



Current Issues Concerning Adaptive Re-use in the Conservation of Urban Cultural Heritage

YONGTANIT PIMONSATHEAN *



Fig. 1 - Ma Kok Miu (Barra Temple) in Macao (10 September 2002). All pictures in this article were taken by the author.

INTRODUCTION

It is commonly understood that adaptive re-use helps extend the life of historic buildings and prevents them from becoming forsaken and derelict. It preserves buildings by changing outdated functions into new

uses to meet contemporary demand. However, not all historic buildings require adaptive re-use to prolong their life. There are at least two types of buildings for which adaptive re-use is not suitable. One of these is religious buildings, particularly those located in a long-established region or town, such as Ma Kok Miu (Barra Temple) in Macao, a temple classified as one of the most significant local monuments. It is very culturally and historically meaningful since its name is linked to the origin of the word “Macao”.¹ In this case, the temple retains its function as a religious place and a symbolic venue for traditional festivals and thus there is no point in introducing any new usage to Ma Kok Miu.

* B. Arch. (Hons.), Chulalongkorn University, Bangkok; M. Sc. (Urban Planning) Asian Institute of Technology; D. Eng. (Urban Engineering), The University of Tokyo. Assistant Professor, Department of Urban & Regional Planning, Faculty of Architecture, King Mongkut's Institute of Technology Ladkrabang (KMUTL), Bangkok.

Bacharelato em Arquitectura (Hon.) pela Universidade Chulalongkorn, em Banguecoque; Mestrado em Ciências (Planeamento Urbano) pelo Asian Institute of Technology; Doutoramento (Engenharia Urbana) pela Universidade de Tóquio. Professor Assistente no Departamento de Planeamento Urbano & Regional da Faculdade de Arquitectura e no Instituto de Tecnologia Ladkrabang do Rei Mongkut (KMUTL), em Banguecoque.

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The other type consists of buildings that require high authentic value. Authenticity is a complex term in which design, materials, workmanship and setting should be taken into account. Recently, authenticity in the socio-cultural context has become an additional consideration in World Heritage sites.² New use in adaptive re-use schemes may require physical alterations that would devalue any aspect of authenticity. In this regard, the method of restoration is much more important than applying adaptive re-use to the building.

Leaving aside the case of religious buildings and those in need of a high degree of authenticity, adaptive re-use can be applied to historic buildings as a tool to keep them alive. Adaptive re-use has at least three advantages in the realm of conservation. It can “recycle” the building in order to regain contemporary economic value.³ Adding economic value is a good reason for conservationists to cite in the preservation of old buildings since artistic and historic value alone may not be sufficient to convince the decision-makers.

Since adaptive re-use prevents historic buildings from being torn down, it can also find favour with economists. Given that the existing structure remains, the cost of new construction is not needed and this saving is one of the main motives behind conservation.⁴ In many cases, new economic activities (like boutique hotels, restaurants or retail shops) can generate income that covers the cost of restoring a historic building. In some cases, new activities (such as museums or libraries) do not cover restoration and maintenance costs but they do provide an indispensable social benefit to the community.

Similarly, environmentalists support the idea of adaptive re-use. As new construction is not required, natural resources used in manufacturing construction materials are not exploited and thus adaptive re-use also promotes conservation of the environment⁵.

Although adaptive re-use seems to be a physically, economically, and environmentally sound approach for any conservation programme, it often gives rise to debate concerning its impact on cultural aspects. Adaptive re-use deals with the conversion of economic activities that will undoubtedly impact on the way of life of residents as well as visitors and users. There are three issues that need to be considered in applying



Fig. 2 - Example of passive new use in Phuket, Thailand (2001). A Sino-Portuguese building, originally built as a charity hospital, was converted to the office of the Chinese Hokkian Association.

adaptive re-use in the conservation of Asian cities. The three issues are a) appropriate new uses, b) legal limits, and c) the impact of gentrification.

APPROPRIATE NEW USES

There are many recommendations on possible new usage for old structures. Highfield⁶ lists possible new uses as including the retail trade, offices, industry (both light and heavy), warehouses, hotels or guest houses, residential units or dormitories, facilities for religious or social activities, welfare housing (especially for aged citizens), health centres, museums, theatres, and even discotheques. Yaomans suggests three groups of activities for adaptive re-use schemes in Liverpool⁷, namely residential, commercial, and mixed residential/commercial/ industrial uses. Tiesdell⁸ has pointed out that new uses should be related to three groups of activities, i.e. cultural tourism, housing, and commerce/ industry.

When taking financial return into consideration, appropriate new uses can be classified into two categories: active use, and passive use. Active use means a new activity that generates sufficient income to cover restoration and maintenance costs in the adaptive re-use programme. Examples of active uses are hotels, restaurants, retail shops, and department stores. Unlike active use, passive use does not generate substantial income to cover restoration and maintenance costs but



Figs. 3/4 - Conversion of storeroom to Thai massage school in Tah Tian community, Bangkok (2002).

it brings social benefits to the community. Examples of passive uses are museums, libraries, welfare housing units, galleries, and other social activity buildings.

No matter what the new uses might be, one of the most important aspects is the analysis of demand for new activities. Demand for new activities arises from at least two interrelated factors. The first factor is the need to overhaul the outdated condition of an historic building or environment. Vacant sites, empty buildings and unused upper floors are signs of inner city decay.⁹ This can be associated with an on-going decline in the population¹⁰ in which case it may be quite difficult to introduce a new function into an old building since the area may no longer be attractive. Moreover, this kind of historic building may, if poorly managed or left intact, be occupied by a lower income group, instead of providing improved economic activities, thus leading to a worse environment and under-priced properties.

To recreate the attractiveness of the old area, it is essential to have government intervention. The second factor in analysing new types of activities is thus government policy. Often the government solves the problem of inner city decay via the provision of new infrastructure and public services. The issue is what kind of infrastructure and services should be provided. In most cases, governments tend to regard the historic area as a potential tourist attraction. Here again Tiesdell¹¹ has suggested two considerations for adaptive



re-use in a prospective tourism promotion area: a) the area should be proven to be suffering from economic and industrial decay, leading to out migration and abandonment, and b) the area should have tourism development potential. Tourism development potential could be guided mainly by the government's provision of public infrastructure and private investment incentives.

However, if the decision from the government places too much emphasis on tourism development, seen as excessive open space development, rigid regulations on building use and relocation of some activities, the area will lose its charm and existing fabric. In this case, the government may encounter conflict with existing residents. The case of the Stone Town of Zanzibar¹² is an example of residents excluded from the decision-making process, resulting in an unfair sharing of benefit in the conservation programme. In the Rattanakosin conservation area in Bangkok, the top-down conservation committee offered only a physical improvement master plan with a number of

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Fig. 5 - Restoration work at the Mandarin's House, Macao (10 September 2002).

relocation schemes for existing communities in order to provide open spaces. Adaptive re-use is not mentioned in the plan because the policy is more in the style of an “open museum”. This has resulted in serial rejections by the relevant communities over the last two decades. Community voices in recent work in Rattanakosin¹³ have highlighted the fact that community participation is needed in decision-making and in implementing the work plan. It is unfortunate that the current conservation committee comprises only senior scholars and elites without including a chair for a community representative.

With regard to this, analysis of new uses depends heavily on the understanding of different needs of the two groups, namely tourists and residents.¹⁴ Trade-offs between these two groups must be done with careful consideration.

LEGAL LIMITS

Adaptive re-use is a laborious process and it is not always possible if legislative controls are taken into account. Existing regulations may become barriers and introduce increased costs and delays to adaptive re-use projects.¹⁵ According to land use controls in the conservation area, the use of land and buildings is more limited than in other urban development areas thereby providing little chance for new uses. In most Asian cities, the common feature of mixed residential and commercial/domestic-manufacturing uses in old shop house areas makes them attractive and unique. Unfortunately, many conservation plans try to eradicate

the old mixed uses and introduce new single activities after restoration or revitalisation schemes. This may make the conservation area physically beautiful but in fact it lacks the real spirit and roots of the area.

In terms of individual buildings, modern building codes may create obstacles in the conversion of old buildings. In many cases, existing structures, materials, openings, stairs, access streets, and the fire safety of historic buildings are considered substandard and therefore can fail to meet the standards of building codes.¹⁶ Adaptive re-use may require alteration to these buildings to meet the demand for new space and this has to be done according to modern building regulations. Such activities are costly. For instance, in Bangkok's Chinatown area, the old shop houses are from 2.7 to 3.5 metres wide but the minimum width allowed in the modern building codes is 4.0 metres. The conversion of old shop houses is almost impossible because it apparently involves violating the law.

The requirements of modern regulations in the conversion of old buildings are not only costly but also reduce the degree of (physical) authenticity. Changes in materials, width of staircase, openings, and other elements distort the meaning of historic buildings. Building regulations have meant that the adaptive re-use approach is not applicable to all historic buildings. For buildings or structures of great importance, it is essential to keep as many of the original components and settings as is possible.

IMPACT OF GENTRIFICATION

Whether it is accepted or not, gentrification seems to be inevitable in most adaptive re-use implementation. Gentrification is a common feature when rapid physical transformation takes place in an historic inner area. It arises with a new sector of the population, particularly the middle class, expressing new aspirations that lead to a demand for new services and designs. It is argued that the influx of new group of people does not facilitate cultural sustainability because the original population or community is no longer associated with the area.¹⁷

One of the benefits of gentrification, however, is the rapid improvement of the physical condition of the building, such as the façade and interior space. Nevertheless, in areas where conservation controls or

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development guidelines are poorly applied, such rapid improvements destroy the entire fabric of the neighbourhood, resulting in a loss of authenticity and integrity.

Recent work concerning cultural heritage conservation has drawn greater attention to keeping existing communities within historic sites, although this approach is barely feasible when adaptive re-use is taken into account. When there are changes in economic activity through an adaptive re-use programme, and improvements to the physical environment, existing residents may not be able to afford to remain there. They cannot even afford to change their existing lifestyle or employment. Therefore, adaptive re-use in this regard may be said to be successful only for physical improvement, not for social continuity.

In a small shop house community called Tah Tian in Bangkok's conservation area, a tenant of a storeroom shop house converted the building to a Thai massage school. Here adaptive re-use and restoration work took place without the replacement of the existing resident. This happened because the resident was able to manage the change of environment and knew how to adjust the business. It is rather easy in the case of individual buildings but it would be more complex and time-consuming with multiple shop house units.

CONCLUDING REMARKS AND A NOTE TO MACAO

The three issues in the implementation of adaptive re-use are not easily tackled in current urban heritage conservation programmes. Since adaptive re-use deals with economic activity that is dynamic in nature, new uses must be analysed properly in the realm of both marketing and political concerns. It requires cooperation between the public sector in terms of infrastructure investment and private developers in terms of operating economic activities. Incentives must also be provided to accelerate private investment. Nevertheless, restrictive building regulations have reduced the opportunities for a number of historic buildings to have adaptive re-use applied. Modern regulations imply that the old buildings should adjust to meet contemporary safety and minimum standards requirements. Even in cases where adaptive re-use has been applied to achieve appropriate new use in keeping



Fig. 6 - Rua da Felicidade, Macao (10 September 2002).

with building codes, there is still the question of gentrification.

It appears that there is no compromise in terms of how to apply adaptive re-use in the conservation of urban cultural heritage. Three alternative approaches are given here. First, the top-down approach, where government has the absolute authority to control and guide development in the conservation area. This approach is appropriate when the government has alternative places for relocating existing residents and practical incentives for private investment. The first approach brings rapid physical improvement to the conservation area but it has to accept the probable impact of gentrification.

The second is the bottom-up or grassroots approach. Existing communities and residents are not forced to leave the conservation area since they are seen as an integrative part of the heritage. This approach is applauded by many social workers, NGOs and existing residents but the issue is how to introduce new activities into the building while the same group of people remains. The socio-economic background, education,

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experiences and attitudes of the current inhabitants may not fit in with the new economic activities. Capacity building, training and community education may help in this regard but it is a time-consuming process. The government may not support this approach because it is a long-term process and there is no proof of success at the beginning. However, if it can be done, the government gains not only economic viability in the conservation area, but also the success of human resource development.

The last approach is working in partnerships. Since the top-down approach may create resistance from existing communities, NGOs, and some scholars, and the second approach may not be practicable, working in partnerships may be the third alternative in running adaptive re-use programmes. The concept of partnerships is to work in a mutual and supportive manner among the beneficiary groups. The strengths and weaknesses of all stakeholders must be understood in order to make full use of those strengths, and to reduce the inefficiency of the weaknesses.¹⁸ For any adaptive re-use programme, an understanding of the existing capacity of private investors and current residents is needed, and this should be in line with government policy. Frequent public hearings and dialogues may need to be organised, and negotiation and conflict resolution may have to be used in this adaptive re-use game.

Since its return to Chinese sovereignty in 1999, Macao has experienced a series of changes in

terms of politics, social fabric and economic base. These changes provide an opportunity for adaptive re-use in some cultural assets, particularly those classified as buildings of architectural interest such as the Mandarin's House, or classified as sites like Rua da Felicidade.

New activities reintroduced to Mandarin's House can be either active (e.g., restaurant or boutique hotel) or passive (e.g., museum or gallery). But for Rua da Felicidade, active use is probably more appropriate because it consists of a group of buildings with existing economic activities. The proposal to improve the environment of the area may bring about gentrification since tourism promotion has been spelled out in the programme but if the removal of existing residents is not the policy, community involvement is inevitable. Here a series of local dialogues, community meetings, workshops and local residents' capacity-building programmes have to be conducted before any physical improvements are implemented.

Adaptive re-use in the conservation of Macao's cultural heritage would definitely ensure the continuity of the historic buildings although approaches to apply adaptive re-use may differ from one location to another. The top-down approach may be needed in situations where strict restoration is an objective, whereas partnership approaches may be possible in the case of historic communities. Such integrated approaches would be sure to help Macao, one of the most meaningful cultural sites in Asia, as a whole. **RC**

NOTES

- 1 Information derived from *Asserting an Identity* (exhibition catalogue), Cultural Institute of Macao, p. 10.
- 2 Bernard M. Feilden and Jukka Jokilehto, *Management Guidelines for World Cultural Heritage Sites*, p. 17.
- 3 Henry Sanoff, *Designing with Community Participation*, p. 178.
- 4 David Rock, "Building Conversion and Rehabilitation: Re-using buildings - a new art and science".
- 5 Nathaniel Lichfield, *Economics in Urban Conservation*, p. 29.
- 6 See David Highfield, *Rehabilitation and Re-use of Old Buildings*.
- 7 David Yaomans, "The Economic and Political Rationale for Local Government Investment in Heritage Conservation and Adaptive Re-use: Consideration of Laws and Incentives." Paper presented at The Economics of Heritage: UNESCO Conference/Workshop on the Adaptive Re-use of Historic Properties in Asia and the Pacific, Penang, Melaka, Malaysia 9-17 May 1999.
- 8 Steven Tiesdell et al., *Revitalizing Historic Urban Quarters*, p. 69.
- 9 John Worthington & Peter Eley, "The Management of Change: new working environments from obsolete industrial buildings".
- 10 For instance, Chinatown Bangkok (locally known as Yaowarat in Sampantawong district) has experienced the decline of population at the constant rate of 2.4 % per annum since 1977 while the use of the second floor of most of the shophouses have been shifting from residential into warehouse/ storage. (Survey conducted by the author in 2001).
- 11 Steven Tiesdell et al., *Revitalizing Historic Urban Quarters*, p. 69.
- 12 Rafael Marks, "Conservation and Community: The Contradiction and Ambiguities of Tourism in the Stone Town of Zanzibar" in *Habitat International*, Vol. 20, No. 2, p. 272.
- 13 Economic and Social Commission for Asia and the Pacific (ESCAP) and Bangkok Metropolitan Administration (BMA), *Traffic and Transportation for Sustainable Environment, Mobility and Access Application of a Comprehensive and Integrated Approach to Policy Development in the Rattanakosin Area of Bangkok*, p. 29.
- 14 Wiendu Nuryanti, "Yogyakarta Case Study: The Role of Tourism in Adaptive Re-use and Development of Historic Public Space". Paper presented at The Economics of Heritage: UNESCO

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- Conference/Workshop on the Adaptive Re-use of Historic Properties in Asia and the Pacific, Penang, Melaka, Malaysia 9-17 May 1999.
- 15 John Worthington & Peter Eley, "The Management of Change: new working environments from obsolete industrial buildings", p. 142.
- 16 Hans Detlef Kammeier, "Heritage Protection versus Building and Planning Regulations: How to Reconcile Traditional Building Practices and Modern Regulations." Paper presented at The Economics of Heritage: UNESCO Conference/Workshop on the Adaptive Re-use of Historic Properties in Asia and the Pacific, Penang, Melaka, Malaysia 9-17 May 1999.
- 17 Ross King, "Green Architecture and Urban Design - A Reflection on Bangkok". Session 4 in Nopadon Sahachaisaeree (ed.) *Green Architecture: The Sustainable Built Environment in the New Millennium Conference Proceedings*. CDAST, KMITL, pp. 112-113.
- 18 See details in Rasna Warah, "The Partnership Principle: Key to Implement the Habitat Agenda", *Habitat Debate*, UNCHS 3 (1), 1997, p.3.

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