



# Adaptive reuse of traditional Chinese shophouses in government-led urban renewal projects in Hong Kong



Esther H.K. Yung<sup>a,\*</sup>, Craig Langston<sup>b</sup>, Edwin H.W. Chan<sup>a</sup>

<sup>a</sup> Department of Building and Real Estate, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong Special Administrative Region

<sup>b</sup> Department of Construction and Facilities Management, Institute of Sustainable Development and Architecture, Bond University, Gold Coast, Australia

## ARTICLE INFO

### Article history:

Received 30 July 2013

Received in revised form 24 February 2014

Accepted 27 February 2014

Available online 21 March 2014

### Keywords:

Adaptive reuse

Shophouses

Urban renewal

Sustainability

Hong Kong

## ABSTRACT

Conservationists and government authorities acknowledge that adaptive reuse of historic buildings contributes to urban sustainability. Traditional Chinese shophouses are a major historic building typology found in the old districts of Asian cities. In Hong Kong, the few remaining shophouses are generally deteriorating and are increasingly under threat of demolition for urban renewal. However, adaptive reuse of these buildings has created many social concerns. In light of these concerns, evaluating adaptive reuse potential needs to incorporate a much broader sustainability framework than simply physical building conditions. This study examines the extent to which obsolescence, heritage value and redevelopment pressures have affected the adaptive reuse of shophouse intervention in government-led urban renewal projects. Interestingly, the results based on adaptive reuse potential find no consistent relationships among the adaptive reuse actions of eight cases in urban renewal districts of Hong Kong. Instead, the question of revitalizing shophouses is determined by whether they are within an urban renewal redevelopment plan. This study further explores the broader urban sustainability framework reflected in eight case studies of shophouse revitalization in three renewal districts. It includes a qualitative synthesis of the social, environmental, economic, and political considerations contributing to the adaptive reuse of shophouses in urban renewal.

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## Introduction

Globally, adaptive reuse of historic buildings is increasingly recognized as a sustainable approach to conservation (Cohen, 1999; Rodwell, 2007; UNESCO, 2007). However, there are many challenges to enhancing sustainability, particularly where redevelopment pressures are immense in urban renewal districts in historic cities in south-east Asia. One of the essential problems of urban renewal remains the narrow focus on redevelopment and demolition rather than urban regeneration. The latter is a social and economic process which involves a community, the environmental impact and cultural heritage. Most prevalently, urban renewal projects have seriously impinged on property rights by premature unilateral termination of leasehold interests by redevelopment ventures who profit by such actions (Lai, 2002). This forced eviction of inhabitants is most evident in the adaptive reuse of

shophouses in urban renewal projects. Shophouses were designed as two to four-storey buildings, with a business on the ground floor and shop-owner residences on the floors above. With urban renewal, the owners of the shophouses were often forced to move out of the adaptive reuse projects. There is also empirical evidence that urban renewal projects have destroyed areas of Chinese traditional trades which usually locate on the group floor of the shophouses (Lai et al., 2007).

In addition, adaptive reuse of the shophouses also often leads to the social phenomenon of dissonance and gentrification. For instance, many shophouses have been turned into middle-class offices, restaurants and cultural enterprises (Chang & Teo, 2009; Yeoh & Kong, 1994) with no public access (Chang, 2010). They commonly compromise the authenticity of an area and the continuity of the original ways of living (Gotham, 2007; Urry, 2002). In light of all these issues, the concept of urban sustainability in terms of social, economic, environmental and political dimensions must be more thoroughly considered in building adaptive reuse in urban renewal areas (UN-Habitat, 2004).

In Hong Kong, heritage conservation faces many challenges, particularly in urban renewal districts, due to the enormous

\* Corresponding author. Tel./fax: +852 2766 5829.

E-mail addresses: [bseyung@polyu.edu.hk](mailto:bseyung@polyu.edu.hk), [bseyung@inet.polyu.edu.hk](mailto:bseyung@inet.polyu.edu.hk) (E.H.K. Yung), [clangsto@bond.edu.au](mailto:clangsto@bond.edu.au) (C. Langston), [Edwin.Chan@polyu.edu.hk](mailto:Edwin.Chan@polyu.edu.hk) (E.H.W. Chan).

pressure for land development and housing demands, as well as compensation for development rights (Loh, 2004; Yung, 2007). As a result of these issues, there are only a few individual shophouses remaining in dense urban centres and these are surrounded by new high-rise buildings. This is very different from Chinese districts in places like Singapore and parts of Malaysia where there are continuous rows of shophouses whose architectural styles and settings have been largely preserved (Baroldin & Din, 2012; Davison & Tettoni, 2010; Lee, 1996; Lee, Lim, & Aini, 2008; Tajudeen, 2012). Recently, a number of government-led projects that included the adaptive reuse of shophouses projects in urban renewal districts were completed, however, they have attracted much criticism because of the destruction of the existing neighbourhood and gentrification. Thus, in this study we considered the following research questions: (1) what role does urban renewal play in the adaptive reuse of traditional Chinese shophouses, and (2) what urban sustainability factors should be considered in the adaptive reuse of traditional Chinese shophouses in urban renewal districts. As urban renewal claims to address urban decay problems in dilapidated districts, should the physical condition of the building be the prime factor for revitalization intervention? More specifically, taking into account obsolescence rate, heritage value, socio-economic context, or urban renewal redevelopment plans, our study examines on which basis the government chooses shophouses for adaptive reuse as part of urban renewal.

As the government has limited resources, prioritizing adaptive reuse of dilapidated buildings based on obsolescence rates is one possible way to decide on the need for conservation. However, this study looks beyond the issue of the physical building to consider the conservation of shophouses within urban governance, policy and sustainability frameworks. In this study, the Adaptive Reuse Potential (ARP) model as a technical approach is applied to assess eight existing clusters of shophouses in Hong Kong listed by the Urban Renewal Authority (URA). Qualitative analysis of the cases in relation to their connection with urban sustainability is obtained through a mixed methodology, using archives, newspapers, reports and discussions with conservation and planning critics, academic experts, URA officials and project participants.

The paper begins by providing a literature review on the revitalization process of shophouses in Hong Kong and, in particular, the problems and issues associated with their potential adaptive reuse. This is followed by a brief summary of the ARP model's conceptual framework, then results, discussion of case studies and some recommendations for a broader sustainability framework for prioritizing adaptive reuse in urban renewal are given.

### Adaptive reuse and urban sustainability

It is increasingly recognized that there is a strong connection between adaptive reuse of historic buildings and sustainable urban development (Bromley, Tallon, & Thomas, 2005; Bullen & Love, 2010; Steinberg, 1996; Tse, 2009). Adaptive reuse refers to any intervention made to adjust, reuse, upgrade, or change the capacity of a building to suit new conditions or requirements when the former function has become obsolete (Douglas, 2006). Adaptive reuse projects provide economic and social benefits. They generate tourism and create job opportunities (Tweed & Sutherland, 2007). However, balancing economic viability and cultural significance for heritage buildings is a major challenge (Murtagh, 2006; Wang & Zeng, 2010). In terms of social benefits, adaptive reuse of historic buildings conserves intangible heritage value. The buildings can enhance the streetscape, enrich local character and provide a sense of place (Lowenthal & Binney, 1981). Furthermore, it is argued that the reuse of historic buildings can encourage the continuity of social life in a community as opposed to the forced eviction of

inhabitants, which usually leads to gentrification and reduced social inclusion (Cameron, 2003; UNESCO, 2007; Yung & Chan, 2012; Pendlebury et al., 2004).

Adaptive reuse of a historic building definitely provides environmental benefits in the reuse of materials and structural elements, reduction of demolition waste and new carbon emissions, and saving of used energy (Bromley et al., 2005; Bullen, 2007; DEH, 2004). As Jacobs (1961) argues, the greenest buildings are those already built. From this viewpoint, adaptive reuse is closely related to the concept of green building. Advocates of the concept of green adaptive reuse emphasize incorporating environmental design and technologies into existing buildings and, in particular, considering whole life cycle energy consumption (Getty Conservation Institute, 2011; Langston, 2010). More recently, the deep green sustainability concept, which highlights the benefits of adaptive reuse and emphasizes low-energy technologies adapted to local geographic characteristics, is being advocated (Boschmann & Garbiel, 2013). The deep green ideology is also closely related to traditional vernacular buildings which contain construction methods, designs and layouts and materials specific to a local region. More specifically, the settings should be place-specific and incorporate the political, social and economic situations of an area, which are pertinent to the principles and practices of urban sustainability (Boschmann & Garbiel, 2013; Cidell & Beata, 2009). This broader ideology is particularly relevant to prioritizing the adaptive reuse of historic buildings in urban dense cities.

### Previous attempts to evaluate adaptive reuse potential

The literature shows that there are a number of different technical and systematic approaches to evaluating the potential of adaptive reuse of buildings. However, they do not clearly assess the different sustainability dimensions. The assessment of office buildings for their suitability for transformation into housing (Geraedts & Van der Voordt, 2007) and the weighted scores for the viability of conversion of buildings for reuse with a different function (Hek, Kamstra, & Geraedts, 2004) are examples of evaluation approaches. Zijlstra (2006) provides a study of a building's contextual aspects, including original commission, location and architect, to decide a building's changeability potential. In addition, the Architect's Approach provides an understanding of the architectural value, value in use, historical and cultural value of an existing building, together with possible new uses (Oudijk, Remøy, & Van der Voordt, 2007). Most recently, Wilkinson (2011) developed the Preliminary Assessment of Adaptation Model (PAAM) to assess the potential for office building adaptation. However, all of these models, tools and methods tend to focus on building science aspects.

In contrast, the Adaptive Reuse Potential (ARP) model examines the adaptability of buildings in terms of seven obsolescence aspects that are closely related to sustainability. The ARP concept was developed in the late 2000s and helped to assess and prioritize existing buildings that were obsolete, or becoming so, but which had substantial 'embedded physical life' remaining in them. The ARP model mainly estimates the expected useful life of buildings (Langston, 2011)

Langston (2012) presented the validation of the model, which involved a large number of international case studies. However, it is clear that the model is not always right. With the benefit of hindsight, useful life is shown to be under- or over-estimated in most cases, but the averaged results are encouraging and the score can still provide one very useful objective indicator for reference. The model's benefit principally lies in sifting through a portfolio of building stock to enable the resources involved in detailed planning and assessment to be allocated wisely. In this study, we adopt

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