FOURTH INTERNATIONAL URBAN DESIGN CONFERENCE
ICCPP-2016

'Cities, People and Places'

‘Transforming Cities through place-making';
From Communities to Meaga Cities’

30 October - 1 November, 2016
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
## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Messages</td>
<td>5</td>
</tr>
<tr>
<td>Keynote Speakers</td>
<td>9</td>
</tr>
<tr>
<td>Organizing Committee</td>
<td>18</td>
</tr>
<tr>
<td>Scientific Committee</td>
<td>18</td>
</tr>
<tr>
<td>Conference Information</td>
<td>19</td>
</tr>
<tr>
<td>Conference Programme</td>
<td>20</td>
</tr>
<tr>
<td>Conference Session Plan at-a-Glance</td>
<td>23</td>
</tr>
<tr>
<td>Detailed Session Plan</td>
<td>27</td>
</tr>
<tr>
<td>Paper Abstracts of Proceedings</td>
<td>41</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>71</td>
</tr>
<tr>
<td>Sponsors and Partners</td>
<td>73</td>
</tr>
</tbody>
</table>
MESSAGES
I am pleased to send my best wishes to the International Conference on Cities, People and Places 2016, organized for the fourth 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 programme since 2009. This conference is another major contribution by the Urban Design Programme of the Department aimed at bringing to light the multifaceted complexities of transformation of public places to livable cities by the integrated expertise of many disciplines such as architects, planners, urban designers, engineers and geographers.

Cities all over the world are constantly under pressure to meet ever increasing demands of people, who are primary users of our built environment. People prefer cities where the modern luxuries, education, entertainment, health-care, rewarding employment and leisure are more conveniently available and can be provided more effectively. The challenge of this century is the creation of such livable cities by transformation of public spaces with interwoven complexities by employing scientific processes such as place-making and place-enabling. Creation of a new Ministry of Megapolis and Western Development further emphasizes the increased importance to the issues related to city development in Sri Lanka.

Conference theme this year, “Transforming Cities through Place-making; from Communities to Mega Cities” is not only timely but also of great importance. 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.
It is my pleasure to have the opportunity to write this message to the proceedings of ICCPP 2016; the fourth International Urban Design Conference organized by the Department of Architecture, University of Moratuwa. The Faculty of Architecture has been improving and refining its research culture in the past years and therefore has achieved recognition in teaching, research, and consultancies. Research activities are carried out in Faculty level, Department level and Individual level. The research conference based on the topics of built environment is the preeminent approach to present the research carried out at each level. In this endeavor, the Program of Urban Design of the Department of Architecture of the Faculty of Architecture in the University of Moratuwa in association with its international and national academic partners have organized an International Conference on “Reinventing Cities & Places” (ICCPP). This provides a platform for a 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, Lifestyle and Product design, Project Management Technology and urban Planning.

The theme of this year’s International symposium is “Transforming Cities through place-making; From Communities to Mega Cities”. As a result of modernization and globalization, new transformation in built environments especially in cities has been experienced all over the world. The prominent issues of this trend include the loss of identity of places and the socio-cultural inferences, over-emphasis on technology and communication, imbalances of natural systems and resultant natural disasters and the failure to adapt to global economic crisis. 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 an 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 certain that the fourth International Urban Design Conference organized by the Department of Architecture would be a milestone to expand the prospect of research carried out by the staff and students of our faculty.

I wish ICCPP Conference 2016 all success!
It is with immense my pleasure that I send this message for the conference proceedings of ICCPP 2016. The response from academics, professionals and researchers worldwide for the previous ICCPP conferences is an indication of the acceptance of ICCPP as a significant forum focusing on current global issues. This year too, the trend continues, with the theme ‘Transforming Cities through Place making: From Communities to Megacities.’

The next few years will see a drastic change in the cityscape in the Western Province as a result of the rapid and gigantic development envisaged for Sri Lanka. In this context, the main focus of the ICCP 2016 on transforming cities through place making is an appropriate theme highlighting a global need for sustained development and transformation of cities fulfilling the needs of urban communities. Such an effort 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 at the University of Moratuwa has a crucial role in the fulfillment of 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 given the opportunity to a large number of participants to contribute towards the success of this years' conference as well.

I wish success for ICCPP 2016 and hope that all participants will find it a forum of significance and value.
KEYNOTE SPEAKERS
Prof. Murray Fraser
Professor of Architecture and global Culture
Bartlett School of Architecture at UCL, UK

'THE ARCHITECTURE OF MEGA-CITIES'

ABSTRACT

While recent innovations in writing about mega-cities have focussed on the role of complex systems and networks in understanding how these large urban centres operate, this has however also diverted attention away from the more traditional question of what the architectural and urban forms for such cities should be. This lecture will therefore discuss the aesthetics and programmes of various new urban projects around the world, including importantly those that involve the dramatic reuse of historic structures, to support the claim that our mega-cities need to express a cultural value system which is much broader than at present.

The first part of the presentation will look historically at the changes in how we have thought about and written about large cities, from early books on town planning by Sitte, Stubben, Geddes and Eliel Saarinen, to those dealing with systems and networks as theorised by Simmel, Castells and Batty, through to the concept of neighbourhood clusters in the work of Teddy Cruz and other contemporary observers. The second part of the presentation will then discuss specific examples of how one might design for large metropolitan areas by a reshaping of the existing historic fabric, using examples such as the Long Museum in Shanghai by Atelier Deshaus, the High Line project in New York, and three projects by Herzog & de Meuron: the Tate Modern Museum in London, the Caixa Museum in Madrid, and their forthcoming Elbe Philharmonie in Hamburg.
Prof. Murray Fraser

Murray Fraser is Professor of Architecture and Global Culture at the Bartlett School of Architecture, as well as Vice-Dean of Research for the Bartlett Faculty of the Built Environment. He has published extensively on design research, architectural history & theory, urbanism, post-colonialism and cultural studies. In 2008, his book on Architecture and the 'Special Relationship' (Routledge) won a RIBA President’s Research Award and also the CICA’s Bruno Zevi Book Prize. His edited books include Architecture and Globalization in the Persian Gulf Region and Design Research in Architecture (both Ashgate, 2013). Previously he co-created the online Archigram Archival Project, shortlisted for the 2010 RIBA President’s Research Awards, and he is now shortlisted again for the 2016 Awards. He is the General Editor for the fully rewritten 21st edition of Sir Banister Fletcher’s Global History of Architecture (Bloomsbury, forthcoming in 2018).
WHOSE THEORIES, WHOSE PREROGATIVE AND WHOSE PLACE MAKING: A DISCURSIVE INTERPRETATION IN THE INDIAN CONTEXT

ABSTRACT

The discourse examines Asian urbanity as an informed anarchist process of place making seen as a humanist hope. Initially, the presentation will inquire into its origins in Western theories, including its attributes in their generic urban environments. In contrast to the restrictive urbanism of the West, Indian examples will be illustrated as transitional and rather informal in nature that build on the urban remnants of the past and are often embedded in the traditional built environments. Temporally and spatially this is a layered process of city making where people's spontaneous participation is inseparable from it. In addition, in response to the climate and the socio-cultural nuances, one finds a gradation of urban spaces and elements that enrich the place making characteristics. Variations in spaces such as bazaars, chowks, river ghats and organic public places portray a self-regulatory urban design control as well as a sense of vibrancy to the Indian urbanity. At the same time, one has to accept the failure of the urban architects and planners to transform the modern cities into meaningful and exciting urban environments. In view of the onslaught of universalized images through global forces, it is important to understand and learn from the milieu of spatial traditions.
Prof. Miki Desai

Prof. Miki Desai retired from CEPT University as the head of the Masters Program in Sustainable Architecture, the Faculty of Architecture, Ahmedabad, India. He has had the EARTHWATCH grant, a Fulbright Fellowship, the Graham Grant and the Getty Collaborative Grant. He is the co-author of *Architecture and Independence*, Oxford University Press, New Delhi (1997), *Architectural Heritage of Gujarat*, the Government of Gujarat, Gandhinagar, (2012) and *The Bungalow in Twentieth Century India*, Ashgate, UK (2012). He is the author, *Architekture in Gujarat, Indian: Bauernhof, Stadthaus, Palast* (translated in German), an Exhibition Catalogue, The Rietberg Museum, Zurich: 1990. He has held an exhibition at the Sanskar Kendra, Ahmedabad in 2012, in addition to contributing a chapter and a wooden model to an exhibition travelling to 6 German speaking countries in 1995. Recently he was a visiting scholar in the College of Environmental Design at the University of California at Berkeley and was the keynote speaker at the seventh international conference on Vernacular Settlements (ISVS), Istanbul Technical University, Istanbul, Turkey, October 2014.
CITIES AND PEOPLE

ABSTRACT

Sri Lanka is still a land of villages: ‘gam’ in Sinhala and ‘grama’ in Sanskrit. Some of these villages have grown into cities (‘pura’ or ‘nagara’) with or without planning. One of the earliest well planned cities in Sri Lanka was Anuradhapura, the first royal capital of this island kingdom, and which remained so for nearly fifteen centuries. Anuradhapura (the City of Anura) came into being as a village and was named ‘Anuradha-grama’ after two Anuradhas, one of whom was a minister of Vijaya, the first king of Island Kingdom. This name appears in earliest map of this Island drawn by the Ptolemy, the Greek, in the first century, as ‘Anurogammai’, when it was still a village.

The Pali epic, Mahavamsa, (The Great Chronicle) composed in the fifth century, describes in detail how the city of Anuradhapura was built. The city was laid out in such a planned way that it included four suburbs, a cemetery, special sectors for huntsmen and scavengers, hospitals and lying-in-homes, temples for various pagan deities and residences for engineers and other officials. Abodes were also provided for devotees of various sects, such as the Jains, the Ajivakas, wandering monks and Brahmins. Guardians of the city (Nagara-guttika) were appointed, one for the day and one for the night.

Cities, if not planned, will bring about problems that affect the citizens in adverse ways, such as over-crowding and pollution of all forms. Garbage disposal has become a serious problem and the spread of serious infectious diseases such as dengue has become critical. Traffic jams have now become the order of the day. So it is the duty of all concerned to plan our cities in such a way that their dwellers enjoy their urban life.
Prof. J. B. Dissanayake

Dissanayake received his primary education at Dharmaraja College, Kandy, secondary education at Ananda College, he graduated from the University of Ceylon, Peradeniya campus in 1961. He would later received a Fulbright scholarship to the University of California, Berkeley, to read for a Masters in linguistics and obtained a PhD from the University of Colombo.

With a long teaching career of over 40 years as a lecturer of the University of Colombo, he is the author of numerous books on linguistics, culture and history. Prior to his retirement Dissanayake served in the capacity of the Head of the Department of Sinhala at the University.

Selected publications:
- Lanka, the land of kings by J. B. Dissanayaka (Sumitha Publishers, Distributed by Sarasavi Bookshop, 2007)
- Mānava bhāṣā pravēśaya by J. B. Dissanayaka (Sumita Prakāśakayō, 2005)
- Paintings of Kelani Vihara by J. B. Dissanayaka (Godage Poth Mendura, 2004)
- Kālaṇi Vihāre situvaṃ by J. B. Dissanayaka (Goḍagē Pot Māndura, 2000)
- Udāraṇa Sinhalaya by J. B. Dissanayaka (Godagē Pot Māndura, 2002)
- Understanding the Sinhalese by J. B. Dissanayaka (S. Godage & Bros., 1998)
- Siyalanga rū sobā by J. B. Dissanayaka (Goḍagē Pot Mandura, 1998)
- Bandu vaṭā pada raṭā by J. B. Dissanayaka (s. Goḍagē saha Samāgama, 1996)
- Gamaka suvanda siv siya gavu āśēya by J. B. Dissanayaka (s. Goḍagē saha Samāgama, 1996)
- Siṁhala bhāṣāvē nava muhuṇuvara by J. B. Dissanayaka (Saṃskṛtika Kaṭayutu Depārtamēntuva, 1996)
- Samaṅkālīna Siṁhala lēkhana vyākaraṇaya by J. B. Dissanayaka (s. Goḍagē saha Sahōdarayō, 1995)
- The monk and the peasant by J. B. Dissanayaka (State Print. Corp., 1993)
- Water in culture by J. B. Dissanayaka (Ministry of Environment & Parliamentary Affairs, 1992)
- Siṁhala budu samaya by J. B. Dissanayaka (Rajayē Mudraṇa Nītiga Saṃsthāva, 1991)
- Nūtana Siṁhala lēkhana vyākaraṇaya by J. B. Dissanayaka (Lēk Havus İnvesṭmanṭs, 1990)
- Siṁhala vehera vihāra by J. B. Dissanayaka (Piyavi Pot Prakāśakayō, 1988)
- Mihiṅtale, cradle of Sinhala Buddhist civilization by J. B. Dissanayaka (Lake House Investments, 1987)
- Say it in Sinhala by J. B. Dissanayaka (Lake House Investments Ltd., 1985)
- Aspects of Sinhala folklore by J. B. Dissanayaka (Lake House Investments, 1984)
ABSTRACT

Sri Lankan is today at a moment when a paradigmatic leap needs to be made in the way we accommodate our populations which even if not growing uncontrollably, is fast becoming one which is beginning to be able to afford and therefore demand greater and more comfortable living space. Issues of urban migration was originally a problem of the growth of shanty towns that occupied the edges of the big cities, now, a middle class with more resources are creating a market for better housing with easy access to workspaces and livelihoods. This is not a phenomenon peculiar to Sri Lanka but is common to most of our part of the world where cities will grow by more than 12% by 2050 with 90% of them in Asia and Africa.

What are these cities and settlements going to look like? Do we care or are we simply content with allowing the free market to define the nature of the environment that will result from this? Are we going to live in one giant suburb, as is the case in Sri Lanka, where subdivision of productive agricultural land results in residential suburbs, with a huge and unsustainable demand for thinly distributed services, or encourage through thoughtful intervention, dense urban conglomerations, even in our rural communities, which are productive and sustainable both economically and socially. This is where a paradigmatic shift in the way we think of our cities and settlements is essential to not only make the lives of future generations productive and happy, but also save our green spaces, which will eventually replenish the earth and help mankind itself survive,
Archt. Channa Daswatte


Since 1998 has been in Partnership with Murad Ismail in MICD Associates, working on a variety of projects in Sri Lanka, India and Africa. Was recognized for conservation work with an Award of Distinction in the UNESCO Asia-pacific Heritage Awards of 2007 for the Conservation of the Galle Fort Hotel. Been a Lecturer and Year Person at the Colombo School of Architecture and a Lecturer at the University of Moratuwa.

Contributing author to many magazine, and books, and author of the books “Sri Lanka Style” with Dominic Sansoni (2006) and “Colonial Furniture in the Geoffrey Bawa Collection (2012). Since 1997 has been a Trustee of the Lunuganga Trust and Geoffrey Bawa Trust and since 2016 been the Chairman of the Galle Heritage Foundation.
ORGANISING COMMITTEE
University of Moratuwa

Chairman
Dr. Janaka Wijesundara

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

Technical Committee
Prícil De Mel
Radeeka Lakshani
Thushara Thejani
Rasanga Nirmani
Samitha Fernando

SCIENTIFIC COMMITTEE

Advisors
Prof. Ali Madanipur  University of Newcastle, UK
Prof. Kim Dovey  University of Melbourne, Australia
Prof. Chye Kiang Heng  National University of Singapore, Singapore

Review Committee
Prof. Frank Schwartze  University of Luebeck, Germany
Prof. Sandeep Agrawal  University of Alberta, Canada
Prof. Koen De Wandeler  University of Leuven, Belgium
Prof. Kapila Silva  University of Kansas, USA
Prof. Samuel Hammer  University of Boston, USA
Prof. L S R Perera  Sultan Qaboos University, Oman
Prof. Rohinton Emmanuel  Glasgow Caledonian University, UK
Prof. Nalanie Mitraratne  National University, Singapore
Prof. Sasanka Perera  South Asian University, India
Prof. Hooman Koliji  University of Maryland, USA
Prof. Luca Molinari  "L. Vanvitelli", Naples, Italy
CONFERENCE INFORMATION


The event is organized by the Department of Architecture of University of Moratuwa in collaboration with joint international academic institutions and is held on 30th, 31st of October and 1st of November 2016 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: iccpp@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 3.15 pm to 6.30 pm on 30th of October from 8.30 am to 5.30 pm on 31st October 2016.

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 30th October to 31st October 2016.

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 and at the summing up session.

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
Sunday, 30 October, 2016

INAUGURATION

03:15 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- 2016
  Theme Video Presentation
04:20 p.m. Welcome Address by Dr. Janaka Wijesundara, Conference Chair-ICC
04:30 p.m. Address by Dr. Gamini Weerasinghe, the Head of the Department of
  Architecture
04:35 p.m. Address by Prof. Lalith De Silva, the Dean of the Faculty of
  Architecture
04:40 p.m. Address by Prof. Ananda Jayawardane, Vice Chancellor of the
  Moratuwa University
04:50 p.m. Presentation on the International students Urban Design Workshop
  (UDW-2016) conducted by the University of Moratuwa
05:00 p.m. Keynote Address -1, Prof. Murray Fraser, Professor of Architecture
  and global Culture, Bartlett School of Architecture at UCL,UK
05:25 p.m. Keynote Address -2, Prof. J.B. Dissanayake, Emeritus professor of
  Sinhala, University of Colombo, Sri Lanka
05:50 p.m. Keynote Address -3, Archt. Channa Daswatte, MICD Associates, Sri
  Lanka
06:15 p.m. Address by the Chief Guest: Hon Speaker of the Parliament of Sri Lanka,
  Mr. Karu Jayasuriya
06:30 p.m. Vote of Thanks
06:35 p.m. Sri Lankan Cultural Pageant, performed by the Department of Fine Arts,
  University of Kelaniya, Sri Lanka
07:35 p.m. Conference Dinner
08:40 p.m. END of the Program (Day 1)
Day 2  
Monday, 31 October, 2016

SCIENTIFIC CONFERENCE

08.30-08.45 a.m.  Conference Registration  
08:45-08.55 a.m.  Arrival of the Keynote Speakers  
08.55-09.00 a.m.  Procession Proceeds to Auditorium  
09:00-09.05 a.m.  Lighting of the Traditional Oil Lamp  
09:05-09.10 a.m.  National Anthem  
09.10-09.15 a.m.  Theme Video  
09.15-09.20 a.m.  Welcome speech by Dr. Janaka Wijesundara, Conference Chair, ICCPP-2016  
09.20-09.25 a.m.  Presentation on the International students Urban Design Workshop (UDW-2016) conducted by the University of Moratuwa  
09.25-10.10 a.m.  Keynote speech 1, Prof. Murray Fraser, Professor of Architecture and global Culture at the Bartlett School of Architecture at UCL, UK  
10.10-10.40 a.m.  Keynote speech 2, Prof. Miki Desai, Retired professor of Architecture CEPT University, Ahmedabad, India  
10.40-10.55 a.m.  Speech by the Chief Guest - German Ambassador to Sri Lanka, Mr. Joern Rohde  
10.55-11.10 a.m.  Tea break  
11.10-11.00 p.m.  Parallel Sessions - Session-1A, 1B, 1C  
01.00-01.45 p.m.  Lunch  
01.45-03.15 p.m.  Parallel Sessions - Session-2A, 2B, 2C  
03.15-03.30 p.m.  Tea break  
03.30-05.00 p.m.  Parallel Sessions - Session-3A, 3B  
05.00-05.05 p.m.  All participants get together at the Main Auditorium  
05.05-05.35 p.m.  Discussion, concluding remarks by Prof. Ranjith Dayarathne, University of Bahrain  
05.35-05.40 p.m.  Vote of thanks  

END of the Program (Day 2)
Day 3  
Tuesday, 01 November 2016  

CULTURAL TOURS – (Tour registration required)  

06.00a.m. – 06.30p.m. Tour Option 1- Sigiriya Archaeological/Cultural tour  
06.00a.m. – 06.30p.m. Tour Option2- Geoffrey Bawa Garden/Architecture, Galle City-Southern tour  

END of the Program (Day 3)
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.15 - 15.30</td>
<td>Arrival of Guests and registration</td>
</tr>
<tr>
<td>15.30 - 15.35</td>
<td>Arrival of the Keynote Speakers</td>
</tr>
<tr>
<td>15.35 - 15.45</td>
<td>Arrival of the Chief Guest</td>
</tr>
<tr>
<td>15.45 - 16.00</td>
<td>Procession Proceeds to Auditorium</td>
</tr>
<tr>
<td>16.00 - 16.10</td>
<td>Lighting of the Traditional Oil Lamp</td>
</tr>
<tr>
<td>16.10 - 16.15</td>
<td>National Anthem</td>
</tr>
<tr>
<td>16.15 - 16.20</td>
<td>Ceremonial Inauguration of ICCPP- 2016, Theme Video Presentation</td>
</tr>
<tr>
<td>16.20 - 16.30</td>
<td>Welcome Address by Dr. Janaka Wijesundara, Conference Chair- ICCPP -2016</td>
</tr>
<tr>
<td>16.30 - 16.35</td>
<td>Address by Dr. Gamin Weerasinghe, Head of the Department of Architecture, University of Moratuwa, Sri Lanka</td>
</tr>
<tr>
<td>16.35 - 16.40</td>
<td>Address by Prof. Lalith De Silva, Dean of the Faculty of Architecture, University of Moratuwa, Sri Lanka</td>
</tr>
<tr>
<td>16.40 - 16.50</td>
<td>Address by Prof. Ananda Jayawardane, Vice Chancellor, University of Moratuwa, Sri Lanka</td>
</tr>
<tr>
<td>16.50 - 17.00</td>
<td>Presentation on the International students Urban Design Workshop (UDW-2016) conducted by the University of Moratuwa</td>
</tr>
<tr>
<td>17.00 - 17.25</td>
<td>Keynote Speaker -1: Prof. Murray Fraser, Professor of Architecture and global Culture, Bartlett School of architecture at UCL, UK</td>
</tr>
<tr>
<td>17.25 - 17.50</td>
<td>Keynote Speaker -2: Prof. J.B. Diasnayake , Emeritus professor of Sinhala, University of Colombo, Sri Lanka</td>
</tr>
<tr>
<td>17.50 - 18.15</td>
<td>Keynote Speaker -3: Archit. Channa Daswatte, MICD Associates, Sri Lanka</td>
</tr>
<tr>
<td>18.15 - 18.30</td>
<td>Address by the Chief Guest: Hon Speaker of the Parliament of Sri Lanka, Mr. Karu Jayasuriya</td>
</tr>
<tr>
<td>18.30 - 18.35</td>
<td>Vote of Thanks</td>
</tr>
<tr>
<td>18.35 - 18.45</td>
<td>Tea Break</td>
</tr>
<tr>
<td>18.45 - 19.45</td>
<td>Sri Lankan Cultural Pageant, performed by the Department of Fine Arts, University of Kelaniya, Sri Lanka</td>
</tr>
<tr>
<td>19.45 - 20.45</td>
<td>Conference Dinner</td>
</tr>
<tr>
<td>20.40</td>
<td>END of the Program</td>
</tr>
<tr>
<td>Time</td>
<td>Event</td>
</tr>
<tr>
<td>--------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>08:45</td>
<td>Conference Registration</td>
</tr>
<tr>
<td>09:00</td>
<td>Arrival of the Chief Guest and Keynote Speakers</td>
</tr>
<tr>
<td>09:05</td>
<td>Procession Proceeds to Auditorium</td>
</tr>
<tr>
<td>09:15</td>
<td>National Anthem</td>
</tr>
<tr>
<td>09:30</td>
<td>Welcome Address by Dr. Janaka Wijesundara, Conference Chair, ICCPP-2016</td>
</tr>
<tr>
<td>09:45</td>
<td>Keynote address by Dr. Janaka Wijesundara, Conference Chair, ICCPP-2016</td>
</tr>
<tr>
<td>10:00</td>
<td>Presentation of the International Students Urban Design Workshop (UNW-2016) conducted by the University of Morstava</td>
</tr>
<tr>
<td>10:10</td>
<td>Key note speaker 1-Prof. Murray Fraser, Professor of Architecture and Global Culture at CEPT University, Ahmedabad, India</td>
</tr>
<tr>
<td>10:20</td>
<td>Key note speaker 2-Prof. Milk Dasi, Emeritus Professor of Architecture, CEPT University, Ahmedabad, India</td>
</tr>
<tr>
<td>10:30</td>
<td>Speech by the Chief Guest - German Ambassador to Sri Lanka, Mr. Joern Rohde</td>
</tr>
<tr>
<td>10:40</td>
<td>Tea break</td>
</tr>
<tr>
<td>11:00</td>
<td>Session 1A: Informal Urbanism</td>
</tr>
<tr>
<td>11:10</td>
<td>Session 1B: Urbanism &amp; Human Behaviour</td>
</tr>
<tr>
<td>11:20</td>
<td>Session 1C: Urban Development Guidelines</td>
</tr>
<tr>
<td>11:30</td>
<td>Session 1D: Urban Climate &amp; Human Behaviour</td>
</tr>
<tr>
<td>11:40</td>
<td>Session 1E: Urban Recovery</td>
</tr>
<tr>
<td>12:00</td>
<td>Lunch</td>
</tr>
<tr>
<td>13:00</td>
<td>Tea break</td>
</tr>
<tr>
<td>13:10</td>
<td>Session 2A: Urban Planning &amp; Human Behaviour</td>
</tr>
<tr>
<td>13:20</td>
<td>Session 2B: Urban Recovery</td>
</tr>
<tr>
<td>13:30</td>
<td>Session 2C: Urban Issues</td>
</tr>
<tr>
<td>13:40</td>
<td>Session 2D: Urban Systems</td>
</tr>
<tr>
<td>14:00</td>
<td>Session 3A: Humanitarian Cities</td>
</tr>
<tr>
<td>14:10</td>
<td>Session 3B: Urban Conversation</td>
</tr>
<tr>
<td>14:20</td>
<td>Session 3C: Urban Safety</td>
</tr>
<tr>
<td>14:30</td>
<td>Session 3D: Urban Security</td>
</tr>
<tr>
<td>14:40</td>
<td>Session 3E: Urban Security</td>
</tr>
<tr>
<td>15:00</td>
<td>Tea break</td>
</tr>
<tr>
<td>15:10</td>
<td>Session 4A: Urban Planning &amp; Human Behaviour</td>
</tr>
<tr>
<td>15:20</td>
<td>Session 4B: Urban Recovery</td>
</tr>
<tr>
<td>15:30</td>
<td>Session 4C: Urban Issues</td>
</tr>
<tr>
<td>15:40</td>
<td>Session 4D: Urban Systems</td>
</tr>
<tr>
<td>15:50</td>
<td>Session 4E: Urban Security</td>
</tr>
<tr>
<td>16:00</td>
<td>Tea break</td>
</tr>
<tr>
<td>16:10</td>
<td>Session 5A: Urban Planning &amp; Human Behaviour</td>
</tr>
<tr>
<td>16:20</td>
<td>Session 5B: Urban Recovery</td>
</tr>
<tr>
<td>16:30</td>
<td>Session 5C: Urban Issues</td>
</tr>
<tr>
<td>16:40</td>
<td>Session 5D: Urban Systems</td>
</tr>
<tr>
<td>16:50</td>
<td>Session 5E: Urban Security</td>
</tr>
<tr>
<td>17:00</td>
<td>Tea break</td>
</tr>
<tr>
<td>17:10</td>
<td>Session 6A: Urban Planning &amp; Human Behaviour</td>
</tr>
<tr>
<td>17:20</td>
<td>Session 6B: Urban Recovery</td>
</tr>
<tr>
<td>17:30</td>
<td>Session 6C: Urban Issues</td>
</tr>
<tr>
<td>17:40</td>
<td>Session 6D: Urban Systems</td>
</tr>
<tr>
<td>17:50</td>
<td>Session 6E: Urban Security</td>
</tr>
<tr>
<td>18:00</td>
<td>Tea break</td>
</tr>
<tr>
<td>18:10</td>
<td>Session 7A: Urban Planning &amp; Human Behaviour</td>
</tr>
<tr>
<td>18:20</td>
<td>Session 7B: Urban Recovery</td>
</tr>
<tr>
<td>18:30</td>
<td>Session 7C: Urban Issues</td>
</tr>
<tr>
<td>18:40</td>
<td>Session 7D: Urban Systems</td>
</tr>
<tr>
<td>18:50</td>
<td>Session 7E: Urban Security</td>
</tr>
<tr>
<td>19:00</td>
<td>Tea break</td>
</tr>
<tr>
<td>19:10</td>
<td>Session 8A: Urban Planning &amp; Human Behaviour</td>
</tr>
<tr>
<td>19:20</td>
<td>Session 8B: Urban Recovery</td>
</tr>
<tr>
<td>19:30</td>
<td>Session 8C: Urban Issues</td>
</tr>
<tr>
<td>19:40</td>
<td>Session 8D: Urban Systems</td>
</tr>
<tr>
<td>19:50</td>
<td>Session 8E: Urban Security</td>
</tr>
<tr>
<td>Time</td>
<td>Tour Registration required</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>06.00 - 18.30</td>
<td></td>
</tr>
</tbody>
</table>
## DETAILED SESSION PLAN

### Monday, 31 October 2016

**Session 1A**

<table>
<thead>
<tr>
<th>Time</th>
<th>Paper ID, Title and Author(s)</th>
</tr>
</thead>
</table>
| 11.10 - 11.35 | BD-06- SLUM AS ‘PLACE’: TRANSFORMATION, ADAPTATION AND PLACE-MAKING OF DOMESTIC AND COMMUNITY LIVING OF ERSHADNAGAR RESETTLEMENT CAMP  
Islam Tazrin, Adnan Enam Rabbi |
| 11.35 - 12.00 | SL-06- ROLE OF SPATIAL HIERARCHY IN RESETTLING THE URBAN POOR: IMPLICATIONS OF SPATIAL CONFIGURATION ON PRIVACY AND INTERACTION  
K.G.T.N. Karunanayake, Shaleeni Coorey |
| 12.00 - 12.25 | SL-20- PLACEMAKING IN INFORMAL PUBLIC SPACES: A STUDY OF FUNCTIONALITY AND LIVABILITY IN THE LOW-INCOME SETTLEMENT AT SEDAWATHTHA, KELANIYA  
Amanda Jayathilaka, D.P. Chandrasekara |
| 12.25 - 12.55 | Final Discussion and award of certificates of attendance |

**Theme** : Informal Urbanism  
**Session Chair** : Prof. Lal Balasooriya  
**Session Co-Chair** : Archt. Varuna de Silva  
**Venue/Time** : Hall No: 1 / 11.10 - 12.55
DETAILED SESSION PLAN

Monday, 31 October 2016
Session 1B

Theme: Urbanism and Human Behaviour
Session Chair: Archt. Prof. Nimal de Silva
Session Co-Chair: Archt. Nadeeka Jayaweera
Venue/Time: Hall No: 2 / 11.10 - 12.55

Time | Paper ID, Title and Author(s)
--- | ---
11.10 - 11.35 | SL-13- FACTORS INFLUENCING THE EFFECTIVENESS OF HUMAN BEHAVIOR IN DESIGNED LANDSCAPES: TWO CASE STUDIES IN SRI LANKA
Sangeetha De Silva, Anishka Hettiarachchi

11.35 – 12.00 | SL-23- SPATIAL PATTERNS AND HUMAN BEHAVIOURS: A STUDY OF URBAN PUBLIC SPACES IN KANDY
Nadun Jayasundara, Prasad Botheju

12.00 - 12.25 | SL-28- PHYSICAL ATTRIBUTES OF PEDESTRIAN SPACE THAT FACILITATE THE PERCEPTION OF SAFETY: WITH SPECIAL REFERENCE TO KANDY GRID CITY
Akila Ranasinghe, Janaka Wijesundara

12.25 - 12.55 | Final Discussion and award of certificates of attendance
DETAILED SESSION PLAN

Monday, 31 October 2016
Session 1C

Theme : Urban Developmental Guidelines
Session Chair : Archt. Plnr. Dr. Surath Wickramasinghe
Session Co-Chair : Archt. Kolitha Perera
Venue/Time : Hall No: 3 / 11.10 – 12.55

Time Paper ID, Title and Author(s)

11.10 – 11.35 IN-03- “REVISITING THE CONCEPT OF SMART CITIES IN THE INDIAN CONTEXT” – LESSONS FROM CONTEMPORARY SUSTAINABLE URBAN GROWTH THEORIES
Jayprakash Chadchan

11.35 – 12.00 BH-01- TOWARDS AN URBAN RENAISSANCE IN BAHRAIN: REGENERATION OF WATERFRONTS IN CITIES
Fatema Al Hammadi

12.00 – 12.25 SL-08- TEMPORARY URBAN INTERVENTIONS FOR EFFECTIVE PLACE-MAKING IN SHOPPING STREETS: SPECIAL REFERENCE TO PETTAH, COLOMBO
Narmada Wijekoon, Janaka Wijesundara

12.25 – 12.55 Final Discussion and award of certificates of attendance
### DETAILED SESSION PLAN

**Monday, 31 October 2016**  
**Session 2A**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Urban Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session Chair</td>
<td>Archt. Plnr Pali Wijeratne</td>
</tr>
<tr>
<td>Session Co-Chair</td>
<td>Archt. Suresh Edirisooriya</td>
</tr>
<tr>
<td>Venue/Time</td>
<td>Hall No: 1 / 13.45 - 15.15</td>
</tr>
<tr>
<td>Time</td>
<td>Paper ID, Title and Author(s)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Paper ID, Title and Author(s)</th>
</tr>
</thead>
</table>
| 13.45 - 14.10    | SL-19- **RECLAIMING TRAFFIC INFLUENCED URBAN RESIDUAL SPACES FOR THE PUBLIC: SPECIAL REFERENCE TO COLOMBO**  
Anuka Weththasinghe, Janaka Wijesundara |
| 14.10 - 14.35    | SL-12- **SPATIAL FACTORS THAT CONTRIBUTE TO THE LEFTOVER SPACES IN CITIES: A STUDY WITH REFERENCE TO COLOMBO**  
H. R. P Fernando, E. A. T. Suresh |
| 14.35 - 15.00    | SL-29- **A STUDY OF MORATUMULLA TIMBER CLUSTER: AGGLOMERATION THEORY**  
Chamodhi Anuradha, Prathibhani Banduseana |
| 15.00 - 15.15    | Final Discussion and award of certificates of attendance |
DETAILED SESSION PLAN

Monday, 31 October 2016
Session 2B

Theme: Urban Sensualities
Session Chair: Plnr. Hemantha Jayasundara
Session Co-Chair: Archt. Janaka Dharmasena
Venue/Time: Hall No: 2 / 13.45 - 15.15

Time Paper ID, Title and Author(s)
13.45 - 14.10 AUS-02- THE IMPACT OF SOCIO-SENSORY KNOWLEDGE ON PLACE MAKING
Kelman Palipane

14.10 - 14.35 SL-31- ANALYTICAL STUDY ON SENSE OF SAFETY IN URBAN LANDSCAPE SPACES
Y. A. Oshadi Dewduni Jayasinghe, Kowshika Gunasena

14.35 - 15.00 SL-02- LIVING ON THE EDGE A STUDY ON THE SOCIO-PHYSICAL FORMATION OF URBAN EDGES AS AN IMAGE-DEFINING ELEMENT OF CITY FORM: WITH SPECIAL REFERENCE TO COLOMBO DOWNTOWN
Tharindu Mahawatta

15.00 - 15.15 Final Discussion and a award of certificates of attendance
# DETAILED SESSION PLAN

**Monday, 31 October 2016**  
**Session 2C**

<table>
<thead>
<tr>
<th>Time</th>
<th>Paper ID, Title and Author(s)</th>
</tr>
</thead>
</table>
| 13.45 - 14.10 | BH-02- **PROMOTING URBAN DEVELOPMENT AND MANAGING CULTURAL HERITAGE: CRITICAL ISSUES OF CULTURAL REVIVAL IN BAHRAIN**  
Ayesha Shah |
| 14.10 - 14.35 | BD-11- **CITIES, PEOPLE AND WATER – AN OBSERVATION ON THE URBAN WATER ENVIRONMENTAL MANAGEMENT**  
Muhammad Qumrul Hassan |
| 14.35 - 15.00 | BD-02- **RURAL URBAN MIGRATION, WHAT HAPPENS NEXT?**  
Sonia Islam, Tahera Tabassum |
| 15.00 - 15.15 | Final Discussion and award of certificates of attendance |
## DETAILED SESSION PLAN

**Monday, 31 October 2016**  
**Session 3A**

**Theme**: Humane Cities  
**Session Chair**: Archt. D.B. Nawaratne  
**Session Co-Chair**: Dr. Rasanga Wijethunga  
**Venue/Time**: Hall No: 1 / 15.30 - 17.00

<table>
<thead>
<tr>
<th>Time</th>
<th>Paper ID, Title and Author(s)</th>
</tr>
</thead>
</table>
| 15.30 - 15.55 | SL-11- DESIGNING FOR SRI LANKAN ELDERLY A STUDY ON CONDUCIVE COLOURS FOR ELDERS HOMES  
               | J.W.N.S Jayawardhana, A.A.Hettiarachchi, D. Amarasekara                                         |
| 15.55 - 16.20 | IR-01- DESIGN GUIDELINES FOR CHILDFRIENDLY CITIES, CASE STUDY: FIROOZE NEIGHBORHOOD IN KERMAN, IRAN  
               | Mahshid Payami Azad, Kourosh Afzali, Sepideh Payami Azad                                         |
| 16.20 - 16.45 | IR-03- CREATIVE PLACE-MAKING AND URBAN DESIGN AT NEIGHBORHOOD SCALE, CASE OF IMAM HOSSEIN PLAZA IN TEHRAN (IRAN)  
               | Razieh Rezabeigisani                                                                            |
| 16.45 - 17.00 | Final Discussion and award of certificates of attendance                                         |
DETAILED SESSION PLAN

Monday, 31 October 2016
Session 3B

Theme : Urban Systems and Functions
Session Chair : Archt. Plnr. Piyal Silva
Session Co-Chair : Archt. Shobha Senevirathne
Venue/Time : Hall No: 2 / 15.30 - 17.00

Time Paper ID, Title and Author(s)

15.30 - 15.55 BD-01- THE IMPACT OF FORCED EVICTIONS ON THE LIVELIHOODS OF THE URBA POOR: THE CASE OF A DEVELOPMENT INDUCED DISPLACEMENT IN KORAIL, DHAKA, BANGLADESH
Sonia Islam

15.55 - 16.20 SL-24- LOSS OR GAINED? AN ANALYSIS OF GREEN SPACES IN CITY OF COLOMBO BETWEEN 2010-2015
K. H.Dilini Wathsala De Silva, Sudheera M. W. Ranwala, Ajith Gunawardene

16.20 - 16.45 BD-05- INTEGRATED WORK-SPACE MODULE FOR INFORMAL MICRO METAL INDUSTRIES OF ZINZIRA, KERANIGANJ, DHAKA
Srijon Barua

16.45 - 17.00 Final Discussion and award of certificates of attendance
ABSTRACTS OF THE PROCEEDINGS

FOURTH INTERNATIONAL URBAN DESIGN CONFERENCE
ICCPP-2016

‘Cities, People and Places’

Theme:
‘Transforming Cities through place-making’;
From Communities to Mega Cities’

Edited by
Janaka Wijesundara
Ranjith Dayarathne

Department of Architecture
University of Moratuwa
Sri Lanka
CONTENTS OF ABSTRACT

SLUM AS ‘PLACE’: TRANSFORMATION, ADAPTATION AND PLACE-MAKING OF DOMESTIC AND COMMUNITY LIVING OF ERSHADNAGAR RESETTLEMENT CAMP
Islam, Tazrin, Adnan, Enam Rabbi

ROLE OF SPATIAL HIERARCHY IN RESETTLING THE URBAN POOR: IMPLICATIONS OF SPATIAL CONFIGURATION ON PRIVACY AND INTERACTION
K.G.T.N. Karunanayake, Shaleeni Cooray

PLACEMAKING IN INFORMAL PUBLIC SPACES: A STUDY OF FUNCTIONALITY AND LIVABILITY IN THE LOW-INCOME SETTLEMENT AT SEDAWATHTHA, KELANIYA
Amanda Jayathilaka, D.P. Chandrasekara

FACTORS INFLUENCING THE EFFECTIVENESS OF HUMAN BEHAVIOR IN DESIGNED LANDSCAPES: TWO CASE STUDIES IN SRI LANKA
Sangeetha De Silva, Anishka Hettiarachchi

SPATIAL PATTERNS AND HUMAN BEHAVIOURS: A STUDY OF URBAN PUBLIC SPACES IN KANDY
Nadun Jayasundara, Prasad Botheju

PHYSICAL ATTRIBUTES OF PEDESTRIAN SPACE THAT FACILITATE THE PERCEPTION OF SAFETY: WITH SPECIAL REFERENCE TO KANDY GRID CITY
Aki la Ranasinghe, Janaka Wijesundara

“REVISITING THE CONCEPT OF SMART CITIES IN THE INDIAN CONTEXT” – LESSONS FROM CONTEMPORARY SUSTAINABLE URBAN GROWTH THEORIES
Jayprakash, Chadchan

TOWARDS AN URBAN RENAISSANCE IN BAHRAIN: REGENERATION OF WATERFRONTS IN CITIES
Fatema Al Hammadi

TEMPORARY URBAN INTERVENTIONS FOR EFFECTIVE PLACE-MAKING IN SHOPPING STREETS: SPECIAL REFERENCE TO PETTAH, COLOMBO
Narma da Wijekoon, Janaka Wijesundara
RECLAIMING TRAFFIC INFLUENCED URBAN RESIDUAL SPACES FOR THE PUBLIC: SPECIAL REFERENCE TO COLOMBO
Anuka Weththasinghe, Janaka Wijesundara

SPATIAL FACTORS THAT CONTRIBUTE TO THE LEFTOVER SPACES IN CITIES: A STUDY WITH REFERENCE TO COLOMBO
H. R. P Fernando, E. A. T. Suresh

A STUDY OF MORATUMULLA TIMBER CLUSTER: AGGLOMERATION THEORY
Chamodhi Anuradha, Prathibhani Bandusena

THE IMPACT OF SOCIO-SENSORY KNOWLEDGE ON PLACE MAKING
Kelum Palipane

ANALYTICAL STUDY ON SENSE OF SAFETY IN URBAN LANDSCAPE SPACES
Y. A. Oshadi Dewduni Jayasinghe, Kowshika Gunasena

LIVING ON THE EDGE: A STUDY ON THE SOCIO-PHYSICAL FORMATION OF URBAN EDGES AS AN IMAGE-DEFINING ELEMENT OF CITY FORM: WITH SPECIAL REFERENCE TO COLOMBO DOWNTOWN
Tharindu, Mahawatta

PROMOTING URBAN DEVELOPMENT AND MANAGING CULTURAL HERITAGE: CRITICAL ISSUES OF CULTURAL REVIVAL IN BAHRAIN
Ayesha, Shah

CITIES, PEOPLE AND WATER – AN OBSERVATION ON THE URBAN WATER ENVIRONMENTAL MANAGEMENT
Muhammad Qumrul Hassan

RURAL URBAN MIGRATION, WHAT HAPPENS NEXT?
Sonia, Islam, Tahera Tabassum

DESIGNING FOR SRI LANKAN ELDERLY A STUDY ON CONDUICIVE COLOURS FOR ELDERS HOMES
J.W.N.S Jayawardhana, A.A.Hettiarachchi, D.Amarasekara
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>DESIGN GUIDELINES FOR CHILD-FRIENDLY CITIES, CASE STUDY:</td>
<td>65</td>
</tr>
<tr>
<td>Firoozeh Neighborhood in Kerman, Iran</td>
<td></td>
</tr>
<tr>
<td>Mahshid Payami Azad, Kourosh Afzali, Sepideh Payami Azad</td>
<td></td>
</tr>
<tr>
<td>CREATIVE PLACE-MAKING AND URBAN DESIGN AT NEIGHBORHOOD SCALE, CASE OF</td>
<td>66</td>
</tr>
<tr>
<td>Imam Hossein Plaza in Tehran (Iran)</td>
<td></td>
</tr>
<tr>
<td>Razieh, Rezabeigisani</td>
<td></td>
</tr>
<tr>
<td>THE IMPACT OF FORCED EVICTIONS ON THE LIVELIHOODS OF THE URBAN POOR:</td>
<td>67</td>
</tr>
<tr>
<td>The Case of a Development Induced Displacement in Korail, Dhaka,</td>
<td></td>
</tr>
<tr>
<td>Bangladesh</td>
<td></td>
</tr>
<tr>
<td>Sonia, Islam</td>
<td></td>
</tr>
<tr>
<td>LOSS OR GAINED? AN ANALYSIS OF GREEN SPACES IN CITY OF COLOMBO</td>
<td>68</td>
</tr>
<tr>
<td>BETWEEN 2010-2015</td>
<td></td>
</tr>
<tr>
<td>Gunawardene</td>
<td></td>
</tr>
<tr>
<td>INTEGRATED WORK-SPACE MODULE FOR INFORMAL MICRO METAL INDUSTRIES</td>
<td>70</td>
</tr>
<tr>
<td>OF ZINZIRA, KERANIGANJ, DHAKA</td>
<td></td>
</tr>
<tr>
<td>Srijon, Barua</td>
<td></td>
</tr>
</tbody>
</table>
SLUM AS ‘PLACE’: TRANSFORMATION, ADAPTATION
AND PLACE-MAKING OF DOMESTIC AND
COMMUNITY LIVING OF ERSHADNAGAR
RESETTLEMENT CAMP

Islam, Tazrin *
Lecturer, Department of Architecture, Military Institute of Science &
Technology

Adnan, Enam Rabbi *
Lecturer, Department of Architecture, University of Asia Pacific

ABSTRACT

This paper investigates the transformation process of a peri-urban slum – ‘Ershadnagar Resettlement Camp’ where forty two years ago; the inner city’s evicted homeless population was relocated without any proper proposition. It discusses how the slum has gained the attributes of a ‘place’ through the transformation and adaptation process of ‘place making’ where both the informal struggles of people and formal organizational initiatives are equally valid. This approach tends to highlight facts regarding the socio-cultural complexity of slums rather than statistical data. Dhaka- the capital of Bangladesh and most densely populated city of the world is facing an extreme pressure to accommodate its ever increasing number of slum dwellers. The study area is located at Tongi, a peri-urban location at the north of Dhaka. This almost 100 acre camp was a government initiative to house the evicted illegal slum dwellers as a part of ‘Dhaka Clean’ project in 1974. Since then, with discrete help from government and non government organizations, the camp dwellers have gradually developed themselves into a community. From field survey, interviews of inhabitants and development workers and discretely available secondary data the place making process have been analyzed at both community and household level. While catalyzing factors in the process of ‘place making’ is observed, the lack of tenure has been identified as a negative catalyst.

Keywords: Slum, Place Making, Ershadnagar Resettlement Camp, Informal Settlement

* Corresponding Authors: Tazrin Islam; E-mail- 124arch0801030@gmail.com
Enam Rabbi Adnan; E-mail- enamrabi@uap-bd.edu
ROLE OF SPATIAL HIERARCHY IN RESETTLING THE URBAN POOR: IMPLICATIONS OF SPATIAL CONFIGURATION ON PRIVACY AND INTERACTION

K.G.T.N. Karunanayake*, Shaleeni Coorey
Department of Architecture, University of Moratuwa, Sri Lanka.

ABSTRACT

The Government organizations in Sri Lanka often resettle the urban poor in high-rise housing. Such housing interventions often do not acknowledge the spatial relationships and organizations of such communities which play a key role in their social ties and way of life.

This study explores the spatial configuration of a low income settlement before and after settlement. Following which the study examines the impact of differences in spatial configurations on the overall housing satisfaction. The impact on privacy and social interaction was specially focused on in the analysis of housing satisfaction.

An ongoing community housing project “MuwadoraUyan a” in Colombo-Thotalanga was selected for the study. The differences in spatial configurations using space syntax and the residents’ views on interaction and privacy using interview were explored in the original low rise and the new high rise settlement. Study highlights the importance of spatial hierarchy and identifies the spatial structuring and spaces necessary to achieve desired interaction and privacy in an original low rise low income settlement. Following which the need for demonstrating such spaces and design directions for a high rise settlement is discussed.

Key words: low income settlements, resettlements, spatial configuration, social interaction, privacy.

*Corresponding Author: K.G.T.N.Karunanayake; E-mail- thavee90@gmail.com
PLACEMAKING IN INFORMAL PUBLIC SPACES: ASTUDY OF FUNCTIONALITY AND LIVABILITY IN THE LOW-INCOME SETTLEMENT AT SEDAWATHTHA, KELANIYA

Amanda Jayathilaka,*D.P. Chandrasekara*
Department of Architecture, University of Moratuwa, Sri Lanka

ABSTRACT

Rapid urbanization has created low-income settlements in developing countries in all parts of the globe. The informal public spaces are an important and essential component of these settlements. They are strongly connected to the life patterns and needs of the occupants. The organically evolved informal spaces are functional, active and lively. It is seen that designed public landscaped spaces of newly constructed high-rise apartment complexes for the low-income lack a vibrant environment. Under such circumstances the users abandon such spaces. Functional landscaped spaces affect the quality of the life of the people as well as the strength of the urban fabric.

Many scholars have contributed to the development of place making theory, which explains how built environment is converted to places, which works exceptionally well with the users.

This research investigates the issue of place making in reference to functionality and livability of the informal public spaces in low-income settlement. Place making helps people to collectively reimagine and reinvent public spaces as the heart of the community. Emphasizing the connection between people and the spaces, place making refers to a collaborative process by which the public realm can be shaped in order to maximize shared values. According to the theoretical analysis of place making, places should possess qualities such as mixed use (sociability), access and linkages, flexible and hybridity, self-satisfaction, comfort and safety.

The outcome of the research explains how the informal public spaces of the low-income settlement have become livable and functional due to the strong connection to place making.

Keywords: low-income settlement, informal public spaces, functionality, livability, Place making.
FACTORS INFLUENCING THE EFFECTIVENESS OF HUMAN BEHAVIOR IN DESIGNED LANDSCAPES:
TWO CASE STUDIES IN SRI LANKA

Sangeetha De Silva*, Anishka Hettiarachchi*
Department of Architecture, University of Moratuwa, Sri Lanka

ABSTRACT

Urban recreational spaces are meant for people to gather, relax, refresh and improve their interaction, thus should be designed consciously and sensitively to have a positive impact on a person’s cognition. The indicator of this impact will be the corresponding behaviour of users. A Landscape Architect is expected to influence the user’s movements and behaviour in creating a desired responsive atmosphere, not only by just designing pathways or furniture arrangements, but also by facilitating user’s movements and behaviour patterns associated with them. Several recreational landscape design interventions have emerged in urban areas of Sri Lanka during the recent past which seems to function well. However, whether these spaces really fulfilled above behavioural need is worth investigating.

This paper intends to explore five significant factors which influence effective human behaviour in urban public spaces applicable to recreational landscape designs, namely; variety, safety, convertibility, scale and permeability as commonly identified by the eminent scholars; Alexander 1977, Rapoport 1977, Bentley et al. 1985 and Gehl, 2010. Leading to an investigation on factors unique to Sri Lankan context, a case study survey was implemented in Diyatha Uyana, Baththramulla (n=30) and Urban wetland park, Nugagoda (n=30) with the use of questionnaires, behavioural mapping, observations and then analyzed with spatial syntax software.

Design following behaviour as well as design against behaviour was observed in both cases. Diyatha Uyana was ranked comparatively high with reference to all the factors tested dominated by variety over Urban Wetland Park. Lack of convertibility, sense of scale, safety and sensitivity to the psychophysical and behavioural requirements of human beings related to recreation were found to be the weak points inducing design against behaviour of the users and needs careful attention in future recreational landscape design interventions.

Keywords: Human behaviour, Designed landscapes, Recreation, Urban public spaces, Effectiveness, Diyatha uyana, Wetland Park

*Corresponding Author: Sangeetha De Silva; E-mail- Sangeethakghs@gmail.com
SPATIAL PATTERNS AND HUMAN BEHAVIOURS: A STUDY OF URBAN PUBLIC SPACES IN KANDY

Nadun Jayasundara, Prasad Botheju
Department of Architecture, University of Moratuwa, Sri Lanka.

ABSTRACT

Rejection of architectural projects, urban designs and resettlements are major concerns in Sri Lankan and worldwide architectural fields. Throughout a vast architectural discourse, there are clear identifications that address the human experience in space as a way to success.

Experiencing the space is a vital need of human beings. It satisfies the objectives of a human’s inherent emotional needs. Human behaviours and their expectation differ from place to place. To achieve a particular status of human behaviour within a place, the place should support that behavioural change.

The main objective is to study the phenomenon of spatial patterns and human behaviours in urban public spaces in Sri Lankan context. The study further focuses on waiting behavioural responsiveness towards geometric properties of public spaces using spatial theories of Jay Appleton, Norberg-Schulz and Christopher Alexander.

A well adopted, architectural and landscape context, Kandy city was selected for this study. Five different geometrical properties and four types of human behaviour patterns were selected for the study.

To study this complex landscape mosaic in Kandy, a mix method combined with observation checklist and questionnaire-based interviews were incorporated.

The primary research findings proved two out of four behavioural actions have a relationship with spatial patterns. The secondary research findings proved that three out of five geometric properties have a significant relationship with the waiting behaviour.

The research ascertained that existing spatial patterns and its geometric shape diversifies human behaviour. The major components of these behaviour–spatial pattern relationships are extracted and studied with the purpose of contributing to the current practice of user analysis method and design process.

Keywords: Human behaviours; Spatial patterns; Theory of centres; Geometric properties of public space; Kandy City.

*Corresponding Author: Prasad Botheju; E-mail- archifour2010@yahoo.com
PHYSICAL ATTRIBUTES OF PEDESTRIAN SPACE THAT FACILITATE THE PERCEPTION OF SAFETY: WITH SPECIAL REFERENCE TO KANDY GRID CITY

Akila Ranasinghe*, Janaka Wijesundara
Department of Architecture, University of Moratuwa, Sri Lanka

ABSTRACT

This paper explores a link between pedestrian space based safety facilitating strategies formulated for urban settlements.

Pedestrian spaces which can be simply address as streets and alleys are major elements of a city. City image and the level of city functionality depends on frequency of these pedestrian spaces.

Perception of ‘safety’, which is the physical and psychological feel of protection, is a key factor that attracts human being into spaces to behave among them. Positive physical attributes of the pedestrian spaces are extremely effective in ensuring the safety within them.

Most architectural and urban design theorists discuss the independent physical attributes that facilitate the safety but usually there is combination of a set of attributes contributing towards the term. The research systematically reviews these attributes to formulate the legitimate combinations to facilitate the safety. The study was launched in Kandy grid city that contains several streets and alleys network. Kandy city is an ancient city with a significant culture, tradition and ethnic.

Study results the least combinations of set of attributes to facilitate the perception of safety as representing all four key attributes extracted from literature search strategy which are built-form, planning and layout, ambience and functions.

Keywords: perception of safety, pedestrian space, physical attributes, Kandy, sidewalks, streets

*Corresponding Author: Akila Ranasinghe; E-mail- akilaband@yahoo.com
“REVISITING THE CONCEPT OF SMART CITIES IN THE INDIAN CONTEXT” – LESSONS FROM CONTEMPORARY SUSTAINABLE URBAN GROWTH THEORIES

Jayprakash, Chadchan*
Mysore School of Architecture, Mysore, India

ABSTRACT

This paper broadly aims at understanding the concept of smart city movement and development from Indian perspective. An attempt is made to review and understand the concept and definitions of smart cities in India and other foreign nations especially in the European countries in a comparative manner. Smart city movement is similar to sustainability movement. The concept of smart city aims at improving the efficiency based on intelligent management, integrated ICTs and active citizen participation. The broad components of smart city mainly include: Smart Economy, Smart Environment, Smart Governance, Smart Living, Smart Mobility and Smart People. By and large, smart city concept believes in applying Information and Communication Technologies (ICTs) to improve the efficiency of cities. Promoting smart cities is about rethinking cities as inclusive, integrated, and livable." In this paper, author makes an attempt to carry out comparative empirical study of contemporary sustainable urban growth theories mainly Smart growth, Compact city, New Urbanism and Transit Oriented development (TOD) principles. Suitable lessons are drawn from the comparative study and on the contrary author argues that, smart city movement complements sustainable development and it can be treated as refined and extended version of contemporary sustainable urban growth theories. In conclusion author states that, smart growth, new urbanism, compact city and TOD principles act as pre-requisite for sustainable urban planning and creating fundamental framework for smart city movement. The efficiency of the smart cities cannot be enhanced without considering and adopting principles of contemporary sustainable urban growth theories. Smart cities and contemporary sustainable urban growth theories complement each other in creating sustainable environment and in no way, the term smart city replaces the words smart growth, new urbanism, compact city and TOD.

Keywords: Smart City, Smart Growth, New Urbanism, Compact City, TOD.

*Corresponding Author: Jayprakash Chadchan; E-mail: jpcchadchan@gmail.com
TOWARDS AN URBAN RENAISSANCE IN BAHRAIN: REGENERATION OF WATERFRONTS IN CITIES

Fatema Al Hammadi
Department of Architecture, College of Engineering
University of Bahrain, Bahrain.

ABSTRACT

Waterfront areas have always been an important part of the urban settings that cities try to preserve for the best use and practice. Many cities have failed in providing public access to the waterfronts while there are also many successful experiences in attempting to regenerate the seashores for public. In Bahrain, the developments that have taken place in the past ten years have affected the public access to the seas. A rapid growth has taken place leading to a massive amount of reclaimed lands around the main island. Unfortunately, these have separated the main cities, which used to be on the shore from the direct contact of the sea. Bahrain being an island, the citizens were fully dependent on the sea in their daily life for centuries. The sea was the grace that god had blessed them with, therefore, most people have spent their lives in the sea or adjacent to it. People of the island today confess sadly that they forget that they are living on an island. Studies have shown access for public to the water edge in Bahrain is no more than 8% of the total islands' shoreline. Due to the rapid growth and infrastructure development, the government intended to reclaim lands to meet people's needs. Unfortunately, this has created more barriers and has enlarged the gap between the cities and the water edge. Inevitably; People have got disconnected from the sea.

The main intention of this paper is to view the practice of waterfront urban development in Bahrain generally and particularly its effect on Hidd. This paper examines the city of Hidd as the area of focus and as a practical example to similar cases in Bahrain. The objectives of this paper are to evaluate the effectiveness of regeneration of the waterfront in the area and how to apply them to cater to people's needs. Moreover, the study will develop an understanding of waterfront development, urban settlement and growth in the context of Bahrain. The paper offers some solution to the problem in order to create a better living environment that has a stronger connection to the city and the waterfront at the same time.

Keywords: Bahrain, Hidd, waterfront, Regeneration, Connection, Development

* Corresponding Author: Fatema Al Hammadi ; E-mail : f.alhammadi85@gmail.com
TEMPORARY URBAN INTERVENTIONS FOR EFFECTIVE PLACE-MAKING IN SHOPPING STREETS: SPECIAL REFERENCE TO PETTAH, COLOMBO

Narmada Wijekoon*, Janaka Wijesundara
Department of Architecture, University of Moratuwa, Sri Lanka

ABSTRACT

Asian cities contain a unique heterogeneity of social cultural backgrounds, which has a significant existence of bazaar type or informal sector with open type temporary and mobile activities that are more flexible, quick, light and low-cost. Today, the mobile, temporary and bazaar type informal activities have an increasing demand for its potential in resisting the high urban rental of land and goods.

The study explores the temporary urban interventions such as activity based intentions, structural interventions and sensory interventions in urban shopping streets as place making elements. This stimulates the city to be a unique place for people and transforms it into a place of enjoyment. It can be remarkably effective in remaking an urban public place such as Pettah in Colombo city which is studied here as a case.

But permanent physical components are committed resources to improve shopping streets rather than temporary components. That is because city development processes assume that improvements in temporary urban interventions cause uncertain risks in the city. Therefore, temporary components in streetscapes are provided less attention and care. Resources are committed for permanent physical improvements of shopping streets by replacing or removing the temporary installations, which are being eroded. This is despite the great interest people show for these places and the benefits gained from them over the permanent components in shopping streets.

The research confirms that the temporary urban interventions in shopping streets are the key aspects of making the urban shopping places active. The hierarchy and continuity in the arrangement of layers creates a kind of urban order, which may not be understood by an outsider of that spatial culture. Using unique patterns to enhance city identity and image is also a strategy of economic and community development in the city. Implementing place-making brings positive

* Corresponding Author: Narmada Wijekoon; E-mail- ntkdau@gmail.com
results in empowering community capacity. It also reveals elements for the affordable places given by community.

Keywords: Urban place, shopping streets, temporary urban interventions, place-making, Pettah
ABSTRACT

Although highly populated districts like Colombo, suffer from decrement of open public spaces, there are many unused areas within the city which has not considered for its full potential. It’s observed that most of them are generated due to traffic related issues. The attention given to revitalize them is questionable. Therefore the study aims to identify the possibilities of traffic related urban residual spaces being reclaimed for public use. The study will explore most suitable reclaiming possibilities in selected urban residual spaces. Usage qualities, spatial qualities of existing residual spaces and revitalization possibilities were tested in this study. Data collection was done via questionnaires, interviews and systematic observations. Four cases were selected with variation in its physical layouts and locations in order to represent the traffic related urban residual spaces in Colombo.

The study reveals spatial and usage qualities of traffic related residual spaces which vary, mainly due to location type and size of the site; people feel insecure in residual spaces due to vehicular movement and that feeling could be mitigated by physical separations and strategies. Lack of accessibility affects the users to be limited in to a particular category based on gender and age. With reducing the size of the residual space, the reclaim possibility is being changed. Due to traffic movement, most of traffic related spaces has higher visibility, defined site boundaries and it’s a potential for reclaiming. Lack of management and control is the main reasons behind the residual symptoms. Although the traffic related residual spaces have residual symptoms, respondents believed that there is a possibility to reclaiming those spaces for public use. Every residual space has unique appropriation /intervention by users. By evaluating these appropriations it’s possible to select most suitable reclaiming possibility for residual space. Well organized public-private partnerships will help to evade residual symptoms and allow better management and control of reclaimed public spaces.

Keywords: Residual space, Reclaiming, Traffic related, Spatial and usage qualities, appropriation
SPATIAL FACTORS THAT CONTRIBUTE TO THE LEFTOVER SPACES IN CITIES: A STUDY WITH REFERENCE TO COLOMBO

H. R. P Fernando*, E. A. T. Suresh
Department of Architecture, University of Moratuwa, Sri Lanka

ABSTRACT

The evolution of urban city in certain instances lead to disturb the quality of city spaces. Spaces of a city play a vital role in treating people with respect in terms of keep the city spaces alive and safe. However in urban areas there are many abandoned spaces which are converted into leftover spaces within the passing of years. This is one of the main challenges affecting the advancement society while dealing with the congested spaces. Therefore this research aims to identify the reasons for creation of leftover spaces in the Colombo region. Initially a literature review is carried out and based on the literature findings a conceptual framework was developed. Afterwards three case study sites were selected and these were analyzed based on the conceptual framework. Questionnaire surveys, interviews and observations are used for data collection. Finally a detailed analysis was carried out based on the physical, visual and psychological aspects of leftover spaces. Physical aspects are identified as the main reason for leftover spaces within.

Key words: urbanization, city spaces, leftover spaces, city image, landscape architecture.

*Corresponding Author: H. R. P Fernando; E-mail- ruwanaraprabuddhu@gmail.com
A STUDY OF MORATUMULLA TIMBER CLUSTER:
AGGLOMERATION THEORY

Chamodhi Anuradha, Prathibhani Bandusena *
Department of Town & Country Planning, Faculty of Architecture,
University of Moratuwa, Sri Lanka

ABSTRACT

“Cluster” means purely a grouping. Industries and firms are geographically concentrated as clusters. Location behavior of firms of a particular industry tends to be clustered together in space as clustering enables them to reach higher economic performance. Alfred Marshall defined the economic benefits gained through the clustered industry as agglomeration effects. Agglomeration economies are the benefits that generate when industries, firms and people locate together in close vicinity to one another in cities. The researchers have discussed agglomeration economies in different contexts. However there was a knowledge deficiency about this in Sri Lanka.

This research was based on the theory of agglomeration economies (AE) that aims to study way of functioning sources of agglomeration economies such as sharing, matching and learning in Moratumulla timber industrial cluster. The literature review was studied the theory and identified the indicators to study the sources of agglomeration economies. Moreover the identified indicators were finalized through the professional discussions. Further Questionnaire survey, interviews and observation were used for data collection in order to study the sources of agglomeration economies of Moratumulla. The research was based on the qualitative analysis. Therefore content analysis, network analysis and mapping techniques were used as data analysis of this study.

The empirical result of analysis in Moratumulla timber industrial cluster has identified sharing the intermediate input supplies, workers and consumers and a large pool of labor also facilitated the matching. However due to the trend of reduction skilled carpenters’ labor pool in Moratumulla is leading to mismatching. Further Moratumulla can be identified as a center for learning carpentry and act as a workers training school due to the generation of knowledge and diffusion among others through accumulation of knowledge. However

* Corresponding Author: Prathibhani Bandusena; E-mail- prathibhanipb@gmail.com
Moratumulla timber industry cluster have characteristics of urbanization economies as it goes beyond the localization boundary.

**Keywords:** Agglomeration economies, Timber cluster, Sharing, Matching, Learning, Moratumulla,
THE IMPACT OF SOCIO-SENSORY KNOWLEDGE ON PLACE MAKING

Kelum Palipane*
Melbourne School of Design, Melbourne, Australia

ABSTRACT

The emergence of ‘mega cities’ is a growing phenomenon. It is seen as an undeniable manifestation of modernity. But who’s idea of modernity? Many cities in emerging nations caught up in the global process of urban regeneration pursue a western model of modernity and urbanity without much consideration for its impact on social sustainability. This can result in entrenching already inequitable conditions where policies typically address the interests of elite minorities. This paper presents an alternative approach to analyzing and engaging with place and its sociality to reveal nuanced place making practices of existing communities giving voice to marginalized groups and views.

Presented within the context of fieldwork studies in the Melbourne suburb of Foots Cray, this paper focuses on the multimodal mapping technique developed to identify and analyze sensory embodied practice. Ethnographic data supplemented by audio and visual recordings are synthesized and represented in a series of multimodal diagrams based the concept of vertical montage which explores the relationships between time, space and activity. This paper also briefly presents design exploration of a Master of Architecture student at the University of Melbourne who adopted the mapping technique, developing a richly experiential and programmatically appropriate design for urban regeneration. Time-based methods reveal that everyday practices create their own epistemic spaces where specific constructs of knowing and being are enacted by specific bodies of differing capacities and cultures. This knowledge could help inform the development of regional model of ‘modernity’ that is socially sustainable and specific to place. One that attempts to address inequity in the participation process and acknowledges the importance of existing spatial practices in creating complex and pluralistic urban spaces.

Keywords: social equity, urban regeneration, multimodal mapping, Footscray, sensory ethnography

*Corresponding Author: KelumPalipane; E-mail- palipane@unimelb.edu.au
ANALYTICAL STUDY ON SENSE OF SAFETY IN URBAN LANDSCAPE SPACES

Y. A. Oshadi Dewduni Jayasinghe*
Kowshika Gunasena
University of Moratuwa, Sri Lanka

ABSTRACT

This paper examines the user behaviours relative to sense of safety in urban landscape spaces. Reconciliation of feelings, emotions and behaviours of user due to image of the space; it may be comfortable or uneasy. Urban become abandoned or uneasy caused by many design issues. It disrupts user engagement and assists to create opportunistic crime spaces. Space contains several physical and psychological parameters which have been found on this study. Prospect and refuge theory, figure ground theory, concept of eyes on the street, broken window theory and sense of ‘enclosure’ theory strengthen the selection of parameters. Theoretical parameters are strengthened by visibility, boundary and enclosure and changing elements affect the sense of safety and fear. Beira Lake and Viharamahadevi Park have been selected as cases, because both have similar landscape characteristics. Surrounding path adjoining with roadscape and middle landscape mass add symbolic similar characters. This study has used questionnaires, interviews, photo and video survey, behaviour mapping and observations to identify safety or fear generating factors considering a sample of participants in the multi ethnic neighbourhoods, visitors and regular visitors in the day time and night time. Compared to Beira lake; Viharamahadevi park gives safer feeling due to width to height ratio. The park has comparatively long width relative to surrounding heights. The Beira Lake is crowded with high rises and length comparatively less than Viharamahadevi Park. It makes uneasy feeling and control user behaviours.

Keywords: sense of safety, human behavior, spatial quality, urban landscape spaces

*Corresponding Author: Y. A. Oshadi Dewduni Jayasinghe; E-mail- oshadidewduni@gmail.com
LIVING ON THE EDGE A STUDY ON THE SOCIO-PHYSICAL FORMATION OF URBAN EDGES AS AN IMAGE-DEFINING ELEMENT OF CITY FORM: WITH SPECIAL REFERENCE TO COLOMBO DOWNTOWN

Tharindu, Mahawatta*
Department of Architecture, University of Moratuwa, Katubedda, Sri Lanka

ABSTRACT

Cities are one of the most comprehensive representations of a society and its culture. Most urban built environments in the past have spontaneously responded to ever evolving socio-cultural values as well as political and functional needs of its population.

A city is a combination of identified elements that play a crucial role in liveability. In a way, the individuals that come into contact with the city as the hometown or the destination of work or passers-by have attachments with those elements that shape the city character emerging the “image of the city”. With numerous examples from all corners of the globe, it is a general acceptance that the city’s liveability is directly related to its own city image.

Colombo, the commercial capital of Sri Lanka has seen many changes throughout the last few decades as a common fact in all Asian and South East Asian countries face. With the introduction of the Post-Colonial Administrative structures on the one hand, and the open economy based financial cultures on the other hand, the city of Colombo is increasingly fragmented into socially, culturally and economically diverse sub-districts or functional districts. Under this notion this study looks at the subsequent formation of urban edges and the possible role of these edges could play in defining the city image to make the city liveable having the ultimate target of sustainable urbanization.

The study is mainly based on the Kevin Lynch’s study on the city image and examines the Downtown of Colombo.

Keywords: Urban Edges / Liveability / City Image / Functional Districts / Colombo.

*Corresponding Author: Tharindu Mahawatta; E-mail- tharindumahawatta@hotmail.com, Tharindu.mahawattha@gmail.com
PROMOTING URBAN DEVELOPMENT AND MANAGING CULTURAL HERITAGE: CRITICAL ISSUES OF CULTURAL REVIVAL IN BAHRAIN

Ayesha, Shah*
Department of Architecture and Interior Design, University of Bahrain, Bahrain

ABSTRACT

Alongside rapid urbanization of the region and the city, Bahrain has placed a significant emphasis on the revival of historical cultural and built heritage, in recent years. Focused on attracting global attention and local investment whilst fostering economic growth and addressing some of the social challenges related to rapid urbanization, Bahrain’s new city projects are using elements of heritage to promote the development projects both at the local and international levels. Indeed, cultural heritage enables people to better understand previous generations and the history of where they come from and can thereby provide an automatic sense of unity and belonging. In these, numerous critical issues arise related to the need to recognize and retain authenticity as an inherent value of cultural heritage in order to employ such development in the task of uniting people. The objective of this paper is to examine how the engagement of heritage in development has incited a cultural revival, within the transformation of mega city developments. It aims to demonstrate how relevant or irrelevant authenticity is, in relation to promoting heritage restoration and redevelopment of heritage buildings. The paper evaluates the presence of authentic historical fabric in the revived architecture of old Muharraq - the previous capital of the country that has undergone a renaissance of tangible and intangible heritage from the past. It critically analyses and questions how this new-built heritage is being produced, by whom, and most importantly for whom. The research employs the study of documentation of these projects, reflecting on their aims and motivations. It buttresses the analysis by the engagement of people’s perceptions derived using a survey of opinions. The intention is to gain an insight on how local residents relate to these renewal projects and if they do indeed promote national pride and a sense of belonging to their historic past. In conclusion, the paper seeks to locate if authenticity is, if at all, relevant to the people’s engagement with their cultural and built heritage in Bahrain. Moreover, it will evaluate the ways in which the

*Corresponding Author: Ayesha Agha Shah; E-mail- aashah@uob.edu.bh
cultural revival has promoted investment and tourism at local and international levels and help create a sense of belong among the people.

**Keywords:** Heritage, authenticity, integrity, urban development, area conservation
CITIES, PEOPLE AND WATER – AN OBSERVATION ON THE URBAN WATER ENVIRONMENTAL MANAGEMENT

Muhammad Qumrul Hassan*
Department of Geology, Faculty of Earth and Environmental Sciences, University of Dhaka, Bangladesh

ABSTRACT

The Planet Earth is a member of our Solar System and, fauna and flora are present since then when planet content water. The 3/4th of water is occupied in the earth. The mode of occurrence of water is on surface and sub-surface positions of different water qualities in nature. The usable condition of water is very limited in the context of the Earth’s Water Budget. However, the many mega-cities to small urban town, people are living in the seaside or riverside since then civilization took places. No water, then no society, sometimes it call as sources of life. The quality of water is now un-control due to different threats from natural to man-made disasters. The un-planned urbanization in the under develop to develop countries the contaminated free water is the most important challenge in all cities. The integrated water environmental management is a processed to overcome the global issues of safe and healthy water supply system in the town to village levels of the societies. In this paper gives some idea on the Urban Water Environmental Management (UWEM) to sustain our future society.

Keywords: Earth, Solar system, Earth’s water budget, Contaminant and UWEM.

* Corresponding Author: Muhammad Qumrul Hassan; Email: mqhassan2009@gmail.com
RURAL URBAN MIGRATION, WHAT HAPPENS NEXT?

Sonia, Islam*, Tahera Tabassum*
Institute of Architects, Bangladesh

ABSTRACT

If urban migration trend is compared worldwide, developing countries have a higher percentage. This is because the number of people added each year escalates to add more to the already increasing population. We have had countless discussions on the effect of urbanization challenges that these countries face. But how often did we ponder on the deserted rural alleys? The “pull” and the “push” factors for urban migration are discussed worldwide, where economic, social and financial sectors are often debated on. But then, the question outstands as, would there ever be “pull” factors back in the rural areas or they would continue to be tagged as “abandoned”.

The objectives settled for this discussion are first and foremost, to promote and encourage incentives that would reduce urban migration to some extent besides discovering ways that could be implied to revive these areas, so that even after major migration phases, the rural areas would not be considered inappropriate to function for the existing inhabitants. The approach is exploratory, incorporating qualitative research strategies. Scenarios from different countries are compared in the context of South Asia, where the urbanization rate seems to have reached the height. The results however are expected to have brought out ideas in for the country sides to be re-enacting, most importantly, highlighting the involvement of different actors in the process. It is expected that through these findings, we would be able to conclude that urbanization, besides being an effect of current globalization trend, with social aspects as well as the economic ones, would not always bring negative phases for rural sides of the developing countries but might as well open new opportunities for future development sectors.

Keywords: Push, Pull, Migration, Urbanization, Explorator

*Corresponding Authors: Sonia Islam; Email: mailbox.harappa@gmail.com
Tahera Tabassum; Email: mailbox.harappa@gmail.com
DESIGNING FOR SRI LANKAN ELDERLY
A STUDY ON CONDUCIVE COLOURS FOR ELDERS HOMES

J.W.N.S Jayawardhana*, A.A. Hettiarachchi
Department of Architecture, University of Moratuwa, Sri Lanka

D. Amarasekara
Department of Sociology, University of Peradeniya, Sri Lanka

ABSTRACT

Aging of population in Sri Lanka is found to be increasing in an alarming rate. As per the estimations of the department of census and statistics, 1/5 of the total population (20%) will be above 60 years by 2030. This may lead into a definite paradigm shift in the physical and spatial attributes of future buildings and cities conducive and sensitive for psychophysiological requirements of an aging population. In comprehending the spatial needs of Sri Lankan elderly, the current investigation zooms into colour, an imperative psychophysiological element of design which is neglected and less investigated often. A person’s preference and response to colours are subjected to transformation with age. Accordingly, it was attempted to identify most appropriate colours for Sri Lankan elderly based on their preference, to be integrated into their living environments with special reference to elders’ homes. An elder’s socio-economic state was hypothesized as a significant parameter leading to his/her colour preference.

Three elders’ homes located in Colombo and representing three most significant economic levels (low, middle and upper) of the society as a cross section were selected to be studied. The responses from 120 elders were obtained using a questionnaire survey and interviews. The research subjects were guided with an A2 size colour palette having 72 colour codes as options to select the most conducive colours to be incorporated in generating the corresponding spatial attributes of selected functional spaces; living, dining, bedroom, kitchen, religious space, and bathroom of their elders’ homes based on preference.

*Corresponding Author: J.W.N.S. Jayawardhana; E-mail- niljawa@yahoo.com
A person’s past socioeconomic level characterized by corresponding level of education, social status, political opinions, religious opinions, gender and marital status were identified by this research as significant parameters affecting colour preference of his/her elderly stage. These parameters need to be carefully considered when specifying colours in creating better, conducive environments for elders in future.

Keywords: Colour preference, Aging, Socio-economic status, Elders homes
DESIGN GUIDELINES FOR CHILD-FRIENDLY CITIES, CASE STUDY: FIROOZEH NEIGHBORHOOD IN KERMAN, IRAN

Mahshid Payami Azad*, Kourosh Afzali, Sepideh Payami Azad
Islamic Azad University of Kerman, Iran
Department of Urban Environment System, Chiba University, Japan

ABSTRACT

Recent years have seen a rapidly growing public debate about the welfare of children around the world. According to UNICEF, a Child-friendly City is a system of good local governance committed to the fullest implementation of the Convention on the Rights of the Child. In addition, the outdoor environment is perceived as a social space which influences children’s choice of informal play activities and promotes healthy personal development. On the other hand, in everyday life in Iran, children play on streets or alleys and use almost every open spaces and spaces between buildings as their playground. While, absence of places designed for children, not only in terms of their quantity, but also their quality and neglecting basic safety rules for children are noticeable.

The purpose of this study is to analyze how the structure of the built environment contributes to environmental child friendliness and proposing some guidelines toward child friendly cities. This paper draws on research and practice literature as well as the thoughts, experiences and observations of children in Firoozezeh neighborhood, as it seeks to draw out the key themes and elements’ regarding a child friendly neighborhood and how it can be built. Children between 7-12 years old from Firoozeh neighborhood in Kerman, were asked to explain their favorite environments and were interviewed individually afterward. The results were analyzed to achieve some guidelines in child friendly environments and explore the places with higher attraction for children.

Keywords: Children, child-friendly, neighborhood, outdoor, play

* Corresponding Author: Mahshid Payami Azad; E-mail- Mahshid_pa_69@yahoo.com
CREATIVE PLACE-MAKING AND URBAN DESIGN AT NEIGHBORHOOD SCALE, CASE OF IMAM HOSSEIN PLAZA IN TEHRAN (iran)

RAZIEH, REZABEIGISANI *
Faculty of urban planning, College of fine arts, University of Tehran, Iran

ABSTRACT

“Places” are experienced spaces of the city which are lived in. Although creating places through physical activities is among the main objectives of urban design practices, however, local places are mainly shaped and transformed by people who live in. People use their identity, culture and “creativity” in (re)producing their places. Urban design as a problem-solving process can produce the basis and the context for the transmission of the creativity to the place. This paper aims to clarify the relationship between traditional urban design and creative place-making. It identifies the role of creativity in place-based community design and tries to achieve to a conceptual theoretical model. The main question to be answered in this paper is that “what is the role of creativity in local place-making and urban design”? So, the result of the paper is a conceptual framework which shows the relationship between place-making, urban design and creativity and is based on the integrated literature review. In order to investigate the conceptual framework, qualitative research method through in-depth interviews has been done with local people in “Imam Hossein plaza” of Tehran. Imam Hossein plaza which is located in central Tehran is the consequence of the transformation of an urban square to an urban plaza (called Imam Hossein) which is done by the Tehran municipality in recent years. In conclusion, the conceptual framework of the paper is completed according to the results of the qualitative analysis of the case study.

Keywords: place, space, place-making, social creativity, urban design, Imam Hossein plaza.

* Corresponding Author: RAZIEH, REZABEIGISANI; E-mail-r.rezabeighi@ut.ac.ir
THE IMPACT OF FORCED EVICTIONS ON THE LIVELIHOODS OF THE URBAN POOR: THE CASE OF A DEVELOPMENT INDUCED DISPLACEMENT IN KORAIL, DHAKA, BANGLADESH

Sonia, Islam*
Harappa Architects, Bangladesh

ABSTRACT

This paper talks about such a case from April 2012, which involved an eviction of a section of the biggest informal settlement Korail, in Dhaka. The eviction has brought into focus the need for a coherent urban poverty and resettlement approach. One part of the slum was bulldozed to extend the main road, as a development project of the government. The plans worked in terms of development initiative, but the policy remained silent on relocation of the evictees. The progress for this research was supported by a quasi-experiment as a strategy. The objective was to reveal an evaluation of the effects on the livelihoods of the evictees and suggest right based alternatives to this development induced eviction. The experiment compared two groups on their livelihood assets and strategies. The evictees were titled as the treatment group and the non-evictees as the control group. Although the comparison inclined more on the “before-after” situation of the treatment group, the control group was considered to explain what would have happened to the treatment group if this eviction had not happened. The research method involved analysis of both qualitative and quantitative data obtained from surveys and semi-structured interviews. The specific suggestions for the policy makers and involved authorities remain to be focused on the laws against eviction and housing rights besides being considerate and coordinated towards the issues of homelessness or landlessness.

Keywords: Forced eviction, Development induced displacement, livelihoods, Impoverishment Risk, Coping strategy

* Corresponding Author: Sonia Islam; E-mail: sonia.islam245@gmail.com
ABSTRACT

Green spaces are an essential component in urban infrastructure and their heterogeneity influence the services they provide to mankind. During the last five year period a significant change in the landscape of City of Colombo was observed as many improvements were incorporated into various components of its infrastructure. We mapped vegetation cover of green spaces in 47 wards in the City of Colombo in 2010 and 2015 using Google Earth, ArcGIS 10.3 and ArcMap software and assessed their change in extent. In 2015 street trees, and vegetation in residential and commercial areas covered 86.06% of the city area while amenity and green open areas (such as lawns and playgrounds) covered 5.50%. Cinnamon Gardens exhibited the highest cover for both these vegetation types. Patchy mix vegetation cover of the City was 4.49% and the highest extent was observed in Fort. Mattakkuliya had the highest extent of lake and canals, and associated wetlands which showed a city wide cover of 3.3%. Scattered patches of abandoned paddy fields and related marsh cover were highest in Kirullapone ward. Between 2010-2015 the total extent of green spaces in Colombo City has not been significantly changed, instead changes among vegetation types were identified. These included a 1.5% decrease in open green areas, patchy mixed vegetation, marshlands and a slight increase (>0.5%) in vegetation at roadside, residential, commercial and amenity areas. A remarkable reduction of 13.26% in green spaces was reported from Modara while 3-6% decrease was reported from Thimbirigasyaya, Bambalapitiya, and Kirullapone wards. A 5-25% improvement of green spaces was reported in Panchikawatte, Pamankada, Kotahena West and East, Lunupokuna and Bloemendhal wards. While reflecting the recent changes in landscape in Colombo wards, this paper also highlights the need of strategic improvement of different vegetation types to receive optimum services and values from
city’s green spaces. Thus, it is expected that findings of this work will be used for planning of further modifications to the existing landscape in the City of Colombo.

Keywords: green-spaces, green-cover, Colombo, vegetation
INTEGRATED WORK-SPACE MODULE FOR INFORMAL MICRO METAL INDUSTRIES OF ZINZIRA, KERANIGANJ, DHAKA

Srijon, Barua*
Department of Architecture, University of Asia Pacific, Bangladesh

ABSTRACT

A silent industrial revolution has been taking place on the banks of river Buriganga, Zinzira, Dhaka. In comparison with other giant industries, Zinzira have been playing a significant role off the record in recent years. The scenario has generated from quite an unorthodox context and term “made in Zinzira”. During 70’s-80’s a special group of skilled workers started to emerge in Zinzira who were mostly hardware mechanics. By only using scrap metal and local knowledge they can reverse engineer expensive machines locally in much less costlier fashion. The term “made in Zinzira” originated from this skill of “reverse engineering” which is somewhat seen in negative lights as counterfeiting and cheap products. As a result, lack of infrastructure, proper workstation, working environment from the scale of the community hinders the potential of this sector. The research & design scheme tries to explore the relationship between the work environment and existing infrastructure within the urban fabric of Zinzira. The aim is to determine a sustainable solution of modules that could be the holistic interface that this specific micro metal industry deserves, as the capital and investments are crucial for the owners and workers of this type of small scale industries. The research will conclude via the comprehensive investigation on how to explore and improve work-space relationships of micro metal industries theorizing schematic work-space modules in order to establish Zinzira as an asset to be recognized in reverse engineering sector rather than leaving it overshadowed by wrongly describing it a counterfeit production industry.

Keywords: Reverse engineering Workshop, “Made in Zinzira”, Sustainable micro metal industry

* Corresponding Author:Srijon Barua; E-mail- srijon.barua@uap-bd.edu
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

Sponsors
Sri Lanka Institute of Architects
Central Cultural Fund
National Science Foundation
Ranjanas Ceramics (Pvt) Ltd
Hotel Galadari, Colombo

Printers
Randhi Printers
SPONSORS, PARTNERS & ADVERTISER
Central Cultural Fund
212/1, Baudhhaloka Mawatha
Colombo 7
Galadari Hotel
No.64
Lotus Road
Colombo 03