THE CREATION OF CULTURAL HERITAGE: TOWARDS CREATING A MODERN THAI ARCHITECTURAL IDENTITY

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Abstract

The Thai Pavilion at the 2010 Shanghai World Expo was basically similar to that of the 1992 World Expo in Spain; both exhibited traditional elements of Thai architecture without any modern transformation.

The inappropriate application of past Thai characteristics in contemporary architecture, particularly in buildings of national significance, has been widely criticized. Yet, there have been no obvious architectural solutions to the demand for a modern Thai architectural identity. This research is undertaken with the following objectives: 1) To investigate the appropriateness of current Thai architectural identity in modern society; 2) To seek guidelines for the creation of a modern Thai architectural identity, taking into consideration various determining factors, especially the concept of green architecture and glocalization; 3) To suggest development approaches for sustaining the creation of identity; 4) To extend the outcome of the development of a modern Thai architectural identity toward opportunities for supporting the creative economy. Thus, in this study physical surveys of buildings with various Thai characteristics, together with document research, were conducted with the intention of setting up information bases for further formation of theoretical and analytical frameworks, as well as guidelines for the creation and development of a Thai architectural identity for a modern society, through modeling investigations.

It is expected that this research will reveal that the various applications of Thai architectural characteristics are not particularly appropriate to the context of present society; neither the traditional and applied Thai architectural styles nor the abstraction of aesthetic feature approach. These findings will point towards the reinvention of a modern Thai architectural identity amid the trend of global architecture. Current factors—economic, social, cultural and technological—in the modern world have to converge with past deep-rooted cultural factors in an attempt to create a Thai architectural identity. In this context, there have to be interrelationships between appearance and inherent wisdom.

Concurrently, various approaches have to be investigated to promote the sustainable development of identity: for example, the generation of public consciousness, the reform of the education system, the establishment of an Institute for Research and Development of Modern Thai Architectural Identity, the stimulation of concern for identity among practitioners, and the support and spirit enhancement of those with outstanding achievements in design and research. This research will also identify opportunities for the output of the creation of a Thai architectural identity to support the growth of the creative economy.

Finally, a series of research questions to be comprehensively addressed in the future are formulated.

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Introduction

Whereas the Chinese Pavilion at the 2010 World Expo (Figure 1) exhibited dignity and progress, while reflecting the modern Chinese architecture identity, the Thai Pavilion maintained an outdated traditional character (Figure 2), which was similar to the formal expression of the Thai Pavilion at the 1992 World Expo in Spain (Figure 3). The "Thainess" that the Thai Government introduced in "Thainess: Sustainable Ways of Life" (Ministry of Social Development and Human Security 2010) on the occasion of the 2010 World Exposition is fundamentally based on traditional notions of Thainess in all aspects, including architecture.

Figure 1: Chinese Pavilion, Shanghai

Figure 2: Thai Pavilion, Shanghai

Figure 3: Thai Pavilion, Sevilla, Spain (*ASA* 24,1992: 34)

For a multi-cultural and multi-ethnic nation such as Malaysia, the need to express a strong national identity in architecture become crucial regarding political implications. However, in Thailand a conscious effort is focused on the creation of a modern Thai architectural identity as part of the country's cultural heritage. Practitioners and academics partly recognize the past failure to provide such a cultural identity (Horayangkura 1990, 1993, 2001 and 2009). Criticism among architects and the public in general became more severe, especially when important new building projects were under construction. Thai architectural identity for such edifices as the Suvarnabhumi Air Terminal Building and the New Parliament Building of Thailand has become a critical issue – asking for architectural images of Thai identity which are rather obscure. Yet, proposed architectural solutions have to be investigated as to the appropriateness of applying traditional characteristics in the context of modern society.

In-depth studies should involve the investigation of the underlying factors that deter the successful creation of Thai identity in modern architecture (Prakitnontakarn 2005; Horayangkura 2009, 2010). In general, architecture in Thailand expresses a mainly modern outlook, excluding Thai identity.

The request for Thai character in most competitions' terms of reference only results in bringing in a juxtaposition of traditional elements with modern design complexes to reflect a related belief system. Without a modern transformation, contextual conflicts are inherent in such architectural solutions. Otherwise, architects mainly focus on the abstraction of traditional configurations to attain formal aesthetics without any other implications regarding functional, environmental or economic aspects.

The goal of this study is to examine the appropriate Thai character of modern architectural design during the past two decades. It should be a contributing vehicle for enhancing the creative economy as well as generating cultural heritage.

Research objectives

Based on an exploratory approach in the creation of a modern Thai architectural identity, the objectives of this preliminary research are as follows:

1. To investigate the congruence of current Thai architecture identity in modern society, especially the identity generated from traditional architecture, applied Thai architecture and the aesthetic abstraction approach.

2. To examine the various determining factors and propose design guidelines for creating a Thai architectural identity for modern Thai society through 'reinvention' with the intention to create future cultural heritage.

3. To study the approaches for enhancing the sustainable development of the creation of a modern Thai architectural identity.

4. To study the opportunities and benefit potential that can be postulated through employing modern Thai identity in architecture as a contributing vehicle in the creative economy.

5. To reach a conclusion and propose recommendations and a series of research issues to be comprehensively addressed in the future.

Research hypothesis

The Thai identity traditionally applied in contemporary architecture is incongruent with the context of modern Thai society. Only through the integration of various determining factors in the "reinvention" approach, can a modern Thai architectural identity be created and become an intrinsic part of the country's cultural heritage in the future.

Research method

This research, under the title "The Creation of Cultural Heritage: Towards Creating a Modern Thai Architectural Identity," is a preliminary investigation of ongoing research. The aim is to determine conceptual frameworks and critical issues to be undertaken in more in-depth studies in the future. Thus, systematic physical surveys of buildings which exhibit various Thai characteristics will be conducted together with document surveys of previous studies. The formation of a basis of information and theoretical and analytical frameworks would lead to the comprehensive formulation of research problems, creation approaches and sustainable measures for the development of Thai identity in modern architecture.

In addition, the conclusion of the findings reached in this preliminary study will be confirmed through a review of experts, practitioners and those involved, regarding the issues raised in the discussion of this study.

Research scope

According to the five research objectives, this study examines architectural works that exhibit various patterns of Thai character constructed since 1947, and those that reveal attempts to express a modern Thai architectural identity. The latter cover only works of the past two decades when the lack of a Thai architectural identity had been publicly perceived and criticized (Horayangkura 1986).

As a whole, the goal of this research is to investigate the collective development of a Thai identity in architecture rather than present an in-depth case study of architectural works.

Research results and discussions

The congruence of Thai architectural identity within the context of present society

A review of the scant criticisms of Thai architectural identity, as subsequently cited in relevant texts, and surveys of buildings initially designed with Thai character reveal three major categories (Figure 4–6):

a) Traditional Thai Architecture
b) Applied Thai Architecture
c) Aesthetically Abstracted Thai Architecture

Figure 4: Borommarajasathitmaholan Hall

Figure 5: National Library Building

Figure 6: Phulay Bay, A Ritz-Carlton Reserve, Krabi

a) Traditional Thai Architecture

The application of traditional Thai character to various building types serving modern functions has inevitably brought about two major conflicts:

1) Conflicts between physical character and social hierarchical order: The prolonged development of religious and palatial architecture in the traditional Thai style has actually set up underlying design criteria regarding the propriety inter-relationship between the physical character of the architectural component and the expression of social hierarchical order. These hidden cultural criteria prohibit the application of traditional character to buildings of modern society. Such buildings as the new Supreme Court Building with a mainly traditional Thai style or the many competition entries for the

new Parliament Building that exhibit traditional architectural elements (Figure 7) are in conflict with the propriety criteria regarding the interrelation-ship between traditional character and social hierarchical order (Pirom 1989: 76; Prakitnontakarn 2005: 115). There is evidence of such violation of the criteria in the case of the Sukhothai Hotel, where Thai style pagodas were installed as decorative features in the hotel court (Figure 8), or in the case of integrating the "prang" or palatial spired structure to the chimney of a crematorium for commoners (Figure 9). It is absolutely inappropriate to apply such elements of palatial and religious architecture to commoners' edifices. It is thus critical to ask: how can we design Thai character into building types which never existed in the past?

The conclusive answer which will finally be reached is that Thai character for various building types of present society can be achieved through "reinvention" in which multiple factors are considered integratively.

Figure 7: New Parliament Building, Bangkok

Figure 8: Sukhothai Hotel Water Court, Bangkok

Figure 9: A crematorium topped with a palatial spire and a "Prang" structure chimney (Pirom 1989: 76)

2) Conflict of traditional architecture with context: Each society in each period has its own specific contextual factors—social, cultural, economic, and technological. These are the determinants of architecture for each period. It is clear that the application of traditional Thai architectural style directly to a modern situation induces conflicts by itself, creating an "out of place" phenomenon. An architectural retreat to a traditional approach finally becomes architectural stagnation. However, the conservative architect, Pinyo Suwankiri, insists that certain traditional architectural patterns, similar to a poem's structure, have to be preserved to reflect Thai characteristics (Tiptus 1997: 106).

The two self-induced conflicts, regarding social hierarchical order and contextual factors with respect to traditional character, together with higher investment costs, have resulted in a limited application of traditional architectural solutions as found in the "souvenir" approach in design. One witnesses a detached structure such as a Thai pavilion or "Sala Thai," a shrine of the household god, or a Buddha image pavilion that expresses Thai architecture identity, located next to a modern main building (Figure 10). One also finds that many modern building complexes are designed with traditional roof features at the canopies of the main edifices (Figure 11).

Figure 10: Thailand Cultural Center Building, Bangkok

Figure 11: Little Duck Hotel, Chiang Rai

b) Applied Thai Architecture

The need to preserve traditional Thai identity in the modern context, especially with the concern for contemporary building technology and materials, has finally resulted in an adaptive architectural style known as "Applied Thai Architecture" (Horayangkura 1994, 1996: 57–62). Beginning with Field Marshal P. Pibulsongkram's government and his nationalist policy (Prakitnontakarn 2004), the demand for a Thai character in all significant government office and institutional buildings had been worked out by the Department of Public Works. Applied Thai architecture thus prevailed among office building complexes along outer Ratchadamnoen Avenue, as well as among provincial civic service buildings and court buildings. The Thai character of these buildings is the outcome of high-pitched roofs, with simplified decorative features at the end gable, which were criticized as a "cancer of architecture" (Charoensuphakul 1969: 87). Constructed with a concrete roof structure and decorative finial and edge ornaments, applied Thai architecture, though having gone through a simplification process, has been judged as a dead solution which is unrelated to historical, social and cultural contexts of contemporary society. However, the applied Thai architectural style was widely employed for decades with the aim of demonstrating nationalism. The Thammasat University Auditorium, the National Theatre Building (Figure 12) and the National Library Building, to mention just a few, are modern functional buildings, designed in the applied Thai style.

The Modern Movement in architecture in Thailand starting in the late 1950's, following the return of many architects who graduated abroad and held key positions in architectural practices in Thailand, flourished while the stagnation of applied Thai architecture mirrored the decline of nationalism. These architects, who had rather limited comprehension of traditional Thai architecture, strongly criticized applied Thai architecture as "a match box topped with headdress" which implied the irrelevance of traditional Thai features in the

modern context. Today, only buildings belonging to the civic centers of most provincial cities are designed in the applied Thai architectural style (Figure 13 and 14). It is unfortunate, as noted by many contemporary architects, that "Applied Thai Architecture" has not developed in past decades along the continuum of the changing context.

Figure 12: National Theatre Building, Bangkok

Figure 13: Provincial Hall Building, Chiang Mai

Figure 14: Six-Thrones Courthouse Building, Yasothorn

The delimitation of applied Thai architectural development has in fact set constraints on development continuity over a certain period which is sufficient for architectural transformation and the generation of an associative architectural identity as in the case of Moghul Architecture. The Moghul style was initiated with the establishment of the Moghul Dynasty in 1526. It should be noted that the initial Persian influence was transformed in the evolution of Moghul architecture which finally, in turn, became a strong architectural influence in Persia and the Mediterranean region (Fletcher 1992: 605–631, 783).

c) Aesthetically abstracted Thai architecture

Thai architectural identity can also be achieved, according to the younger generation of architects, through the abstraction of the formal aesthetics of traditional architecture of the past. Thai character can be expressed in terms of an aesthetic dimension gained through formal abstraction or reduction, mostly without logical concerns. The formal expressions in general do not reflect functional aspects that generate formal solutions. Such an approach to expressing Thai architectural identity can be found in the case of the Architect Council Building. The curvature of the roof, though a reminiscent element, does not imply the wisdom of a formal solution, such as the missing concern for environmental protection as distinctively demonstrated in both the existing building (Figure 15) and, to a greater extent, the proposed original design (Figure 16). A similar approach to expressing Thai identity through aesthetic abstraction is in the pointed golden roof and golden horizontal linear decorative elements of the Siam Commercial Bank Headquarters office tower (Figure 17). These formal expressions have yet to be explained in their "contents" or "meanings," only in their aesthetics.

Figure 15: Architect Council of Thailand Building

Figure 16: Architect Council of Thailand Building as designed (ACT, Vol. 1, No. 1, April 2009, cover)

Figure 17: Siam Commercial Bank Headquarters

The aesthetic abstraction approach of achieving Thai identity is likely based on Western thinking which emphasizes "separation" rather than "integration." The formal approach should reflect the functional content or underlying wisdom.

To conclude, all three major categories of architecture that express various degrees of Thai identity—traditional, applied and abstraction—are still based on a continuation of past formal character. The creation of a modern Thai architectural identity should be the output of "reinvention" in seeking architectural transformation in which Thai architectural identity is congruent with the context of modern society, and becomes a part of cultural heritage that represents the contribution of current architects (Pirom 1988).

2. Guidelines for the creation of Thai architectural identity for modern Thai society

The failure of past attempts to create an appropriate architectural identity in the context of modern society, as discussed earlier, has motivated a "reinvention" movement in which more integration of various determining factors contributes much to the creation of a modern Thai architectural identity. There is evidence of precedents to the reinvention approach (Horayangkura 1996, 2002). For example, simulated components and elements of architecture with varying degrees of Thai characteristics have been investigated (Plaichoom 1998; Phongmethakul 1999; Plaichoom 1998; Sriphirom 2009).

2.1 Conditional frameworks for reinvention

Comprehensive conditional frameworks have to be set up as guiding vehicles leading toward reinvention. They are prerequisites to the formulation of determining factors (see item 2.2) to be holistically taken into account

later on to achieve design guidelines for the creation of a modern Thai architectural identity. The conditional frameworks would provide for sustainable development by setting forth appropriate directions which would avoid achieving only the formal dimension without the underlying substance.

The following guiding framework will be the conditional basis for a holistic reinvention approach:

1. The existing practice of achieving Thai architectural identity is rather an inappropriate approach because the output is incongruent with the situation of present society.

2. There are cultural limitations in the application of traditional Thai architecture. In addition, there are also contextual conflicts in modern society. It is time to identify directions for reinvention.

3. Thai architectural identity should be the output of both external and internal inputs. Thai identity encompasses the transformation of both aesthetics and wisdom in architecture.

4. Reinvention implies the creation of Thai identity amid the influences of globalization following Nagashima's (1996) concept of "Glocal Architecture" (Glocal = Global + Local). The consideration includes the issue of global warming and its green architecture implications.

5. The formal aspect of modern Thai architectural identity has to reflect various determining factors such as economic, socio-cultural and technological systems of today and the future.

6. Modern Thai architectural identity must encompass concrete aspects which could be applied and developed by various government authorities and private agencies.

7. In this dynamic society, research and development activities of modern Thai architectural identity must be ongoing, reflecting contextual changes.

8. Through reinvention there is no instant formula to obtain a modern Thai architectural identity. It takes times to create and develop through a transformation process until certain architectural styles can be achieved and accepted by the society as a whole. They have to be widely applied over a certain period.

2.2 The approaches to create a modern Thai architectural identity

Through reinvention, it is essential to encompass a tremendous amount of related variables—both the current factors of the contemporary situation and the traditional culture and wisdom that are inherited. The integrated mixture of both current factors and traditional ones in the reinvention process will become significant inputs in generating a modern Thai identity in architecture.

Current Factors include economic, socio-cultural and advanced technological influences which bring about critical changes in modern society and reflect globalization. They are thus the principal contextual factors that become architectural inputs.

Traditional Factors include the roots of culture—concepts, attitudes, values, traditions —which are still part of today's way of life, including past wisdom in creating livable environments, which can be modified through present applications, such as the green wall / sun shade (Laopanitchakul 2006). Traditional factors play a similar influencing role as the current factors in transforming architectural solutions. The lack of Thai identity in today's architectural designs is the result of mainly taking

into consideration current factors while discarding traditional accounts (Figure 18). In addition, designers are likely to emphasize the formal or concrete aspects, though the more abstract dimensions such as buoyancy (Figure 19), transparency (Figure 20) and shadiness contribute significantly to the Thai identity (Horayangkura 1996: 51–54).

Figure 18: Energy Complex, Bangkok

Figure 19: United Nations Auditorium, Bangkok

Figure 20: Samui Air Terminal

Analytical framework of various factors determining modern Thai architectural identity

Following the conditional framework for reinvention and the approaches to create a modern Thai architectural identity as mentioned in items 2.1 and 2.2, modern Thai architectural identity can be proposed by taking into account the integration of the determining factors as presented in the following analytical framework:

Design Guidelines for Creating Thai Identity in Modern Architecture

Modern Thai Architectural Identity Output	⇔	**Current Factors + Traditional Factors Concrete Aspects + Abstract Aspects**

Modern Thai Architecture as determined by:		**Factors of modern society**
	=	Economic, socio-cultural, physical contexts (location + site + construction technology + building technology + energy conservation measure + eco-friendly measure + green architecture implication + etc.)
		+ Globalization / Glocalization
		+ Human needs (entrepreneurs + users + public) + marketing
		+ Formal character (external) + wisdom (internal)
		+ Concrete aspects + Abstract aspects
		+ Others (such as imagination, etc.)
Formal Character (external)	=	Creation of aesthetics / styles / refinements
		+ Applications of various architectural elements
		+ Propriety interrelationship between physical character and social hierarchical order
		+ Site planning of building and group of buildings
		+ Landscape planning
		+ Others related to current and traditional factors
Wisdom (internal)	=	Settlement site selection + natural disaster mitigation
		+ Natural process (orientation + natural ventilation natural lighting + natural shading + cooling from water-ground, etc.)
		+ Material selection + building construction technique selection
		+ Others related to current and traditional factors
Concrete Aspects	=	Architectural components and decorative elements + building group planning + landscape planning + etc.
Abstract Aspects	=	Buoyancy + transparency + shadiness + etc.

3. The approach of enhancing sustainable development in creating a modern Thai architectural identity

In addition to the design guidelines proposed, it is essential to propose approaches to enhancing sustainable development in creating a Modern Thai architectural identity. In-depth interviews with various experts in related fields revealed the following five measures to sustain identity creation:

Building up public consciousness

The underlying reason for lacking Thai identity in architecture is a spiritual issue. The public in general, communities, entrepreneurs, government authorities and architects as a whole, disregard the creation of Thai identity in modern architecture or have a rather negative attitude toward Thai identity. They consciously refer to Thai identity as traditional Thai architecture and thus see it as an obsolete issue in opposition to the changes in a limitless world. The new generation of Thai architects should also play significant roles in creating cultural heritage (Pirom 1988); they should not simply design according to contemporary society's framework, which is likely to fall into a competitive world under the influence of globalization.

Nevertheless, the consideration of local context in following Nagashima's glocal architecture would provide a perceptual opportunity for specific local characteristics. Bangkok, for example, would exhibit a certain identity which is different from those of other metropolises, partly because of its glocal architecture amid an international context.

Public consciousness nurtures the initial movement toward the creation of Thai identity.

Transformation of the education system

The fundamentals of architectural identity could be introduced to the younger generation more effectively, provided that there is conscious public cultivation of identity in the pre-university education system. This should become the basis of professional education. However, in reality, most architects have limited fundamentals concerning architectural identity of the past up to the present and hence lack potential in the creation of a modern Thai architectural identity. The truth is that most architectural institutions neglect to teach courses of comprehension and development of Thai architecture; but rather offer courses of traditional Thai architecture, mostly as one or two selective courses—lecture or semi-studio. The emphasis is on capturing Thai architectural style rather than the development and application of a Thai architectural identity that is relevant to present-day society. Only few architectural schools offer studio teaching projects in a real context. Even though some programs do offer specific Thai architecture study, graduates are more skilled in traditional Thai architectural design than in the creation of a modern Thai architectural identity. Finally, they face difficulties in gaining professional opportunities.

In addition, graduates from abroad mostly lack comprehension of Thai architecture fundamentals. Yau Fong (2000: 121) has reflected the underlying factor: "Most architects in Thailand received western-oriented education that has made them less sensitive to their cultural heritage. This intellectual barrier has become detrimental

in developing Thai architecture." The education system has to be reorganized to promote Thai architectural identity development. A deeper understanding of the formal aspects in connection with latent wisdom would contribute to the creation of a modern Thai architectural identity. Teaching should focus on how to extend traditional wisdom toward its application to design for modern Thai society, particularly in providing comfortable environmental conditions. These talents can become part of the professional licensing process. Foreign architects may be required to pass a similar examination as the Thais in accordance with professional standards enforced after the more competitive practices induced by the Free Trade Area (FTA).

Research and development

Architecture by its nature is a creativity-based discipline and an independent profession. Research in architecture in general has been largely overlooked and dispersed among multi-disciplinary fields of architecture. To sustain research and development concerning the creation of a modern Thai architectural identity, which requires prolonged research activities on a specified topic, it is proposed here that a "Research and Development Institute of Modern Thai Architectural Identity" be established. The institute is to be responsible for the promotion of research and development which will generate research outputs as design guidelines for the creation of an appropriate Thai architectural identity for modern society. Through reinvention, both concrete and abstract aspects as well as both formal character and latent wisdom would be explored and filtered through the integration of various focuses such as progressive building technology and materials, investment cost and consumers' responses.

The establishment of the Research and Development Institute of Modern Thai Architectural Identity under an act of legislation would fully support its commitment as well as facilitate cooperation with other authorities and institutes in research and promotion of output activities. Since the main mission of this institute would be the creation of architectural identity, and architecture has become an industry of the creative economy movement, the research and development institute should therefore be positioned as an independent organization in association with the creative economy authority.

The stimulation of identity-based professional practices

Practitioners in architecture are the key persons who will provide the final answers to the problem of missing identity. Considering the whole process of architectural identity promotion—building up public consciousness, transforming the education system, supporting research and development—as discussed earlier, it is obvious that professionals, who are fully aware of the lack of a modern Thai architectural identity and have been equipped with knowledge and skill for the creation of identity according to the direction provided by research and development, have much influence on the success or failure of generating a modern Thai architectural identity. Under such circumstances, it is proposed here that to earn a professional license, one should pass qualifying examinations—one of which should be focused on Thai cultural/ architectural wisdom. This measure would hopefully, in the future, increase Thai

identity in architecture as well as decrease the inappropriate applications of traditional architectural styles to modern buildings (Figure 21 and 22).

Figure 21: Mandarin Oriental Dhara-Dhevi Hotel, Chiang Mai

Figure 22: The Viharn Lai Kham, Wat Phra Singh, Chiang Mai

The Madarin Oriental Dhara-Dhevi Hotel in Chiang Mai (Figure 21) demonstrates the violation of social hierarchical order in an attempt to simulate the religious architecture of northern Thailand as exemplified by Viharn Lai Kham, Wat Phra Singh (Figure 22).

The spirit-driven promotion

Professional experts insist that professional opportunities should be specially provided for those who graduate in programs that offer Modern Thai Architecture Courses. They should also receive special financial offers in terms of a monthly income.

Awards and recognitions should be bestowed by various related professional associations and councils on those who make significant contributions to the creative work—design, research and development––associated with the search for a modern Thai architectural identity. Both annual and specific competition project awards open to all qualified institutions and individuals would strengthen the creative process. All sectors, including private organizations, can play significant roles in promoting all kinds of activities leading towards the designated outcome of achieving a modern Thai architectural identity. All these spirit-driven promotional activities would create a critical mass for identity creation in response to the creative economy policy.

4. Opportunities for and benefit potential of a modern Thai architectural identity in the creative economy

John Howkins (2001), in his book *The Creative Economy: How People Make Money from Ideas*, has succinctly defined the creative economy as value-added creation out of human ideas. Architecture is one of the nine creative industries. The production development of these industries, namely 1) crafts, 2) design, 3) fashion, 4) film & video, 5) broadcasting, 6) performing arts, 7) advertising, 8) publishing, and 9) architecture,

would become contributing vehicles of a creative economy.

The creative economy is an alternative initiation in the economic development of the country. The emphasis is on increasing social value through value-added economic activities as specified in the government policy contained in the 11th National Economic and Social Development Plan (2012–2016). Essentially, the creative economy aims at increasing the economic potential of present situations, which are mainly based on exports of industrial products, agriculture, services, tourism, etc. The economic goal is to strive to raise growth from 10% of GDP (900,000 million Baht) to 20% of GDP (2,000,000 million Baht) within three years.

Creative ideas are critical for cultural heritage conservation and the development of creative properties. According to the Economic Stimulation Plan phase 2 (2010–2012), 17,585 million Baht has been allocated for the promotion and development of the nine categories of creative industries. Adding up to the solely low-cost production following the current economic policy are the efficiency-driven as well as innovation-driven approaches which require more specific creative skills (Samakoses 2009).

Figure 23: Petronas Twin Towers, Kuala Lumpur

Figure 24: The Taipei 101 Tower, Taiwan

Figure 25: The Shanghai World Financial Center

The issue to be discussed is then focused on the roles of architecture, one of the creative industries, as a contributing vehicle in the creative economy to achieve the goals as planned, as well as on the co-

variables, especially the locational and environmental factors, in the architectural process leading towards creative economy development.

Architecture, as a part of the culture industry, depends on creativity. The creation of a modern Thai architectural identity will signify national dignity, progress and modernity, in addition to the demonstration of national identity. Such architectonic qualities will become tourists' attraction. This is especially true in the case of creating high quality architecture—an iconic architecture—which adds more value to the culture industry as a whole. It should be noted that many countries in Asia exhibit extra-dominant buildings which represent iconic architecture, such as the Petronas Twin Towers in Kuala Lumpur (Figure 23), Taipei 101 in Taipei (Figure 24), and the Shanghai World Financial Center (Figure 25), etc. Architects have paid particular attention to design with national characteristics in mind. Likewise, the creative economy in Thailand can be enhanced, directly or indirectly, through the provision of a modern Thai architectural identity and an increase in the member of tourists. Moreover, other creative industries also gain positive effects along with the growth of tourism, especially in such culture industries as crafts, design, fashion and the performing arts.

Conclusion and recommendations

This research is a preliminary study aiming at exploring four areas of investigation set forth in the research objectives. Research questions to be addressed in the future under more critical examination are hereby proposed. The concerns are to create cultural heritage by establishing a modern Thai architectural identity.

Here are the major conclusions that can be reached in this preliminary research:

1. The three major categories of Thai character in architecture—1) traditional Thai architecture, 2) applied Thai architecture, and 3) aesthetically abstracted Thai architecture—are inappropriate to the present context of modern society. The traditional design is in conflict not only with traditional criteria concerning the propriety interrelationship between the formal aspects and the social hierarchical order belonging to palatial and religious architecture, but also with the context of modern society (Figure 26 and 27). Similar propriety concerns have deterred applied Thai architecture from achieving a wider scope of application; it has been delimited to the building design of provincial civic complexes and some special national buildings (Figure 12 and 28). The more abstract approach has failed mainly because it lacks wisdom underlying the formal aesthetics.

2. Modern Thai architectural identity has to be the output of reinvention in which Thai character can be achieved through the transformation of determining variables: both current and traditional factors, both wisdom and formal concerns, as well as both concrete and abstract aspects. The products of reinvention would become cultural heritage as called for by Prince Naris whose design of the King Rama I Memorial (Figure 29) reveals the start of a modern Thai architectural identity. The findings confirm the hypothesis regarding the reinvention approach in attaining modern Thai architectural identity. The scientific basis of traditional wisdom with respect to comfortable living conditions (Lieorungruang 2005) can be extended to be a part of modern

architectural identity. Traditional factors become latent in a modern context.

Figure 26: Vajiravudh College Auditorium

Figure 27: Montien Plaza, a shopping arcade of Montien Hotel, Bangkok

In serving different modern functions, both buildings (Figure 26 and 27) fail to express appropriate formal criteria with respect to both tradition and the modern context.

Figure 28: National Archives of King Bhumibol Building, Pathumthani

Figure 29: King Rama I Memorial

3. Reinvention can lead to a sustainable outcome through building up fundamentals in comprehension, skills and identity development potentials. This research also calls for, first of all, building up public consciousness concerning the essentials of Thai architecture identity in a globalized world. Meanwhile, both the education system and research development should be in the forefront of moving toward transformation in architectural identity through a glocalization approach. An Institute of Research and Development of Modern Thai Architectural Identity should be established which can become an innovative mechanism in driving the creative economy. In addition, the stimulation of professionalism, through professional licensing exams that test practitioners' fundamental knowledge of Thai wisdom as well as by awarding work opportunities to those with high performance in creating a modern Thai identity in architectural design, should be significant strategies in sustaining Thai identity in modern society.

4. As architecture is one of the nine creative industries, Thai architects in the reinvention process should make an

innovative leap in creating a modern Thai architectural identity through proposing an iconic architecture that would raise social and economic values in the face of the creative economy. The Thai character could be a vehicle driving the promotion of the creative economy.

Recommendations for future research

This preliminary research has pioneered the following research issues:

1. How appropriate are those Thai characteristics exhibited in the architecture of the past two decades to the modern world and why?

2. How are the applications of traditional Thai architecture accepted by Thai society, especially in consideration of the interrelationship between physical character and the expression of social hierarchical order?

3. How feasible is it to create a modern Thai architectural identity with the essence of Thai character in a globalized context and what are the possible solutions?

4. How possible is it to revive the Applied Thai Architecture—a once architectural style under nationalism—through critical development and application which would gain increasing public acceptance?

5. Can the architectural value of Thai identity be judged by considering either formal aesthetics or the underlying wisdom, or both aspects reflectively? For instance, is the solely formal expression of aesthetic solution without reference to wisdom sufficient for the evaluation of Thai identity?

6. Is it possible to set up a distinctive design framework in both concrete and abstract aspects to be served as a handbook in the selective application of an appropriate modern Thai architectural identity on a broader scope.

7. If current design lacks Thai architectural identity because of the concern for mainly current factors, how would the incorporation of traditional factors help create a more distinctive Thai architectural identity and in what aspects?

8. Why do education institutions in architecture disregard the creative approaches of modern Thai architectural identity? How can this critical issue be solved when both teachers and curriculums have similar limitations of creative roles or designations for identity which are increasingly formidable?

9. Under an agreement to establish a Research and Development Institute of Modern Thai Architectural Identity, what should be the scope of its responsibilities and services?

10. How can the public and communities be induced to participate in the creation of architectural identity which is modern Thai in outlook, especially for those significant buildings located in the public space of local community centers?

11. Do professionals agree to undertake qualifying examinations under the Architect Council of Thailand that lest the fundamental knowledge and skills needed to create modern Thai architectural identity as part of the professional licensing process?

12. How does the creation of modern Thai architectural identity help promote the creative economy? And can the added economic and social value be evaluated out of concern for national security?

The conceptual research framework is demonstrated in the following diagram.

① – ④ follow the statement of the research objectives.

Diagram of proposed conceptual research framework: towards creating a modern Thai architectural identity as cultural heritage

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