Preface

In recent years, Area Studies have seen collaborations with Designs, such as Anthropology of Design and Design Anthropology. Behind the scenes, there is a growing interest in practice, which is another basic method, to interact with the area along with observation. On the other hand, in Design Studies, a phenomenon called 2nd Digital Turn is progressing due to contemporary digital technology.

In the 2nd Digital Turn, the empowerment of humans to think and express through computer programs and digital fabrications are included as one trend. Digital technologies such as personal computers and the Internet, which have been developed and popular since the second half of the 20th century, have greatly changed our lives and society. The transformation of the world through digital technology is also called a digital turn. It has also created major changes in academics. The emergence of new measurements, recordings, and communication technologies is not unrelated to Area Studies as well.

This issue highlights the expansion of new research and new vision that emerges in the overlap between Area Studies and Design Studies through new digital technologies of our time and aims at creating new academic fields that can bring new perspectives to our world. In particular, focus will be given on the fieldwork shared by Area Studies and Architectural Design.

In both Area Studies and Architectural Design, collaborations between fieldwork and new digital technologies of our time have not yet been actively attempted. One of the reasons for this is that many digital technologies have been developed in a cycle of huge investments and their recovery by nations and companies, and are expensive and complex, and it is sometimes considered as the one which neglects or demolish the local context or local lives or deprives the knowledge nurtured from the areas and their lives which is respected and considered as the main objective of the fieldwork. This paper does not deny the risk of such aspects. At the same time, it is not appropriate to deterministically assert that digital technologies will always be like that.

There are various actors and paths in the development of digital technology. The movement of the digital technology pioneers since the late 1960s, such as Stewart Brand, Alan Kay and others created a laptop computer with the aim of making the computer as a tool that expands the ability of individuals to think and explore was one of the most cutting-edge challenges in the pursuit of individuals beings actively exploring and living their lives, which led to the formation and expansion of today's digital technology. Focusing on these aspects, digital technology does not necessarily stand out from the fieldwork that respects individuals and other existing things and their lives in the area, but rather it can be expected to expand the possibilities of fieldwork.

The purpose of the research, which integrates Area Studies and Architectural Design, is to support individual and other existing things to explore and live their lives by themselves, while contributing to the formation of local dwelt environment which sustains the life of each existence. We should keep in mind that, from the explorations of the pioneers of digital technology to live their lives by themselves, companies such as GAFA have emerged and grown, and now they have become the global power to determine the lives of other beings, including us. But, instead of rejecting digital technologies, while paying attention to how individuals can contribute to the formation of local dwelt environment which sustains the life of each existence, these studies are aiming to participate in the usage of digital technologies to contribute to creation of new directions of their usage and to contribute to the development of Practice-based Area Studies.

By the way, in contrast to Area Studies whose main purpose is to observe and understand the current situation, research that overlaps Area Studies and Architectural Design, or more broadly, Practice-based Area Studies, has a design aspect. In other words, the ultimate goal is for researchers of Practice-based Area Studies to be involved in the transition and formation of the situation on the premise of understanding the current situation. While fieldwork in Area Studies observes and understands the current situation, in research that overlaps Area Studies and Architectural Design, fieldwork consists of a series of processes from observation and understanding of the current situation to extraction of issues and possibilities, creation of ideas that solve issues and develop possibilities, and practice of realizing and returning the ideas to the field.

In the latter half of fieldwork, that is, in the process of creation of ideas that solve issues and develops possibilities, and in the process of practice of realizing and returning the ideas to the field, the step of forming models and prototypes and confirming their behavior in the local dwelt environments become important. Digital technologies such as simulation and digital fabrication have the potential to make this step much easier, and to support this step effectively.

Chapter 1 and 2 are examples from the first half of fieldwork in research that overlaps Area Studies and Architectural Design, that is, observation and understanding of the current situation and extraction of issues and possibilities. Chapters 3, 4 and 5 are examples related to the latter half of the phase, that is, creation of ideas that solve issues and develop possibilities, and practice of realizing and returning the ideas to the field. Chapter 6 is an example of the total process of the fieldwork of Practice-based Area Studies.

This issue collects the research results that have been carried out in relation to the joint research projects, of "Center for Sharing Regional Information Resources and Promotion of Correlated Area Studies", A Joint Research Center of the Center for Southeast Asian Area Studies, Kyoto University, "Construction of Climate-responsive Dwelt Environment Database" (FISCAL 2020) and "Construction of integrated simulation of climate-responsive living environment and cross-reference system of cases" (FISCAL 2021).

March 31st, 2022

Editors

About the authors

SEEKKUARACHCHIGE Mihiri Hirudini

She is a Doctoral Student in Doctoral Program in Design, Graduate School of Comprehensive Human Sciences, University of Tsukuba. Her specialty and interest lie on the Architectural Design, Social interactions in public places and domestic places. Following is one of her key publications,

Hirudini S.M., Chandrasekara D.P. (2015) "Co – presence" : A Study of Public Places with Special Reference to Independence Square, Colombo 07. Colombo. Third International Urban Design Conference ICCPP 2015.

YAMADA Kyota

He is an Associate Professor in Faculty of Art and Design, University of Tsukuba. His specialty and interest lie on the South Asian and Indian Ocean World Area Studies, Architectural Design, and Anthropology of Design. Following is one of his key publications,

YAMADA K. (2017). Vernacuralization of Architecture Planning: Towards Basic Theory for Dwelt Environment Design. Proceedings of the 10thInternational Conference of Faculty of Architecture Research Unit (FARU). University of Moratuwa, Sri Lanka. pp.361-372.

JIANG Guangbo

He is a Master's Student in Master's Program in Design, Graduate School of Comprehensive Human Sciences, University of Tsukuba. His specialty and interest lie on the Architecture design, Microclimate Simulation of Vernacular Architecture.

JIANG G. (2022). Simulation of the Microclimate Generated in the "Siheyuan" of Qing Dynasty, Beijing Based on an Historically Verified Model -Towards clarification of the climate responsive mechanisms of vernacular architecture (実証的復元モデルに基づく 清代北京四合院に生まれる微気候のシミュレーション —ヴァナキュラー建築の気候応 答メカニズムの解明に向けて). Dissertation submitted to Master's Program in Design. University of Tsukuba, Japan.

HONG Haolin

He is a Student of Architecture Design, School of Art and Design, University of Tsukuba. His specialty and interest lie on the Islamic Architecture, Algorithm Design. HONG H. (2022). Geometric analysis of composition of muqarnas and its modeling and reconstruction through parametric design (ムカルナスの構成の幾何学的分析及びパラ メトリックデザインによるモデリングと再構成). Dissertation submitted to Degree of Bachelor of Art and Design. University of Tsukuba, Japan.