

ICCPP-2020

8th International Urban Design Conference
Cities, People, Places

Dec 15-18, 2020
Colombo, Sri Lanka

Cities
People
Places

ICCPP 2020
COLOMBO, SRI LANKA

Cities in Distress:
Covid -19 Pandemic &
Its impact on Cities

Proceedings



PROCEEDINGS

Eight International Urban Design Conference on
Cities, People and Places
ICCPP- 2020
Colombo, Sri Lanka

Theme:

**“Cities in Distress:
COVID – 19 Pandemic & its impact on Cities”**

**Edited by:
Ranjith Dayaratne**

Department of Architecture
University of Moratuwa
Sri Lanka



Editor: Ranjith Dayaratne

ISSN: 2345-9530

Department of Architecture, University of Moratuwa, Sri Lanka

Tel : +94 11 2 651 047

Fax : +94 11 2 651 047

Email : iccpp@uom.lk

Web : www.iccpp.lk

The papers published in this proceeding reflect the opinion of the respective authors. Information contained in this proceeding has been obtained by the editors from sources believed to be reliable. Authors of specific papers are responsible for the accuracy of the text and technical data. Neither the publisher nor the editors/authors guarantee the accuracy or completeness of any information published herein, and neither the publisher nor the editors/authors shall be responsible for any errors, omissions or damages arising out of use of this information. Trademarks are used with no warranty of free usability.

All rights reserved. No part of this publication including the cover design may be reproduced, stored or transmitted in any form or by any means whether electrical, chemical, mechanical, optical recording or photocopying, without prior permission of the publisher.

ACKNOWLEDGEMENTS

For the eight consecutive year, ICCPP conference is taking place in Colombo in 2020. This time, we are talking about a crucial issue of managing and caring about cities. The theme is very apt given the fact that the ever more complex urban locations appear to need some shifts in the ways in which they are managed. Recent happenings in Colombo demonstrate clearly that a change in management can move a city from being one of the most livable to a miserable one. In 2017, Sunday observer wrote that Colombo was on par with most livable cities in the world; yet two years later, people complain of left over garbage, smell pollution and derelict atmosphere, which undeniably came from a change in the city administration. Managing and caring for cities is no easy task; let things drift and everything can collapse.

There is no doubt that this conference will throw light on some of the critical aspects of management, livability, attachment to place and what these mean and how they can be achieved through democratic and participatory means. We are grateful to the conference organizers, especially those who appear to care a great deal about cities to bring this issue forward and draw attention to its nuances for the benefit of the administrators and others..

Needless to say, the conference papers have been thoroughly vetted; reviewed by an international review panel, who have gone through the papers twice over: first by examining the abstracts and then the full papers. Not many conferences do so and can demand a small group of international reviewers to be so stringently on the refinement of the papers presented. This is a great asset ICCPP has nurtured from its beginning and surely will provide a solid base and strength to its proceedings. We are grateful to the many distinguished academics on the Review Panel, who have never refused to help when the need arose for reviewing many papers and to comment upon each aspect of them to bring them to a level of perfection.

The same spirit of perfection prevailed among the local conference organizers; namely the Faculty at the University of Moratuwa together with their support staff. They have toiled over an year to get this event to a fruitful outcome. Their efforts are making an impact not only in the conference and its day-to-day organization, but also in the development of the country. The papers that come out of the conference will surely become contested, yet provide much needed intellectual inputs in the progression of ideas that will fashion the cities. University of Moratuwa has been always fully supportive of this event and their great contribution cannot be measured and acknowledged sufficiently. Without this institutional support, ICCPP would have come to an end long time ago, but UOM is an institution with people who go beyond the call of duty to support intellectual endeavors.

Last but not least, the paper presenters have been tremendously tolerant, willing and rigorous in their responses to the many comments and criticisms of the original papers and research that, upon refinement have reached very high standards. They owe our great admiration of their pursuits and the desire to participate and excel. That is indeed our biggest strength which ensures that the ICCPP continues and flourishes as a meaningful and intellectually rich endeavor in the calendar of the Sri Lankan academic scene.

We thank for all who has supported to complete this task.

Ranjith Dayaratne and Janaka Wijesundara, 2020

FOREWORD

Cities are large gatherings of people inhabiting dense geographical spaces and built-structures. To be livable, they need to be lovable; helping people to make close relations and attachments which sustain the people both individually as well as cohesive social groups, such as families and communities. Needless to say, such an outcome is not possible unless the cities are managed well and cared for without reservations. In the past, such dense yet small cities were taken care of by the people themselves. Contemporary cities however are unimaginably large, complex and cannot be managed by the inhabitants themselves.

In the context that the world's urban population will exceed its rural population for the first time in history—with some 75 percent of city dwellers living in developing countries—cities tomorrow will be massive; complex and contain diverse communities, leading to conflicts and poverty, as much as opportunities and prospects of progress. If handled poorly, they could impede development, give rise to slums and may create conflicts and even wars.

Indeed, managing cities today have become ever more complex and demanding given also the fact that they consist of sophisticated systems which need to be inter-related and integrated. From service infra-structure that makes water, electricity, garbage clearance and other systems available to every individual, facilities such as public transport, schools, hospitals, supermarkets, police and workplaces demand that planned and constantly-enhanced arrangements must be put in place for cities to be livable places. As the populations grow and people migrate across cities and even countries, these will be made more and more complex as time goes. Livable cities need, fresh air, safety, freedom, and most importantly, the opportunities for all the inhabitants—those resident as well as visiting—to achieve their best potentials. Despite the fact that machines, technologies, systems and digital intelligence have come to help in the most difficult of these tasks, human expertise, political will, participation, democracy, and inclusive policies must underline the governance of such cities.

The ICCPP-2019 conference invited those who are examining the nuances of processes of cities to propose confluences that divulge these complexities and simultaneously show how they can be professionally addressed. One question it raised indeed is how the work of architects may contribute to managing and caring for such cities possible. Indeed, the ICCPP-2019 ventured on this endeavor to reflect upon how the present day architects understand and devise ways and means of managing our rather chaotic, unplanned, spontaneous, yet ruthlessly controlled cities to be more socially meaningful, vibrant and wholesome; lovable and livable.

The papers in this proceedings show that there is a great deal of understanding about the cities, how they can be created wholesome and most importantly how they can be meaningfully managed to incite care and love of the inhabitants. Undeniably, the variety of papers shows that the researchers are examining both micro as well as macro level issues of urban management. While on the one hand, the role of street lighting is looked at on the other, improving traffic light systems are being explored. Automatic defense systems, surveillance, green cleaning and many other topics exemplify the array of issues being examined, which collectively demonstrate the complexity involved as well our understanding of how to deal with them.

In this sense, it is fair to claim that the intentions of the ICCPP-2019 have been well realized adding a body of knowledge that will eventually help the professionals to manage and care for the multitude of cities that already exist and are emerging.

Ranjith Dayaratne and Janaka Wijesundara, 2020

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
Prof. Murray Fraser	Bartlett School of Architecture, UK
Prof. Ranjith Dayarathne	University of Bahrain (Mentor)

Review Committee

Prof. Ranjith Dayarathne	University of Bahrain (Mentor)
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	Sri Lanka Institute of Information Technology
Prof. Rohinton Emmanuel	Glasgow Caledonian University, UK
Prof. Sasanka Perera	South Asian University, India
Prof. Hooman Koliji	University of Maryland, USA
Prof. Luca Molinari	"L. Vanvitelli", Naples, Italy
Prof. Jyotirmay Mathur	Malaviya National Institute of Technology
Prof. Tanka Nath Dhamala	University of Tribhuvan, Nepal
Prof. Rangajeewa Herath	University of Moratuwa, Sri Lanka

CONTENTS

ACKNOWLEDGEMENT	III
FOREWORD	V
SCIENTIFIC COMMITTEE.....	VII
CONTENTS	IX
CONTENTS OF PAPERS	XI
PAPERS	XII

CONTENTS OF THE PAPERS

RURAL DEVELOPMENT AS A STRATEGY TO DETER MIGRATION IN INDIA RE-EXAMINING THE IDEOLOGY OF CLUSTER DEVELOPMENT Nandini Mohan, Thiruvengadam RB	01
RE-ESTABLISHING THE RELATIONSHIP BETWEEN URBAN STRUCTURE & HUMANIZING ASPECTS OF INDIAN CITIES AFTER COVID-19 PANDEMIC: THE CASE OF DELHI, INDIA Netal Subhash Chandak, Harshwardhan P Nagpure	14
TRAVELLERS' ACTIVITIES AT MODERN TRAIN STATIONS: A STUDY OF KYOTO STATION, JAPAN Bình Nghiệm-Phú	35
AN EVALUATION ON NATIONAL HOUSING POLICY SRI LANKA RELATED TO PLANTATION HOUSING Hapuarachchi S.P.̣, Kariyawasam S.S.	44
BORDERING PROCESSES: THE EVOLUTION OF SOCIAL BORDERS IN THE TIME OF PANDEMIC Reem Sultan, Lakshmi Srinivasan	56
AN APPROACH TO OPTIMIZE THE LOCATION DECISIONS OF PUBLIC PARKS IN COLOMBO Fernando G.S. ̣, Kariyawasam S.S.	71
COHESIVE THRESHOLD SPACES AS COMMUNAL ANCHORING NODES IN SHAPING SUPER DIVERSE COMMUNITIES COMBATING COVID19 PANDEMIC: THE CASE OF KUMBHARWADA, DHARAVI, MUMBAI, INDIA Vanshikha Praveen Singh, Harshwardhan P Nagpure	83
ARE GREEN WALLS OF COLOMBO MEANINGFULLY GREEN? THE SINCERITY OF VEGETATED BUILDING FACADES AND THEIR CONTRIBUTION TO ENVIRONMENTAL SUSTAINABILITY. Buddhi Chathuranjeli De Silvạ, Nihal Perera, Nandika Denipitiya	103
ADAPTATIONS TO THE COVID-19 PANDEMIC: OPEN SPACES IN RESIDENTIAL NEIGHBOURHOODS OF DHAKA Afrida Afroz Rahmaṇ, Zareen Habiba Islam	138
THE INTERVENTIONS OF PORTABLE ICT DEVICES ON SOCIO-SPATIAL PRACTICES IN COLOMBO URBAN PUBLIC SPACES: VIRTUAL SOCIALIZING TOWARDS SOCIAL DISTANCING DURING COVID -19 PANDEMIC Kavisha Charukshi de Silvạ, Ajitha Ilangaratne, Jeewanthi Senadheera	156
RHYTHM ANALYSIS IN TIMES OF PHYSICAL DISTANCING: SRI LANKAN CASE STUDIES ON COVID-19 IN BRUSSELS Koen De Wandeleṛ, Rishika Mariella Mendis, Sonya Milanthi Nanayakkara, Mahishini Vasudevan	181

DO THE SURROUNDING CONDITIONS OF JOGGING TRACKS CREATE STRESS IN JOGGERS? A CASE STUDY OF JOGGING TRACKS IN SUBURBAN SRI LANKA Chamal Fernando	204
TOURISTS' EXPERIENCES AND PREFERENCES OF CULTURAL HERITAGE LANDSCAPES: A STUDY OF GALLE WORLD HERITAGE SITE I.A.D.M. Madhushani, D.P. Chandrasekara	222
IMPACT OF GREEN SPACES ON WORKPLACE STRESS; INSIGHTS FROM SOFTWARE COMPANIES IN SRI LANKA Shashikala Galappaththi, Anishka Hettiarachchi	240