

JARS

Journal of Architectural/Planning Research and Studies | Volume 11. Issue 1. 2014

11(1).2014

วารสารวิจัยและสาระสถาปัตยกรรม/การผังเมือง ปีที่ 11 ฉบับที่ 1. 2557

JOURNAL OF ARCHITECTURAL/PLANNING RESEARCH AND STUDIES | VOLUME 11. ISSUE 1. 2014

Copyright © 2014 by
Faculty of Architecture and Planning, Thammasat University, Rangsit Campus
Khlong Luang, Pathumthani 12121, Thailand
Tel: 66-2-986-9606 Fax: 66-2-986-8067
<http://www.tds.tu.ac.th/jars>
E-mail: JARS@ap.tu.ac.th

JARS Published bi-annually:
JARS 11(1) September - October 2014
JARS 11(2) November - December 2014

ISSN 1905-2022

Printed and bound by
G.B.P. Center Co., Ltd. Bangkok 10230, Thailand
Tel: 66-2-943-3838 Fax: 66-2-943-3290

Statements or facts and opinions appeared in JARS are made on the responsibility of the author alone and do not imply the endorsement of the publisher.

All researches and studies are available online at <http://www.tds.tu.ac.th/jars>

Editorial Board

Executive Honorable Advisors:

Professor Vimolsiddhi Horayangkura, Ph.D.
Associate Professor Chalermwat Tantasavasdi
Assistant Professor Santirak Prasertsuk
Assistant Professor Pimonmart Wankanapon, Ph.D.

Associate Professor Chatri Prakitnonthakan
Faculty of Architecture, Silpakorn University, Thailand

Assistant Professor Rawiwan Oranratmanee, Ph.D.
Faculty of Architecture, Chiang Mai University, Thailand
Francis Duffy, Ph.D.
DEGW, London
Visiting Professor, Massachusetts Institute of Technology, USA

Editor-in-Chief:

Associate Professor Pawinee Iamtrakul, Ph.D.

Torwong Chenvidyakarn, Ph.D.

Centre for Architectural Innovation and Management,
Shinawatra University, Thailand

Editorial Board:

Professor Jelena Srebric, Ph.D.
Department of Architectural Engineering,
The Pennsylvania State University, USA

Associate Professor Nipan Vichiennoi, Ph.D.

Professor Mike Jenks, Ph.D.
Department of Architecture,
Oxford Brookes University, UK

Associate Professor Awiroot Srisutapan

Professor Bill Hillier
The Bartlett School of Graduate Studies,
University College London, UK

Assistant Professor Dr. Yongtanit Pimonsathean

Professor Peter G. Rowe
Department of Urban Planning and Design,
Harvard University, USA

Assistant Professor Dr. Peeradorn Kaewlai

Professor Kamthorn Kulachol
Faculty of Architecture, Kasetsart University, Thailand

Archan Boonyanan, Ph.D.

Associate Professor Dr. Bundit Limmeechokchai
Sirindhorn International Institute of Technology,
Thammasat University, Thailand

Jaturong Pokharatsiri, Ph.D.

Associate Professor Siriwan Silapacharanan, Ph.D.
Faculty of Architecture, Chulalongkorn University, Thailand

Kritaporn Haocharoen, Ph.D.

Associate Professor Vira Inpuntung, Ph.D.
Faculty of Architecture, Silpakorn University, Thailand

Siriporn Kobnithikulwong, Ph.D.

Kalaya Kovidvisith

Maniporn Sambandaraksa

Copy Editor:

Apinya Hemawannagoon

Graphic Designers:

Panudda Rodsattru

Information Technology and Website:

Athitaya Ruangrungchaikul

Editorial Secretary:

Pimwadee Eomthurapote

Editorial

This is a volume number 11, issue 1 of ***Journal of Architectural/Planning Research and Studies (JARS)*** which covers 8 papers on relevant topics in Architecture and Urban Planning. On the first paper, it reviewed about the issues of Buddhism vernacular architecture in Songkhla Lake Basin. The second paper applied the participatory process in urban regeneration around Wat Mangkorn Kammalawat MRT Station which aims to determine the factors leading to the failure of the project, learn the flaw of the project running, and propose the ways to adjust the role of stakeholders and improve the working steps in urban regeneration. Follow by the third paper, this article investigated the history of the production of space by Sino-Thai and their spreading of that urban space, both physically and socially by using a social science approach. The fourth paper was focused on an approach to promote cycling on university campus. Next, the fifth paper utilized GIS-multivariate analysis approach to delineate thermal climate units and to understand the thermal impacts which plays an important role to regulate temperatures in the urban environment. Furthermore, the sixth paper also proposed the solution for reducing energy consumption of an office building facade with self-shading applications. This finding is useful for architects who are interested in the facade design, and can effectively use self-shading facade to maximize energy conservation benefit. The seventh paper proposed a calculation method of Effective Solar Radiation (ESR) for office buildings to manage building energy efficiency. In order to meet the OTTV requirements, this paper recommended adding insulation, using energy efficient windows or keeping the low reflectance from surfaces of landscape around the building. The final paper is to explore ideas and operations of social design practices that combine the value of social responsibility with designers' day-to-day practices. Furthermore, the book review in this journal is "The story of post-modernism: Five decades of the ironic, iconic and critical in Architecture"

We trust this issue will again provide a multi-perspective of architecture and urban planning related issues to our readers and the general public with useful research findings and information for a wide range of educational, research, and policy study activities. Finally, we would like to express our sincere appreciation to the authors for their continuous support of producing this journal. Moreover, we would like to express our sincere gratitude to our editorial board and reviewers, who have always given us their generous support, to all those who have given their valuable time in writing or editing the manuscripts in this issue, and to all of our editorial staff for their dedicated works in getting this issue out on time.



Associate Professor Pawinee Lamtrakul, Ph.D.

Editor-in-Chief

Contents

1 พุทธศาสนาปั้ดยกรรมพื้นถิ่นลุ่มน้ำทะเลสาบสงขลา
Buddhism Vernacular Architecture in Songkhla Lake Basin
Isarachai Buranaut and Kreangkrai Kirdsiri

21 ความสำคัญของการบูรณะร่วมในการพัฒนาอย่างก่อของเมือง: กรณีศึกษา พื้นที่บริเวณสถานีรถไฟฟ้าใต้ดินวัดมังกรกมลลาวาส
Importance of Participatory Process in Urban Regeneration: Case Study of Wat Mangkorn Kammalawat MRT Station's Surrounding Areas
Churit Kangwanpoom

37 คนไทยเชื้อสายจีนกับบทบาทในการผลิตพื้นที่เมืองในไทยทศวรรษ 2490
The Role of Sino-Thai in the Production of Urban Space in Thailand in the 1950s
Pinyapan Potjanalawan

59 Guidelines to Promote Cycling on University Campus: Case Study of Kasetsart University, Mahidol University and Thammasat University
แนวทางการส่งเสริมการใช้จักรยานภายในมหาวิทยาลัย: กรณีศึกษา มหาวิทยาลัยเกษตรศาสตร์ มหาวิทยาลัยมหิดล และมหาวิทยาลัยธรรมศาสตร์
Waralak Khongouan and Satida Sakulrattanakulchai

73 Classifying Thermal Climate Zones to Support Urban Environmental Planning and Management in the Bangkok Metropolitan Area
การจำแนกเขตภูมิอากาศความร้อนเพื่อสนับสนุนการวางแผนและจัดการสิ่งแวดล้อมเมืองในพื้นที่กรุงเทพมหานคร
Manat Srivanit, Kazunori Hokao and Pawinee Iamtrakul

93 แนวทางการออกแบบกรอบอาคารสำนักงานโดยการบังแฉดด้วยรูปทรงอาคารเพื่อการประหยัดพลังงานในเขตร้อนชื้น
Design Guideline of Office Building Facade with Self-Shading for Energy Conservation in Hot-Humid Climate
Ratha Jittawisuthikul and Jatusat Varodompon

109 Assessment of Overall Thermal Transfer Value (OTTV) in Buildings with Inclined Glass Wall
การประเมินค่าการถ่ายเทความร้อนรวม (OTTV) ของอาคารผนังกระจกเอียง
Sudaporn Sudprasert and Sivayu Klinsmith

119 Social Design Enterprises in Thailand: Potentials and Challenges
ธุรกิจการออกแบบเพื่อสังคมในประเทศไทย: ศักยภาพ และความท้าทาย
Boonanan Natakun and Khemmiga Teerapong

Book Review

137 The Story of Post-Modernism: Five Decades of the Ironic, Iconic and Critical in Architecture
Santirak Prasertsuk