Abstract of Dissertation

Culture of Small Space: A Comparative Study Between Traditional Thai and Japanese Dwellings (小空間の文化: タイと日本の伝統的な住宅の比較研究)

ウォンパヤット ワリシャー

Given that "dwelling" is the formal articulation of an intertwined relationship between the inhabitant and the inhabited landscape, a traditional dwelling, created by its dwellers' collective experience, unmistakably reveals the image that manifests the "here of life"—the "proximity"—and the multidimensional aspects in dwelling experience. Under the long reach of modernization and urbanization, however, the traditional dwellings and their multidimensional virtues irresistibly give way to the nascent modern villas, which, with lacking of true understanding of everyday life, has generated the built functional onedimensional space that reflects no respect to the use of place—the world's finite resource.

This research is the proxemic study of the traditional Thai dwelling, *ruan thai*, in comparison with the traditional Japanese dwelling, *minka*. Based on phenomenological and psychological approaches, this in-depth exploration takes on a form of comparative case studies—be it, the "old," the "transitional," and the "old and new" tradition, ranging from the early Modern age to the present day. The areas of study are located in *Phrapradaeng* District (Samutprakarn Province) and Chiba Prefecture. The research goals are, first, to clarify essential characteristics, meanings, and evolution process of the lived space of *ruan thai* and *minka*; second, to identify the shared and the different grounds as well as their underlying causes, which will create cross-cultural understandings between Thai and Japanese architectural and cultural study; third, to recreate the quality of space that brings its dwellers the quality of life, and ultimately to propose the "culture of small space" as a source of potential paradigm contributing to the design of small space in contemporary dwellings.

The dissertation consists of five chapters. The first chapter discusses the historical horizon of traditional Thai dwelling in three spheres; i.e. the natural-cultural context, the socio-spatial confluence, and the architectural-spatial concept. Based on the phenomenological interpretation, the first part examines the physical manifestation of *ruan thai*—the amphibious tensile architecture composed of small units encircling the spatial core—through the fourfold factors—that is, "on earth," "under sky", "dweller," and "divinity," or in more general sense, flood, forest, family, and fortune related-belief. In the second part, the research explores the socio-spatial confluences that impact on the evolutions of *ruan thai*, from the broader scale of socio-cultural context, the settlement level, and down to the microcultural level of dwelling situation. The final part of this chapter expounds on the spatial concept behind the presence of *ruan thai*, beginning with the intimate scale of architectural components, "human as a measurement unit," to the arrangement of dwelling unit, "linear-integration," and finally the composition of the entire dwelling compound, "part-oriented design."

Accordingly, the next chapter examines the past and the present conditions of the case studies. With regard to the complementary components between the "past" and the "present," the research selects two neighborhoods from *Phrapradaeng* district; *Songkanong*, an old and compact neighborhood where most households have managed to maintain the traditional style dwellings and the traditional way of living amidst intensive urban developments, and *Bang Namphueng*, a revived agriculture-based neighborhood where the old *ruan thai* coexist with new style residences, as the areas of study.

In the search for the balanced constituents of the periods of construction and habitation, i.e. the "old," the "transitional," and the "old and new" tradition, the dwelling typologies, such as single/multi-unit dwelling, and the orientation of the case studies, for instance, towards water/road way, eight case studies from both neighborhoods are chosen for the proxemic study of *ruan thai. Songkanong* cases consist of Sawai house, Manee house, Maew house, and Pratum house. *Bang Namphueng* cases are composed of Rart house, Mali house, Suleporn house, and Prayut house. The oldest case study is approximately two hundreds years old; the newest one is about fifty years old. Based on field surveys and oral histories including architectural drawings, diagrams, photographic images and sketches,

the research portrays the outlined information of household family, site plan, and spatial development of the case studies from the original construction to the present-day condition.

Chapter 3 expounds on the analysis of the intertwined course between the cultural and spatial aspects—be it, "context of life" and "content of life". Hall's Primary Message System study is employed as a means to explicate the (multi) cultural aspects of Thai dwelling. Together with the theme analysis grounded in the phenomenological approach and the analysis of spatial diagram based on basic activities—that is, living, receiving, sleeping, dining and cooking, the research depicts the spatial essences in each evolution stage as the integral parts of the broader cultural context.

To clarify, the correlation between the "living with nature," "living with others," and "self-sufficient living" context of life of the "old" tradition brings about the spatial essences of *ruan thai*; the integrated-interchangeable receiving and living space, the (semi) flexible sleeping space, and the integrated-intimate dining and cooking space as well as the intimate relationship between the served and the service quarters. In the "transitional" tradition, the "beginning of diminishing nature," the "downsizing household structure," and the "diverging walks of life" socio-cultural contexts result in the gradual change in the spatial content of ruan thai; the integrated receiving and living space (yet with the changing spatial characteristics of the spatial core), the shared sleeping space vis-à-vis the emerging separate sleeping space(s) (yet still very much of the communal sleeping tradition), and the intimate dining and cooking space vis-à-vis the emerging distant relationship between the served and the service quarters. In the "old and new" tradition, the ever-speedy change in the socio-cultural condition, such as the "regenerating living environs vis-à-vis (sub) urban encroaching symptom," the "ever-disintegrating household," and the "experiencing modern lifestyle," has created the complicated and contrasting essences and evolutions of ruan thai's lived space—be it, the separate-(re)integrated receiving and living space, the separate and fixed sleeping space, and the integrated vis-à-vis separate dining and cooking space.

Based on the analysis of sectional diagrams, the research reveals the continual decline in the notion and utilization of the verticality in *ruan thai*, from the vertical interchangeability of the lived space between upstairs and downstairs, the "on-earth/under-sky" vertical orientation, the unfinished vertical elements that served as the extensional functional space, the various vertical steps that acted as the "pre-furniture" to the ultra-horizontal interior, which, with the depthless architectural components, causes the lived space to be underutilized.

Following the same methodology, chapter 4, traditional Japanese dwelling, begins with the overview, i.e. origin, evolution, and architectural manifestation, of *minka* and its spatial components and compositions. Based on the survey of literary works, such as repair reports, and field observations, the research presents the background information regarding the area of the study and the historical development of the case studies. With regard to the proportional number of the scale of buildings, the distribution of the location of dwellings, and the socio-economic class of the dwellers, a small set of six *minka* from both the highly urbanized areas in the west; Ōsawa house, Mikogami house, and Hirano house, and the agriculture-based areas in the east; Ōsawa house, Yabu house, and Sakuta house, are chosen as the case studies.

Divided into three evolutional stages—the "old," the "transitional," and the "old and new" tradition—the study examines the spatial identification and orientation of basic activities; receiving, living, sleeping, dining, and cooking, in each period. Based on the analysis of these activities, it could be regarded that the lived space of the "old" tradition of *minka* originated from the spatial relations between the integrated-intimate living, dining, and sleeping space, the interconnected living, dining, and cooking space, and the separate receiving and living space. The essential characteristics of the "transitional" tradition comprise the integrated living and dining space, the disconnected living and cooking space vis-à-vis the connected dining and cooking space, and the (semi) integrated receiving and living space and the integrated receiving and sleeping space, with the (semi) internal corridor. The spatial essences of the "old and new" tradition of *minka* could be characterized as the semi-integrated/semi-separate living and dining space, the intimate-integrated dining and cooking space, and the integratedinterchangeable receiving, living, and sleeping space, with the emergence of the internal corridor.

The Japanese concept of verticality seems to originate from different purposes thus offering the reversed view to its counterpart. As shown in the provision of the finished ceiling above the formal space and the partial partition and the latticed framework in front of the everyday life space, the verticality of the old *minka* appeared to focus more on visual, or perceptual, aspect—the aesthetic preference—rather than the functional aspect as did the old *ruan thai*. However, the later years of *minka* revealed the gradual development of the verticality, both the usable space, such as the use of attic above the earthen floor area, and the unusable space, such as the extension of finished ceiling over the entire raised floor area in parallel to the spread of *tatami* flooring. In addition, it is interesting to note that while the vertical elements of the "old" tradition of *minka* constituted the whole-oriented design approach, the "old and new" of *minka* becomes more of the part-oriented composition, one that treats vertical elements quite separately thus resulting in the discontinuity of the spatial enclosures of the entire dwelling.

In chapter 5, traditional dwellings in dialogue, the dissertation draws comparative views between the traditional Thai and Japanese dwellings, and between the traditional and the contemporary Thai dwellings, and finally synthesizes them into the comprehensive concept—be it, five invariables in small space dwelling. The first part deals with the cross-cultural analysis between *ruan thai* and *minka* in three evolutional periods, each consisting of the analysis of spatial core, functional space, circulation space, transitional space, and vertical space. To begin with, the essential characters of the "old" tradition of *ruan thai* and *minka* comprise the contrasting contents of dwelling cores (the integrated receiving-living space as for *ruan thai* and the integrated living-dining space as for *minka*), the intermingling of everyday life/served space and production/service space, the reversed perspective of space in-between (centripetal spatial feature of *palai* and centrifugal spatial feature of *engawa*), the absence of circulation space, and the different concepts of verticality (functionality as for *ruan thai* and formality as for *minka*).

The spatial essences of the "transitional" tradition are composed of the converging spatial relation of dwelling cores, the dissolving formal and informal division, the diverging relation between served and service quarter (distanceless vs. distance), the emergence of (semi) internal circulation, and the defining vertical space (function vs. functionless).

The characterizing features of the "old and new" tradition include the converging contents of dwelling cores (the integrated living-dining space) vis-à-vis the diverging modes of dwelling (floor-based/furniture-based lifestyle), the juxtaposing the old and the new (flexibility vs. fixity), the converging spatial feature of space in-between (centrifugal spatial feature), the evolution of internal circulation, and the converging-contrasting verticality.

The next step is the comparative study between the "old" and the "new" tradition of Thai dwelling explicated through the old and the new house of Mali family. Based on the analysis of the case study, the research unveils five emerging aspects of the "new" tradition—be it, the "old content in new context," the "new openness," the recreated in-betweenness," the "double modes of dwelling," and the "from compartments to complete whole."

Last but not least, the dissertation synthesizes the shared qualities derived from the in-depth exploration of the case studies into the overarching theme, or five variables in small space dwelling. Encompassing not only the physical, but also the psycho-poetic aspects in dwelling experience, these existential qualities; the "space(s) in space," the "vertical space," the "space in-between," the "time in space," and the "space in time," play vital roles in generating the qualities of life; the "living with intensity," the "living with nature," the "living with others," the "dynamic of living," and the "seed of life," all of which contribute to the dweller's well-being.