

## Adaptive Use Situation for Urban Conservation in Thai Context

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### Abstract:

This study is a part of Literature Review in the research, Adaptive use policy improvement for urban conservation in Thai context, which author joined in Gottenheim Conference, International Journal of Arts and Science (JIAS) in Gottenheim, Germany on 4th December, 2008. The content is about urban building conservation in the changing social and economic situation, focusing on the background, adaptive use approach, valuing cultural heritage, regulation and organization concerned to adaptive use policy in Thailand and conclusion leading to next part of the research.

Adaptive use policy improvement for urban conservation in Thai context, expressing background, objectives, research questions, scopes of research, literature reviews, methodologies and research outcomes. The study is about urban building conservation in the changing social and economic situation, focused on adaptive use of historic buildings and areas, adaptive use policy and procedure in Thailand comparing to international countries, building valuing and practical situation in Thailand. The **objectives** are to study the procedure and exact management of adaptive-reuse in Thailand comparing to the international standard, to study valuing cultural heritages, sustainability in urban development, to find out the factors which impact to success of adaptive-reuse in urban historic conservation and to find out the guidelines for adaptive-reuse policy improvement in urban conservation for Thai context. The **research questions** are how the procedure of adaptive-reuse in Thailand is, what adaptive use approach that is harmonious to sustainability approach and how the adaptive-reuse policy improvement in urban conservation for Thai context should be. The **scopes of research** focus on urban heritage buildings which have adaptive-reuse. The **literature reviews** are cultural conservation approach, historical area management approach and adaptive use approach. The **methodologies** are studying literature review, the current situation of the adaptive use procedure in Thai context, factors which lead to the success of adaptive use in urban historic conservation, setting the criteria for case studies, collecting data, analyzing and concluding the research. And the **research outcomes** are to know about current situation of the adaptive use procedure in Thai context comparing to the international level, factors which lead to the success in implementing adaptive use in urban historic conservation and the guidelines for adaptive use policy improvement in urban conservation for Thai context.

Keyword: Adaptive Use, Urban Conservation

### 1. Introduction

Among rapidly economical development in developing countries, current economic situation and globalization make materialism progression throughout many countries, especially Southeast Asia region. Thailand, one country in this area, has long-time history of more than 800 years, having a great deal of

valuable heritages in architecture, built-environment, custom, tradition, etc.

At present, there is a demand to improve the land in urban area where most of old and worthy buildings are located. Development always creates more opportunities for employee and higher profit for landowners. Thus developers may prefer to give priority to redevelopment and new construction rather than conservation. Some valuable buildings such as warehouses, residences or commercial buildings trend to be demolished to construct new project without awareness to preserve all kinds of these buildings and built environment, they maybe are going to disappear finally.

*The Adaptive use*, a method for preservation, can be rehabilitated these historic buildings and area. We can keep the constructions, façades through the ornaments, renovate interior as much as possible or adapt the new use inside. For example, an old colonial-style house change to boutique hotel, an old palace adapted to museum or a single house converted to restaurant.

## 2. State of the Art

As mentioned above, there are many adaptive use projects occurred spontaneously without policy intention and there is no mechanism to facilitate private effort in restoration and run the adaptive reuse program. (Yongtanit pimonsathean, 2004) (*Yongtanit Pimonsathean, The Prospect of Adaptive Re-use of Modern Movement Architecture Heritage and Historic Communities in Bangkok, Department of Urban and Regional Planning, Faculty of Architecture, KMITL, Bangkok, 2004*)

There is no regulation to control building uses and to protect values of the old and valuable buildings. These types of buildings became substandard compared to the building codes such as no fire protection materials, narrow staircase or too small openings etc. When we change the function of old buildings, there always were many substandard parts for its new function because these buildings were built before building code declaration. For example, when we adapt residential buildings to commercial ones, there are many limitations for private residential structures to be concerned as public building structure suitable for its new function.

No specific incentives for individual owners of heritage buildings and sites are provided to protect their own properties. Nowadays, there is no financial incentives and Transfer of Development Right (TDR) in Thailand which are the ways to make awareness accomplish.

## 3. Literature Review

The literature reviews of this research are focused on adaptive-reuse approach, valuing cultural heritage, Thailand's regulation and organization concerning to adaptive use for heritage buildings including to case studies;

### 3.1 Adaptive use approach

'Adaptive use' means functional change in old materials buildings or area in response to its new requirement. For adaptive use in heritage building means functional change in old building to fit in the new use affected from shifting social and economic situation. Normally, adaptive use needs renovation together

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ไม่ว่ากรณีใดๆ ทั้งสิ้น อีกทั้งห้ามมิให้ตัดแปลงเนื้อเอกสารต้องอ้างอิงถึงเจ้าของเอกสารทุกครั้งที่มีการนำไปใช้

with decoration which is suitable to its new function. It has to consolidate or reinforce the building's structure following the existing condition. It also preserve most part of the old buildings as much as possible, they maybe can change few parts to fit into its new function.

'Adaptive use' is the word commonly used in the U.S.A. and some Asian countries. At the same time, it also matches to the word 'Building conversion' used in England and in other European countries. These two words come with following definitions;

'Adapt' (v.) (*From Addison Wesley Longman, Longman Active Study Dictionary, 3<sup>rd</sup> Edition, England, 1998*)

1. To change your behavior or idea to fit a new situation
2. To change something so that it is suitable for a new need or purpose

'Conversion' (n.) A change from one system or purpose to another

Most procedures which are linked to planning, requirement, arrangement and building use and adaptive use are one strategy to revive the buildings or communities. (Robert W. Buchell, 2004)

Many countries are developed, and people tend to be in materialist and capitalist. Natural resources are used to response to human consumption. It's difficult to save natural heritage although there are sustainability approach nowadays. In the other aspect of cultural heritage, people need more spatial requirement for residences, workspaces and others. They trend to demolish the old buildings and reconstruct new projects without any concern of conserving the old structure. Adaptive use is one solution to solve these problems, utilizing the existing potential assets or buildings and completing with professional management to response the present and future requirement.

There are several important reasons for adaptive use by the following aspects. (1) To save energy and natural resource; we can reduce energy consumption from building demolition and reduce material for new construction. (2) To protect environment and natural balancing; we can re-arrange the deteriorated buildings or communities to be revived and in good vision. (3) To conserve the historic evidences and cultural heritage; historic buildings and area are important historic evidences which are cultural heritage. Remaining historic buildings always make us be proud of and convinced in motherland. (4) To study historical, social and cultural procedure, we would know the past from these evidences, studying the ways of life, traditions or regional knowledge. (5) To study art and architecture development, we can learn design concept which response to and reflect environment and situation in the past, know construction technology, material and building form which are losing some days. (6) To increase building values; we can add the values of the buildings or communities directly and indirectly such as adapting a residence to commercial one or attracting tourists by charming old buildings.

Adaptive use is important for urban conservation plentifully because adaptive use make the existing physical assets become useful. So we should realize and foresee value of these assets before it would be late to preserve. Especially, government, politician or local officer should be certain to these losing cultural values in many points of view more than economic aspect. Furthermore, government should review and support adaptive use policy as one alternative to conserve these invaluable assets.

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ไม่ว่ากรณีใดๆ ทั้งสิ้น อีกทั้งห้ามมิให้ตัดแปลงเนื้อหา หรือทำซ้ำโดยไม่ได้รับอนุญาตจากเจ้าของเอกสารทุกครั้งที่มีการนำไปใช้

### 3.2 Valuing Cultural heritage

There are several types of value associated to cultural heritage so urban conservation needs to be concerned to these types. Historic buildings or areas are cultural heritages thus we have to know about value and authenticity which UNESCO (United Nations Educational, Scientific and Cultural Organization) use to arrange and evaluate world heritage. In Thailand, there are 6 types of values designated by the Fine Arts Department (FAD) by following items; (1) Identity value, this value associate to social perception and emotion pass to important community attribute such as setting, race, legend, belief, spirit, religion, patriot, tradition and culture. (2) Educational value, knowledge can be occurred from studying cultural heritage, arts, utensil, architecture, reflecting to the way of life, and events from the past. However, we can study design concept, technique, fundamental use, structure and workmanship related to the passing period. (3) Economic value, this value supports to cultural heritage management which concern to multi-level finance requirement such as tourism, commercial, functional use and service. Arrangement still needs to concern to the other value types to each other. If we focus on only financial purpose, it could lead to destroys cultural heritage. (4) Functional value, this value relates to economic value and links to original functions. Among changing economic situation and building condition, this value maybe lost and changeable so cultural heritage conservation need adaptive-reuse approach which is close to this research. (5) Social value; this value associates to social behaviors, activities and traditions showing the identity of society and leading to cultural preservation and restoration. (6) Politician value, this value always associates to important events in the past or important people (Bernard M. Feilden, 1998)

Another type of value, rarity value, concerned by UNESCO, is designated to representative or identity of cultural heritage and is associated competitively to form, creator, period of time, religion or combination. Worldly rarity can lead to world heritage.

Authenticity is an important issue in valuing cultural heritage which UNESCO used as criteria in evaluation world heritage. Authenticity can lead to right understanding and correct learning cultural information such as way of life, surrounding, atmosphere, creativity, wisdom, knowledge and truth. Authenticity focuses on the completion of cultural heritage's originality, classified to 4 issues; material, design, workmanship and settings. (Bernard M. Feilden and Jukka Jokilehto, 1998)

1. Authenticity in material, this focuses on originality of material, evidence and symbol created in the past including material's life-cycle and declination. It's necessary to show difference between origin and new material.

2. Authenticity in design, this focuses on aesthetic, functional concept, architecture and engineering of the heritage resource and setting to respect to design concept.

3. Authenticity in workmanship, this focuses on products, utensils, local wisdom, original construction and technique.

4. Authenticity in setting, this focuses on sites or surroundings of cultural heritage which associate to construction period such as historic park and cultural landscape.

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Outside of values and authenticity, integrity and continuity are important for cultural heritage. Integrity means combination to each factor of cultural heritage and completely from location, design, setting, material, workmanship, feeling and association. Continuity focuses on historical continuity, continuous period of time related to way of life, tradition and custom.

### 3.3 Thailand's Regulation concerned to adaptive use

From the background, there are three main regulations concerned to adaptive use approach for heritage building in Thailand, these are the following; City Planning Act, Building Control Act and Ancient Monuments, Antiques & National Museums Act.

#### 1. The City Planning Act;

The objects are to collect, research, analyze and process the physical, economic, social and population data including a continuous planning. It is designated for land use plan, transportation system plan, utilities and facilities setting plan. Especially, land use plans are set up detailed land use in city's parts such as residential, commercial, industrial, government and educational institute or art and cultural areas, etc. There are many criterions to control land use such as types of use, building use, building form (Floor Area Ratio-F.A.R. or Open Space Ratio-O.S.R. etc.) including land use prohibited in each zone. So for adaptive-reuse, we have to check whether building type adapted to another would be suitable for these area or not.

#### 2. Building Control Act;

This regulation is important for building use, aimed on safety, stability, fire protection, public health, environmental care and support city planning. There are several standards in details for building design, such as fire protection standards in public building, suitable material, building line etc. All of these details in building design need approval from the concerned government agency. Some building types need to be inspected in engineering and architecture before utilization such as theatre, hotel, night club, condominium or factory with size limitation. When we convert the building into another use or function, these buildings may become substandard based on the building codes such as no fire protection material, no ramp for disabled or narrow stair case, etc. There are still many limitations for building use adaptation.

#### 3. Ancient Monument, Antiques & National museums Act;

This regulation is mostly arranged by the Fine Arts Department (FAD). They are responsible to control and protect the ancient monuments, antiques and national museum to be educational resources, to gain income to communities and to be cultural travelling places. There are still gaps of the regulations between ancient monuments and cultural heritages, the criterions still do not cover in protecting many valuable buildings depending on valuing cultural heritage as well.

There are some regulations related to adaptive use approach such as National Environmental Quality Act, Property / Building safety regulation etc. Mostly, they emphasized on safety, property or environment. Therefore, many cultural building heritages are converted into a new function become

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substandard based on the building regulations. Building inspection focuses on some larger building type, they exclude smaller one where there are large in number. There still are also gaps for valuable building conservation and urban development so many organizations are founded to protect and conserve these losing valuable buildings.

### 3.4 Thailand's Organization concerned to adaptive use

There are many organization; government, non-government and private sectors, being responsible and participating in protecting cultural heritages. There are three government organizations looking into this matter. First, the Fine Arts Department (FAD) is mainly responsible to protect the monuments, artifacts, art objects and nation museums. The aims are to preserve, conserve, revive, promote and disseminate the knowledge, wisdom and culture of these valuable things. Second, the Office of Nation Resources and Environmental Policy and Planning (ONEP) are mandated to formulate policy and plan for natural resources and environment conservation. They also administratively manage, study, analyze and formulate measures for regulation in environmentally protected area. Lastly, the Crown Property Bureau is responsible for managing the personal wealth of the King of Thailand and his immediate family. There are many assets that are cultural heritage in the association.

Some Non-governmental Organizations (NGOs) are working to protect cultural heritages. One of these is the International Council on Monuments and Sites of Thailand (ICOMOS Thailand), an international organization working for the conservation and protection of ancient monuments and heritages. They create for a Thailand Charter to serve as guidelines for conservation these valuable cultural heritages. And the Association of Siamese Architects (ASA) under the Royal Patronage is established for promoting the architecture, architect including art and culture of Thailand. It participates in promoting cultural heritage by giving awards for annual architectural heritage in Thailand as well. Other NGO's are community representatives, advocacy organizations, universities or foreign expert institutions, also participating to protect cultural heritages. For private sector, there are many companies, organizations and historic building owner trying to preserve and adapt their own properties voluntarily.

Therefore, government and non-government organizations need to exert more effort and/or spend more time in inspecting historical heritages for there are many sites that need to be inspected, listed and registered. There still are many NGOs and private sectors concerning and realizing to be responsible for historic buildings and communities. And Thailand Charter will be guidelines to conserve the valuable cultural heritages.

### 3.5 Case studies

There are several case studies for adaptive-reuse approach occurred spontaneously in Thailand as mentioned from the beginning. Three case studies are explained in this article to represent different ways of adaptive-reuse situations such as (1) Baan Dinso, a residence converted into a boutique hotel, (2) Phayathai Palace, a royal palace changed to medicine center and (3) Thai-Chinese Chamber of Commerce building, adapted from an office into a restaurant.

### 1. Baan Dinso ;

Baan Dinso, Bangkok, is a two-story house constructed with golden teak wood in colonial style and approximately built more than 85 years ago during the reign of King Rama V. Originally; it was used as a private residence. ‘Baan’ means house in Thai language. Baan Dinso was descended to the current owner since 2006 with wrecking condition in some parts. With the conservative intention, the owner renovated, reconstructed some parts of building and adapted building use to a small charming boutique hotel. (See figure 1 and 2) This case study shows high effort from individual private sector to protect cultural heritage.



Figure 1:  
The exterior of charming boutique hotel.  
(From [www.baandinso.com](http://www.baandinso.com) 2008)

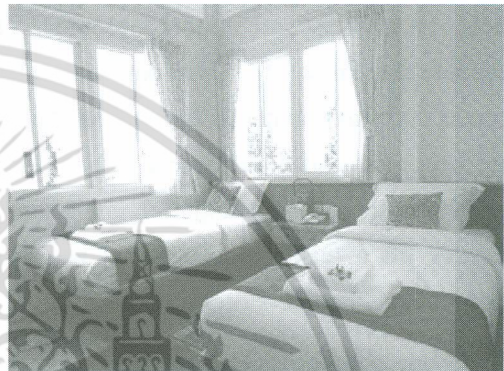


Figure 2:  
The interior of guest room with twin bed.  
(From [www.baandinso.com](http://www.baandinso.com) 2008)

### 2. Phayathai Palace ;

Phayathai Palace, Bangkok, was initially built by the King Rama V as his countryside resort. The architecture of halls is romantic style designed by European architects. After King Rama VI's reign, the palace had been rehabilitated as a hotel and government broadcasting station afterwards and recently adapted to medicine center for ‘Pramongkutklao hospital’ now. (See figure 3 and 4) This case study shows conservative management from royal class and government.

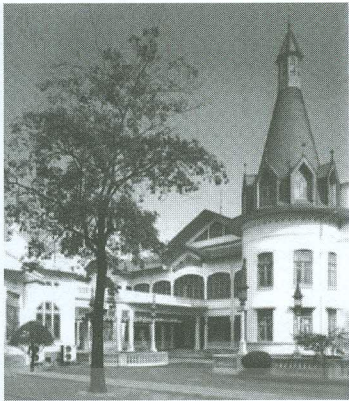


Figure 3:

The exterior of the Phayathai palace shows the hall with a high dome roof (From the Association of Siamese Architects, Architectural Heritage in Thailand, 20 years of Architectural Conservation Award 1982- 2002, p.108)



Figure 4:

The front exterior of the Phayathai palace. (From the Association of Siamese Architects, Architectural Heritage in Thailand, 20 years of Architectural Conservation Award 1982-2002, p.111)

3. Thai-Chinese Chamber of Commerce building ;

Thai-Chinese Chamber of Commerce building, Bangkok, is a 3-story building in Renaissance Revival style with some Chinese influences. The building was originally an office of the Bombay Burma Trading company in 1915. Later, the house was bought by the Association of Chinese Commerce in Thailand for a new office. At present, the company is moved to a new high-rise building at the back of the compound and the building is rented by the Blue Elephant restaurant. (See figure 5 and 6) Therefore, this building in business area is kept alive and well-maintained by rehabilitation which is a commendable conservation approach by private sector as well.

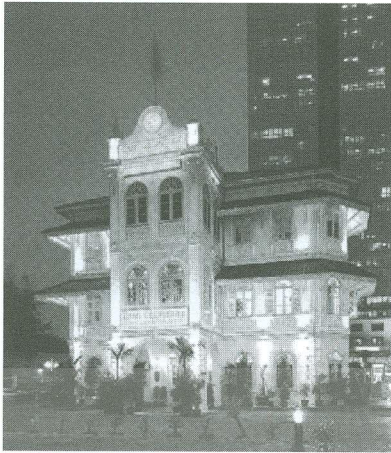


Figure 5:

The front exterior of the Blue Elephant restaurant (From the Association of Siamese Architects, Architectural Heritage In Thailand, 20 years of Architectural Conservation Award 1982-2002, p.152)

Figure 6:

The interior of the Blue Elephant restaurant (From the Association of Siamese Architects, Architectural Heritage In Thailand, 20 years of Architectural Conservation Award 1982-2002, p.152)

#### 4. Conclusion

The above contents are integral part of the research entitled, 'Adaptive-reuse Policy Improvement in Urban Conservation for Thai Context.' It explained about the adaptive-reuse approach, valuing cultural heritage and Thailand's adaptive reuse policy and case studies. The existing laws, policies, rules and regulations are factors that control and limit adaptive-reuse approach. Restoring historical buildings and/or converting it into useful/functional structure would mean to comply the existing laws and its requirements that make historical buildings difficult to neither comply nor pass the standards required by the law. There is no clear mechanism and special incentives to private individuals who will facilitate in conserving and restoring historical buildings/structures. Government organizations that are mandated in restoring historical buildings, places and sites play a major role by lobbying policies in the congress giving way of using adaptive-reuse approach in restoring historical buildings/structures. Government should also monitor and inspect other historical sites that need to be restored before losing valuable cultural heritages.

Furthermore, there are other factors that affect the restoration and adaptation of the building's use such as the owner's mentality and motivation in restoring the place, appreciation of land price, etc. The author continues to study these factors which affect the implementation of the adaptive-reuse approach in urban historic conservation.

## 5. Acknowledgement

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