

Keynote Address

Between Theory and Practice

Associate Professor Tonkao Panin, Ph.D.

Faculty of Architecture, Silpakorn University

If architecture can be said to aim at orienting human existence, then it might be possible to argue that the function of architectural theory is to orient architecture. As theory can be seen as a matter of questioning about basic premises in architecture, I would like to focus today on the dialectic between architectural theory and practice and address the current conditions of architectural education in Thailand, both its priorities and preoccupations.

We often hear that “architecture is a combination of art and science.” It becomes a phrase so familiar that we often take its meaning for granted. We seem to believe without a doubt that architectural design is a process that requires inherent negotiation between scientific logic and artistic intuition. Yet, at a closer look, questions may emerge. Which part of architecture can be considered an art, which part can be considered science?

While this tenet may have helped educators explain the difficulty of teaching and learning architecture, it has also been problematic. When we think of architecture as a mixture of two other disciplines, we already set ourselves up against conflicting conditions. Instead of understanding the process of architectural design as unique, we often look through the lenses of other discourses and consider their conflicts as the causes of our architectural difficulties. Thus we have concluded that the inherent complexity and contradiction within the process of architectural creation was the

result of the discordant coexistence of art and science, or worse, of reason and imagination, technical knowledge and philosophical inquiry. Furthermore, when we think of architecture as a union of two other things, we already allow a chance for those two things to break apart, leaving architecture unsatisfactorily incomplete. Faced with difficulties, it forces us to choose between pragmatic doctrine and philosophical inquiry. This results in either a disposition towards rigid practicality or an inclination towards subjective imagination. We are thus left with two major types of architectural students. First are those equipped with technical knowledge but lacking in philosophical understanding, believing that practical functionality is the sole purpose of architecture while other factors are arbitrary. Second are those imaginatively adept but lacking in advanced pragmatic logic, believing that architecture is only an innovative creation divorced from practicality. Such divisions can still be found in Thai architectural schools, home to both types of architectural students. While it is productive for students to become methodologically strong in certain areas of architectural education, it is also unfortunate that such strengths are often translated into unacceptable weaknesses in other areas of the discourse. Why has it become difficult to educate students who can intuitively accord reason and imagination, technical knowledge and philosophical understanding?

In the past thirty years, architectural education in North America and Europe has shifted its emphasis to questioning again what architecture is, how it may be defined, how it is created, and what are its appropriate goals and aspirations.¹ As these questions are set as the basic premises of architectural education, it enables students to understand architecture as architecture, unique in itself, with its own priorities and preoccupations: thus it is no longer necessary to ponder the question of art-science discordance. This explains why the last thirty years have seen tremendous changes in the discipline of architectural history and theory. As M.Arch. Programs in North America and Europe have multiplied, so have Ph.D. programs. Furthermore, publishing houses specializing in architecture and related disciplines have also blossomed, as the readership of art and architecture rapidly grows.² The number of theoretical publications has gone from scant to overwhelming. But as value has been placed more and more on architectural theory, it has also become increasingly autonomous. The word theory has started to become dubious. In recent years, theory has become a field unto itself, gradually disengaged from architectural practice. During the past ten years, in addition to the theory of architecture, there also appeared the theory of architectural history, the theory of architectural theory, and critical theory of everything but architecture. Thus the gap between the academic world of studio studies and the academic world of history and theory studies has become increasingly difficult to bridge.³ In other words, the space of inquiry between architectural production and advanced scholarship has increased.⁴ The task of architectural institutions is thus to bring architectural education back to the multidisciplinary equilibrium it was once familiar with.

As North American and European architectural education is burdened by an increasing,

sometimes excessive emphasis on theory, architectural education in Thailand has also been transformed. In the past twenty years colloquiums at major schools began to include courses such as Concepts in Architecture, Design Criteria and Concepts, Theory and Concepts in Architecture, and other variously named courses depending on the schools. The subjects that these courses tackle vary from the basic history of architecture to an advanced history of architectural thinking, the history of theory to a theoretical inquiry on various architectural issues and a philosophical exploration of the basic premises of architecture. Yet the numbers of these courses are few compared to those in other areas, often amounting to one or two courses within the whole five year study. So far there has been no graduate program on History & Theory, while those of other academic-pragmatic subjects have considerably increased. For students, the most sought after graduate programs are ones that promise new or additional knowledge about something readily applicable to their practice as soon as they graduate. In addition to basic graduate programs in architectural, urban and landscape design, urban planning and history of architecture, new courses offer either innovative technological knowledge or the recovery of disappearing traditional-vernacular knowledge. Today, however, this educational climate has started to shift.

Building-Type / Problem-Based

While undergraduate studios elsewhere may fuse design methods and techniques with theoretical inquiries, organizing each project via problem-based orientation, most design studios in Thailand have been based on building-type know-how approach, which has provided the basis for generations of highly skilled architects over many decades, no matter how archaic it seems to the younger generation of educators.

While problem-based projects allow students to understand the different logics underlying the nature of various built environments, they often leave no time for advanced practical exploration. Since the 1980s, a common problem in many North American schools is that students have been given philosophical-theoretical questions, but hardly enough time to apply their answers to concrete solutions. In other words, it is an approach that emphasizes primarily the thinking process rather than the practical product. Thus, it seems inevitable for students to be left afloat in the middle of the river while they learn to swim. They must find a way to their own practice once they graduate, which explains why a few years of architectural training is mandatory before trainees can become licensed architects. In other words, the antecedent problem-based know-why approach is inseparable from the subsequent know-how practical training. Thus, teaching and learning architecture never begins and ends within the walls of architectural schools.

The building-type approach, on the other hand, has burdened us with different problems. Projects are selected for their practical applicability both in terms of scales and prosaic functions. They foretell what students will face after graduation. Thus the spectrum of projects during the course of study attempts to cover a whole range of “possible” building types as realistically diverse as possible. Students will automatically know what to do, or what to make, once presented with such commissions after graduation. Yet, dealing with complex functional programs is never easy. Arranging and re-arranging functional puzzles takes time, thus no space is left for asking what it is that is being made, and why it is done that way. As the goal is to arrive at concrete final products that are both conclusive and readily applicable, the process is already set with gradual steps to be followed. A few weeks within a semester is simply not enough;

there is simply no time for hypothetical inquiry. Once out of school, new architects are ready to tackle tasks entrusted to them, but after a few years of making and doing architecture, some will inevitably return to the questions they did not have a chance to ask in the first place; what it is that is being made, why it is done that way. Without prior training in theoretical inquiry these architects either dutifully continue doing what they do without asking more questions, or continue to feel the lack of philosophical satisfaction in what they do. This explains why graduate programs in advanced architectural design with theoretical and conceptual overtones often attract those hoping to fill such a theoretical hole in their practice.

At any rate, the building-type approach has succeeded in arming Thai architects with practical know-how, while the theoretical know-why part has often been acquired from overseas. Yet since the beginning of the twenty first century, with younger generations of educators and architects influenced by the growing theoretical-philosophical climate of Western architectural education since the 1980s, theoretical ripples are beginning to appear in Thai architectural education. Seemingly “old” teaching methods are being questioned and challenged; “new” modes of study are being introduced. During the past ten years, practical equilibrium has been shaken by design studios at various schools directly adopting foreign teaching and learning methods, resulting in a sudden break between processes of practical production and modes of theoretical abstraction. New generation of educators then began to extend the premises of adoptive thought in the direction of what has been called “theory.”⁵ Yet there is a difference between this adoptive notion of theory and the intuitive know-why philosophy that has served many North American and European schools for the past thirty years. On the one hand, the North American know-why methods are firmly grounded

in basic philosophy and a fundamental questioning of ourselves and what we do which makes most design solutions conceptually logical. Adoptive theory, on the other hand, seized upon something more abstract and arbitrary, thus placing architectural design in the realm of artistic creation, seemingly free from all binding constraints. When educators see traditional practice as banal, new design projects will try to avoid the basic premises of such practice, thus resembling less and less what is being done outside schools.

While this expansion and intensification of theoretical approaches has served to bring our architectural education up to speed with its own critical awareness, allowing for a fuller exploration of issues beyond the scope of previous teaching methods, it has also become ever more remote from the concerns of architectural practice outside the schools. Thus this overtly abstract theoretical approach, paralleled with impulses introduced into architectural education through technology and computation, has created a further rift in the practical-theoretical union we have strived for. As neither a complete overthrow of previous educational approaches nor a complete adoption of new methods will suffice, rethinking the possibility of building-type based design may allow it to transcend the rigid pragmatic doctrine it once adhered to. Perhaps we need to ask not only how much theoretical inquiry our architectural context can take, but also how much of the pragmatic doctrine we still need, and when. Unable to find the point of equilibrium, we would inevitably return once again to the notion that know-how equals something concrete, conclusive, ready available and constrained, while the know-why part of architectural education is synonymous with something abstract, intangible, inconclusive, and seemingly free.

In addition to the categorization of architecture via building-type, another kind of architectural

division has also emerged in Thai architectural education during the past ten years, that of functional and conceptual architecture. Such division, while easily understood, also distorts the fundamental nature of architectural design. By defining types of work as either functional or conceptual, we are misled to conclude that function is the antithesis of concept. Through the eyes of practical reason, concept is thus seen as untouchable, unintelligible and arbitrary, whereas through the lens of imagination, function is seen as banal, cumbersome and restrictive. Problems arise as students align themselves with either functional or conceptual design, but never both. Obvious examples are the subjects of fifth-year theses in many schools. In order to choose the design projects, students often begin by categorizing themselves as either the functional or the conceptual type. At one end of the spectrum are projects that adamantly aim at symbolic representation of abstract concepts. In the name of conceptual approach, such projects are often unwilling to deal with the mandatory issues of human activity and interaction, let alone the basic functional requirements that all architecture must answer to. At the other end of the spectrum, projects seem to take on ready-made programs, easily categorized by their building-types. In the name of a functional approach, these projects neglect the fundamental philosophical inquiry each and every architectural design must begin with. At any rate, students see themselves as either an artist or a pragmatist, but hardly an architect. The question is: what causes students to choose sides? Why can't our architectural education be as diverse, integrative and multidisciplinary as Vitruvius once preached?

In Book I of the *Ten Books on Architecture*, Vitruvius openly stated that being an architect never means being adept at a single discipline, but always many. *"The architect should be equipped with knowledge of many branches of study and*

*varied kinds of learning. This knowledge is the child of practice and theory.”*⁶ In order to explain what architecture is, Vitruvius emphasizes the integral relationship between manual skills and scholarship. *“It follows, therefore, that architects who have aimed at acquiring manual skill without scholarship have never been able to reach a position of authority to correspond to their pains, while those who relied only upon theories and scholarship were obviously hunting the shadow, not the substance.”*⁷ Apart from practical knowledge, one needs to familiarize oneself with the anthropological, social, cultural as well as philosophical foundations of one’s context. Along with technical skills, an architect must understand the meaning of what he makes and learn to communicate as well as interpret the meaning of all things. Philosophy is a prerequisite for such understanding, in order for architects to avoid arbitrary assumptions. Despite being multidisciplinary, architecture is architecture, with its own unique priorities and preoccupations, neither an art nor a science. As architecture always consists of the built substance and the thinking behind it, both making and thinking ability are thus integral. Understanding this may help us resolve the functional-conceptual conflict we face today. Soon we may realize that

the battle of the building-type versus the problem-based teaching approaches is only futile. Perhaps it is not a question of which to choose, but a question of when and how. Whatever methods and approaches we choose may equally be applicable, as long as we know what we are doing and never stop re-inquiring into the nature and purpose of the things we teach and learn.

At any rate, all architecture can generate many possible readings, but to seek out its potential or to design for potential is a more self-conscious task. An analytical approach might see existing programs, functions, sites or technical methods as generative, able to evolve into new poetry that is rich and surprising. Strategic changes might create new readings of the old, or open the way to potential within an interaction of new and old. Design is then truly innovation, a making new again for a contemporary audience to interpret afresh.

Acknowledgement

The author would like to thank Thailand Research Fund for its continuous support. The author also would like to thank Professor Dr. Vimolsiddhi Horayangkura for his guidance and encouragement in academic research.

Notes

¹ Vickery, R. (1980). Teaching theory to beginning students, *JAE*, 33(3), 19-20.

² Ibid.

³ Jarzombek, M. (1999). The disciplinary dislocations of architectural history, *JSAH*, 58(3), 488-493.

⁴ Ibid.

⁵ See similar remarks on American architectural Education in Jarzombek, M. (1999). The disciplinary dislocations of architectural history, *JSAH*, 58(3), 488-493.

⁶ Vitruvius. (1960). *The ten books of architecture*. New York: Dover.

⁷ Ibid.