## CIRAS Discussion Paper No. 116

## Digital Technology Mediated Integration of Area Study and Design Study

Edited by YAMADA Kyota<sup>1)</sup> and YANAGISAWA Masayuki<sup>2)</sup>

1) Faculty of Art and Design, University of Tsukuba 2) Center for Southeast Asian Studies, Kyoto University

Center for Southeast Asian Studies, Kyoto University

## Front cover photo

1	2		3
	4		
5	6		
7	8	9	

- 1. Co-presence in a suburban esidence at Korosduwa, Sri Lanka
- 2. Diagram of Tsukuba Virtual Fieldwork Studio Course Package
- 3. Fieldwork and crowdfunding projects through online networks, Colombo, Sri Lanka
- 4. Simulation programme and results of air conditioning in "Siheyuan" in Qing Dynasty, Beijing
- 5. Live broadcasting of the virtual fieldwork in Japanese historical town Kawagoe
- 6. A section drawing of a "kang"
- 7. Meal preparation on a "kang" in R House, Yungang town, Datong city, China
- 8. A plan and an elevation of muqarnas of the main gate of Ottoman mosque Atik Valide, Istanbul, Turkey
- $9.\,A\,new\,geometric\,form\,generated\,by\,an\,algorithm\,reconstructed\,from\,an\,analysis\,of\,compostional\,principles\,of\,muqarnas$

CIRAS Discussion Paper No.116

Edited by YAMADA Kyota and YANAGISAWA Masayuki

Digital Technology Mediated Integration of Area Study and Design

Study

©Center for Southeast Asian Studies, Kyoto University

46 Shimoadachi-cho, Yoshida Sakyo-ku, Kyoto-shi,

Kyoto 606-8501, Japan

TEL: +81-75-753-7302

FAX: +81-75-753-9602

March, 2022

## Contents

Preface 4
Chapter1
Patterns of Co-presence in Contemporary Suburban Dwellings in Western Province,
Sri Lanka with Special Reference to Long-Distance Online Field Studies
SEEKKUARACHCHIGE Mihiri Hirudini (University of Tsukuba.)
Chapter2
Experiments on Creation of Virtual Fields for Mutual Interaction: Remote studio
courses on Colombo, Sri Lanka, and Kawagoe, Japan
YAMADA Kyota (University of Tsukuba) 33
Chapter3
Reconstruction of the Spatial Composition and Microclimate of "Siheyuan" in Qing
Dynasty, Beijing Through Cross Disciplinary Research: Towards clarification of the
climate responsive mechanisms of vernacular architecture
JIANG Guangbo* (University of Tsukuba) 43
Chapter4
Proposed Model House for the Low-income Parents of Samanera Theros in Rural
Villages in Sri Lanka: An example of village culture, construction system, and micro-
climate simulations integrated in architectural design
YAMADA Kyota, SEEKKUARACHCHIGE Mihiri Hirudini, JIANG Guangbo 63
Chapter5
Analysis and Reconstruction of the Algorithmic Composition of the Muqarnas of the
Main Gate of the Ottoman Mosque Atik Valide (Istanbul, Turkey): Creation of new
geometric forms
HONG Haolin** (University of Tsukuba)
Chapter6
The Network Turn in Fieldwork and Architectural Design: A local cultural center
project and an online relief project during the COVID-19 crisis in the historical area of
Colombo, Sri Lanka
YAMADA Kyota (University of Tsukuba) 95
*Supervised by BAO Muping (Yamato University), UNO Tomoko (Mukogawa Women's University) and YAMADA Kyota
**Supervised by FUKAMI Naoko (JSPS Cairo Research Station), YAMADA Gentaro (SKILLUP AI, Ltd.) and

YAMADA Kyota

CIRAS Discussion Paper No. 116
Digital Technology Mediated Integration of Area Study and Design Study

発 行 日 2022年3月31日

制作・発行 京都大学東南アジア地域研究研究所

Edited by YAMADA Kyota and YANAGISAWA Masayuki

https://kyoto.cseas.kyoto-u.ac.jp

編 集 中葉 史人

印 刷 株式会社田中プリント

〒 600-8047 京都府京都市下京区石不動之町 677-2

https://www.tn-p.co.jp