating climate change, creating healthy built environments, and improving quality of life.

The benefits of green infrastructure are numerous. From the broadest environment benefits to site-specific ones, green infrastructure is an effective and cost-efficient tool for absorbing and sequestering atmospheric carbon dioxide (CO₂); filtering air and water pollutants; stabilizing soil to prevent or reduce erosion; providing wildlife habitat; decreasing solar heat gain; lowering the public cost of storm water management infrastructure and providing flood control; and reducing energy usage through passive heating and cooling.

While managing green infrastructure we can also create a beautiful places for living, working and recreation. Here follows few examples from our practice.

Keywords: Green Infrastructure, Public Space, Landscape, Beautification of the city, water management

ACKNOWLEDGEMENTS

The organizing committee would like to express its sincere appreciation to the following individuals and organisations who have contributed to the success of the symposium:

Chief Guest
All Distinguished guests
Keynote Speakers
All Distinguished Speakers

Scientific committee
Symposium Session Chairs and co-chairs
Session Coordinators
Symposium Secretariat

The Sri Lanka Foundation Institute

Sponsors

Sri Lanka institute of Architects
Central Cultural Fund
Abans Limited
Ranjanas Ceramics (Pvt) Ltd
Mount Lavinia Hotel

Printers

Randhi Printers

SPONSORS, PARTNERS & ADVERTISERS



Sri Lanka Institute of Architects

120/7, Vidya Mawatha,
Colombo 7



Central Cultural Fund
212/1, Bauddhaloka Mawatha
Colombo 7



MULTI V™ IV

THE VRF AIR CONDITIONER

BEYOND YOUR STANDARD

- World's First Class Rated & Part Load Efficiency (4.34 COP / 7.2 IPLV)
- Cooling Operation Range up to 54°C
- World's Longest Piping Capability (1000m)
- High Pressure Oil Return Technology (HIPOR™)
- Upgraded Fault Detection & Diagnosis (FDD MICOM/Black Box)
- Smart Monitoring & Controlling (BMS / AC MANAGER / SMARTPHONE)
- World's Lightest & Smaller Foot Print Outdoor Unit



Dutch Hospital - Galle



Grand Stand - Colombo



Logistic Park - Colombo



Abans Engineering (Pvt) Ltd.

128, Airport Road, Ratmalana. Tel : 011 2633544/ 011 77 63594

Email: lgmultivabans@gmail.com



Sri Lanka
Institute of
Architects

ASSOCIATE SPONSOR
ARCHITECT EXHIBITION 2014



a destination you could opt for world class and reliable

Wall Tiles, Floor Tiles, Sanitary ware, Shower Enclosures, Massage Tubs, Mirrors,
Tile and Stone Installation products, Faucets and accessories.

We have Built Customers' TRUST, with DEDICATION and HARD WORK.



malheethan@ranjanas.com



RANJANAS CERAMIC (PVT) LTD HEAD OFFICE | KOTAHENA 011 2 543 256 SHOWROOM | NAWALA 011 2 817 474
 • NEGOMBO 031 2 227 505 • JAFFNA 021 2 220 033 • MANNAR 023 2 223 188 • MADAMPE 032 2 249 777
 • HATTON 051 2 225 087 • KIRIBATHGODA 011 2 929 206

www.ranjanasceramic.lk | info@ranjanasceramic.lk | www.facebook.com/RanjanasCeramic

CONTEMPORARY FLOOR • WALL • BATHWARE





No 100,
Hotel Road,
Mount Lavinia,
Sri Lanka.

Email
Tel
Fax

reservation@mountlaviniahotel.com

0094 11 2711711

0094 11 2730726 / 0094 11 2738228

MLHG



Vakarufalhi
MALDIVES



TRY OUR NEW MOBILE APP



A member of the Mount Lavinia Hotel Group, Sri Lanka
www.mountlaviniahotelgroup.com

www.facebook.com/mountlaviniahotel plus.google.com
[@mtlavinia](https://twitter.com/mtlavinia) foursquare.com/v/mount-lavinia-hotel







International Urban Design Conference | Cities , People & Places | October 31st-November 2nd, 2014



Department of Architecture
University of Moratuwa, Sri Lanka



ISSN : ISSN 2345-9549
Bar Code : 9772345 954003