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Full Length Research Paper

The Sustainable Viability of Adaptive Reuse of Historic Buildings: the experiences of Two World Heritage Old Cities; Bethlehem in Palestine and Visby in Sweden

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Abstract

The paper aims at investigating the viability of adaptive reuse of abandoned buildings (religious, Nobel Architecture, residential, commercial, and other) and the impact it has on the sustainability of existing environment in Bethlehem and Visby. There are many historic buildings in Bethlehem and Visby that are unique in their history, architecture, and built environment. This paper explores the importance of adaptive reuse by looking at several examples of reused historic buildings in both cities. The examples illustrate the viability of adaptive reuse in terms of sustainability; economic impact, affordable function, vitality of social life, and usability of existing urban resources and energy saving. The paper advocates policy makers is to increase the adaptive reuse policy within abandoned old cities as an integral tool of regeneration and sustainability policies. A comparative study of Palestine (Bethlehem) and Sweden (Visby) focuses on the experiences of two cities where conversions have registered a significant impact in terms of new facilities and businesses creation and has had a positive impact on the life both city centers. A survey of building owners, governors and local community leadership in Bethlehem old city and the old city of Visby, interviews, and a review of literature concerning adaptive reuse of historic buildings are used as a tool of conducting qualitative and comparative research. The researcher's perception is that adaptive reuse with social life regeneration, economic development activities, and energy efficiency serve the key concepts of sustainability; in addition to the local community perception of adaptive reuse as a viable option to demolition and redevelopment of existing facilities. The research recommends key implications for local governments in Sweden and Palestine as they eventually provide a theoretical framework that can be incorporated in the decision-making processes for adaptive reuse projects.

Keywords: Adaptive Reuse, Misused, Regeneration, Revitalization, Economic Development and Sustainability.

INTRODUCTION

Conserving and reusing the disused historical buildings can play an important role in the regeneration process and can contribute to meeting the growing need for new buildings. It can also be argued that this type of adaptive re-use is a sustainable option as it promotes urban strengthening and encourages the revitalization efforts. The benefits of increasing the numbers of reused historical buildings in the old neighborhoods or deep-rooted centers are widely recognized, and it is strongly believed that this will help achieve the sustainability goals (Rudlin and Falk, 1999; Urban Task Force, 1999). Understanding and embracing the potential socio-economic and cultural opportunities the historic buildings, the physical and social fabrics which it offers will help to achieve these goals.

A number of building, that are vacant and/or lost their original use, is increasingly being converted into useful and vibrant space and this adaptive re-use of historic buildings is helping to revitalize neighborhoods and old cities and is driving them to become more sustainable social and economic spatial for a vibrant life.

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The change to the reuse and adaptation of buildings is a trend that has been clearly recognized by Bullen (2007), Gallant and Blickle (2005), Kohler and Hassler (2002), Ball (2002, 1999) and Bon and Hutchinson (2000). In different parts of different countries such as the USA, England, Sweden and, to some extent, in Palestine there is a significant awareness regarding the demolishing of historical buildings and switched from constructing new buildings to adapting and rehabilitating vacant or misused existing structures of historical buildings (De Valence, 2004). The importance of this trend is that extending the useful life of existing buildings supports the key concepts of sustainability by lowering material, transport and energy consumption and pollution (Gregory, 2004; Douglas, 2002).

Additionally, the opportunity for a particular city to thrive can also be seen in terms of how many businesses or inhabitants might be attracted to resettle, rather than the fact that different kind of people leaving to live in the old city or nearby vacant historic buildings. Any development will fail if the number of patrons are simply inadequate to make the continuation of life feasible (Jacobs, 1961). Hence, adaptation is gaining recognition as an effective strategy to improve the sustainability of existing buildings and revitalize the city life (Ball, 1999; Brand, 1994; Pickard, 1996; Kohler, 1999; Latham, 2000; Cooper, 2001; Kohler and Hassler, 2002; Douglas, 2002; Gregory, 2004).

Adaptive reuse of historic buildings also generates many tangible and intangible benefits. These benefits are not limited to the developer but also accrue to the community and local government. Developers can save considerable project costs when they initiate reuse projects as they can develop the building without demolition costs and minimize building costs since existing buildings tend to be reused. For public consideration, local governments can protect their environments because adaptive reuse projects generate much less waste in their neighborhoods than new construction projects (Choi, 2010).

Adaptive reuse can create valuable community resources from unproductive property; substantially reduce land acquisition, construction costs, revitalize existing neighborhoods, and help control sprawl (Bullen, 2007). In addition, adaptive reuse of existing abandoned buildings can be used as a tool to revitalize urban areas through job creation, tax revenues and historic preservation.

The increased interest in adaptation is caused by the growing perception that old buildings are often cheaper to convert to new uses than to demolish and build new ones (Gregory, 2004; Pearce, 2004; Douglas, 2002; Ball, 2002; Vanegas et al., 1995). Reusing the existing building stock, particularly as a result of performance upgrading, has been identified as having an important impact on sustainability of the built environment (Bromley et al., 2005; Rohracher, 2001; Kohler, 1999; Kendall, 1999).

Myers and Wyatt (2004) maintain that debates concerning sustainable development raise the importance of the building stock as economic, social and cultural capital that should not be wasted. There are growing calls to limit new construction in favor of improving the existing stock (Graham, 2003) and even to completely stop constructing any additional new buildings in developed countries (Kohler, 1999).

Having mentioned that there is a wide spectrum of benefits that might be gained by adaptive reuse of vacant and obsolescent buildings. However, there are obstacles facing the implementation of reuse strategies where economic constraints force sub quality construction or manufacturing to take place without acknowledging that adaptive reuse aims at continuing improvements. These improvements are part of sustainability at historic buildings and not unexpectedly improving old buildings by adaptation, which is considered an effective strategy for sustainability.

Finally, trends and techniques of adaptive reuse and acclimating urban settings to a human level are defined by the various works of Fitch (1999); Jacobs (1961); and Moore (2001) whose writings tackle the definition of space as a place with a spirit and a kinetic energy linked to its people; while authors such as Byard (1998) lend insight to propriety and aesthetic acceptance of these methods applied to a develop project.

This paper focuses on applying adaptive reuse to two historic locations, Visby and Bethlehem; and tests the benefits of revitalization which might be shown in their potential in a vibrant social and economic climate. In doing so, this paper highlights the various outcomes which are common in reusing a building, including economic and social climates that must be catered to, integrating pleasing aesthetic style into affordable situations, and promoting and revitalizing through an iconic character. This paper displays the potentials to revive and celebrate places in the urban fabric that were once thought lost to neglect or hardship.

What is adaptive reuse? And why it might generate sustainability?

Adaptive reuse is described as developing the potential of additional use and wear for functionally obsolete buildings. It is essentially the recycling of a building. Commonly associated with historic preservation, the process involves more than restoration. Rehabilitation is the act or the process of making possible a compatible use of a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values. Rather than seeking to continue the building's existing use through upgrades or restoring it to a specific time period, adaptive reuse seeks to find new uses for it. Adaptive reuse does not have to involve a significant piece of architecture to be successful. The concept is not

constrained by what the building used to be, but respects the history and structure as a new intervention or reuse is inserted.

There are potential economic and social advantages to adaptive reuse. If the building is in good structural condition and easily adapted to its new program, there are economic advantages. These include the potential for lower construction cost, lower land acquisition cost, and less construction time depending on the extent of the work done. Adaptive reuse has also become a strategy for the conservation of energy, an economic issue in terms of the use of resources.

The social advantages of adaptive reuse include providing a link to the past in addition to revitalizing a neighborhood. Rather than attempting to remove an area's problems by demolishing structures, realizing buildings provides a neighborhood with 'sense of place'. The physical revitalization associated with reuse positively impacts the surrounding neighborhood, often encouraging upgrades in surrounding structures.

Cities need old buildings so badly it is probably impossible for vigorous streets and districts to grow without them. By old buildings, I mean not museum piece old buildings, not old buildings in an excellent and expensive state of rehabilitation…but also a good lot of plain, ordinary, low value old buildings, including some run down old buildings (Jacobs, 19961).

According to Holyoake and Watt (2002), reuse can mean something special, unique, and often expensive and adaptation describes rehabilitation, renovation or restoration works that do not necessarily involve changes of use. Rehabilitation is the recycling of buildings, involving restoration and new construction (Gregory, 2004; Douglas, 2002). The difference is that restoration returns a building to the condition it was when originally constructed, whereas renovation modifies a building so that it meets current standards and codes. Although it extends the useful life of a building, renovation does not involve a change in use (Douglas, 2002). It can therefore be reasonably argued that adaptation is a method of extending the useful life of buildings and hence their sustainability by a combination of improvement and conversion (Lowe, 2004; Kohler and Hassler, 2002; Douglas, 2002; Cooper, 2001).

Hypothesis

Can the identity of a historical building or fabric be reinterpreted to play a contributing role in the revitalization of historic cities when their original use is no longer essential to community daily life?

Can the overlapping principles in adaptive reuse create sustainable development that reduces environmental impact through material and energy conservation?

RESEARCH METHODS

In order to have a systematic understanding of the impact of adaptive reuse of historic buildings in Visby; Gotland and Bethlehem; Palestine, both of which cover a period of recent years of adaptive reuse works, qualitative field research is employed as the main research method, as it is well suited to the study of social process over time (Babbie, 2001). In addition to the review of archival materials and previous research, the field research spanned over four months (October 2014 to January 2015) and was generally conducted in the forms of non-participant observation and open-ended interviews.

Relative to the influences of local governments, private investment, and external capitals, the role played by the local community in the adaptive reuse and historic preservation development process was the researcher's main focus during the stage of observations. The community's responses to given events usually played as the key clues for the observational works, thus, were carried out in a case-by-case pattern. This is because the main purpose of the observations was to understand the pattern of interactions among the stakeholders of revitalization development, rather than to examine the self-evolving process of the local community.

The non-participant observations mainly dealt with the following issues: Who initiated adaptive reuse works within the communities to create changes in the cultural, economic and social development process? What was the proportion of the population involved in those community actions? Who was the main target of those actions? What kind of measures that were taken by the community as a response to given sustainable events? How was the community itself influenced by these actions? What were the eventual outcomes of this community engagement?

In order to obtain a deep and comprehensive understanding of the two cases, open-ended interviews were also conducted with ten purposes fully chosen local people in each case. Those interviewees were believed to belong to different interest groups within the community, embracing local owners of those small cultural heritage tourism businesses (including small inns, restaurants and souvenir shops), and households opening to tourists and not opening to tourists, as well as local experts and professionals working in this field.

The researchers also conducted interviews with government officials to get their views on the same events that had been discussed with the communities. It is believed that such efforts may help the researchers keep their objective positions and protect the field research from the communities' unilateral influences.

Interview Questions

The aim of interviews was to obtain views from local communities, building governors and managers about the key issues surrounding adaptive reuse of existing historical misused buildings in Visby and Bethlehem. In support of this aim, the objective of the interview was to investigate whether adaptation of existing historical buildings is more likely to satisfy the community social life, environmental, economic and institutional tenets of sustainable development than demolition and redevelopment. To pursue this objective it was decided to ask interviewees the following questions:

- Is it economically and more viable to extend the life of existing buildings through conservation followed by adaptive reuse?
- To what extent are heritage buildings in Visby and Bethlehem exemplars of sustainable development principles?
- What examples of buildings Visby and Bethlehem illustrate in terms of opportunities of adaptive reuse?
- What examples of buildings Visby and Bethlehem illustrate in terms of barriers of adaptive reuse?
- How adaptive reuse of historic buildings generates added social and economic values to old cities?
- To what extent are the heritage buildings in Visby and Bethlehem protecting the cultural identity of their local communities?
- What issues should be included in the decision process used to assess the suitability of a building for adaptation?
- Should there be an assessment process in place in Sweden and Palestine that considers sustainable and reusable building construction and management methods?
- How can local governments, non-governmental organizations, academic institutions, and local community assist and become more engaged in the process of adaptive reuse of historic buildings?
- Which Visby's and Bethlehem's old city that you prefer: a cultural heritage tourism city by its living in people (Cultural context within social fabric), or tourism city vacant from its people (Fantasy city).

Case studies of Visby and Bethlehem

Both are historical cities in two different countries, Sweden and Palestine. Visby is located in the Gotland Island of the east part of Sweden and Bethlehem is located to the south of Jerusalem, Palestine. Both are two typical representations of historical buildings which represent the culture of each community. Both settlements have had large population shifts from the old city to the surrounded urban sprawl in terms of new structures. During the last century, both cities were highly appraised by local and international experts due to the preservation of their appearances, their structural plan, architecture, decoration, and the integration of houses with the environmental context. In terms of cultural tourism, and during the history, especially the last two-decades of development, both cities have become cultural tourism destinations. The comparability of their socio-economic and cultural backgrounds and their historic building's adaptive reuse experiences are the main considerations leading to this research. Both cities were recognized on UNESCO's World Heritage List.

Visby, Gotland, Sweden

"... an extremely distinguished example of a Northern European walled Hanseatic town which has in a unique way preserved its townscape and its highly valuable architecture, the form and function of which clearly express the importance of this human settlement."

This was the explanation of UNESCO's World Heritage Committee for inscribing the Hanseatic town of Visby on the prestigious World Heritage List in 1995. Few places give such an intense experience of both medieval metropolis and idyllic turn-of-the-century small town as Visby. Within the well-preserved wall, medieval church ruins and storehouses stand side by side with stone and wooden houses from later eras. Visby is the only locality with historical city status on the island of Gotland. The Hanseatic city of Visby is arguably the best-preserved historical city in Scandinavia. Among the most notable historical remains are the 3.4 km (2.1 mi) long town wall that encircles the town center, and a number of church ruins. Visby is a popular vacation destination for Scandinavians during the summer and receives thousands of tourists every year. It is by far the most populated locality outside the Swedish mainland (Gotland Region: 2013). Figure 1 and 2.

Bethlehem, Palestine

Bethlehem Governorate dates back to the Bronze Age. Historically, the city of Bethlehem was established mainly as an assembly of nomads. Its name, which means the house of bread, was originally derived from the Aramaic and indicates the fertility of the area. As the case with all Palestinian territories, Bethlehem Governorate has witnessed unprecedented changes in terms of the different periods, beginning with the Roman period, Byzantine period, Ayyubid and Mammluk periods, Crusades, Ottoman period, the British Mandate, the Jordanian jurisdiction, and finally the Israeli occupation. The governorate has therefore been significantly influenced by diverse cultural groups, which have in turn uniquely shaped the Palestinian culture, its physical historical monuments and sites, architecture, and traditions. Currently, Bethlehem Governorate has

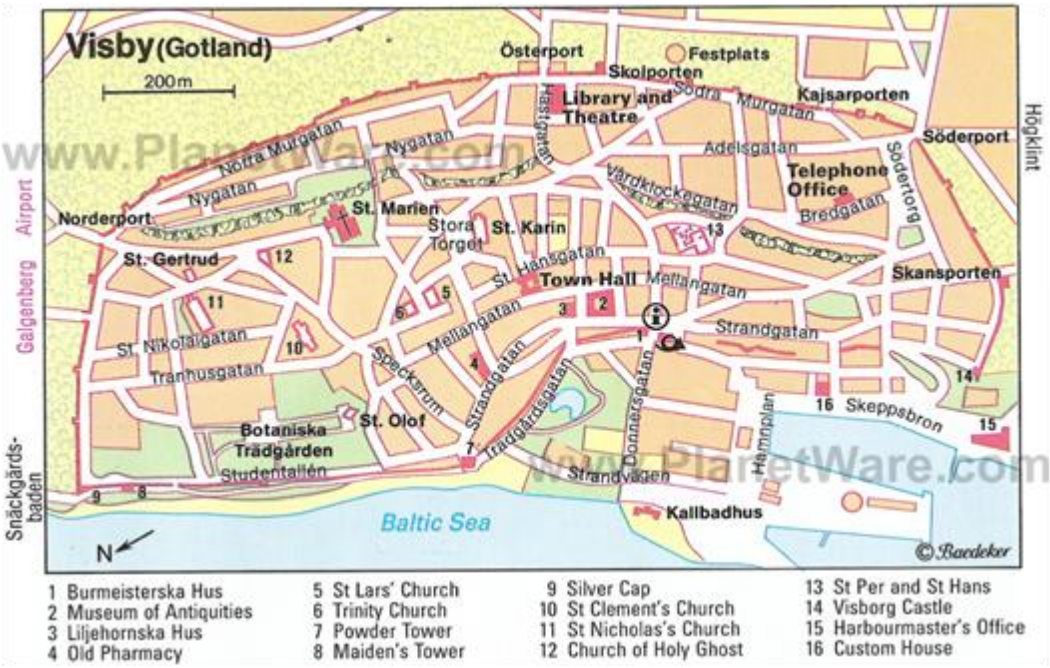

Figure 1. Map of Visby Old City
Source: Gotland Region, 2013.

Figure 2. Visby Old City
Source: Gotland Region, 2013.

three historical towns, Bethlehem, Beit Jala, and Beit Sahour. The three towns lie within the urban center that have upheld outstanding qualities of the historical urban fabric dating back to the Ottoman period and have maintained relative homogeneity in volumes, materials, as well as unique architectural typologies (CCHP: 2013).

These historical towns were privileged with the most skillful builders across Palestine during the end of the nineteenth century and the beginning of the twentieth century. Thus, they contain a number of magnificent large-scale traditional buildings, such as Dar Shahwan, Jacir Palace, Dar Salsa', and many other traditional buildings that are still present to this date. Bethlehem Governorate holds extraordinary spiritual and historical significance due to its unique religious sites (CCHP: 2013). Figure 3 and 4.

Bethlehem is acknowledged worldwide as the birthplace of Jesus Christ. The major attraction to millions of people around the world is the Church of the Nativity. The original basilica church was built by St. Helen, mother of Emperor Constantine (326–339 AD). It was arranged so that its octagonal eastern end

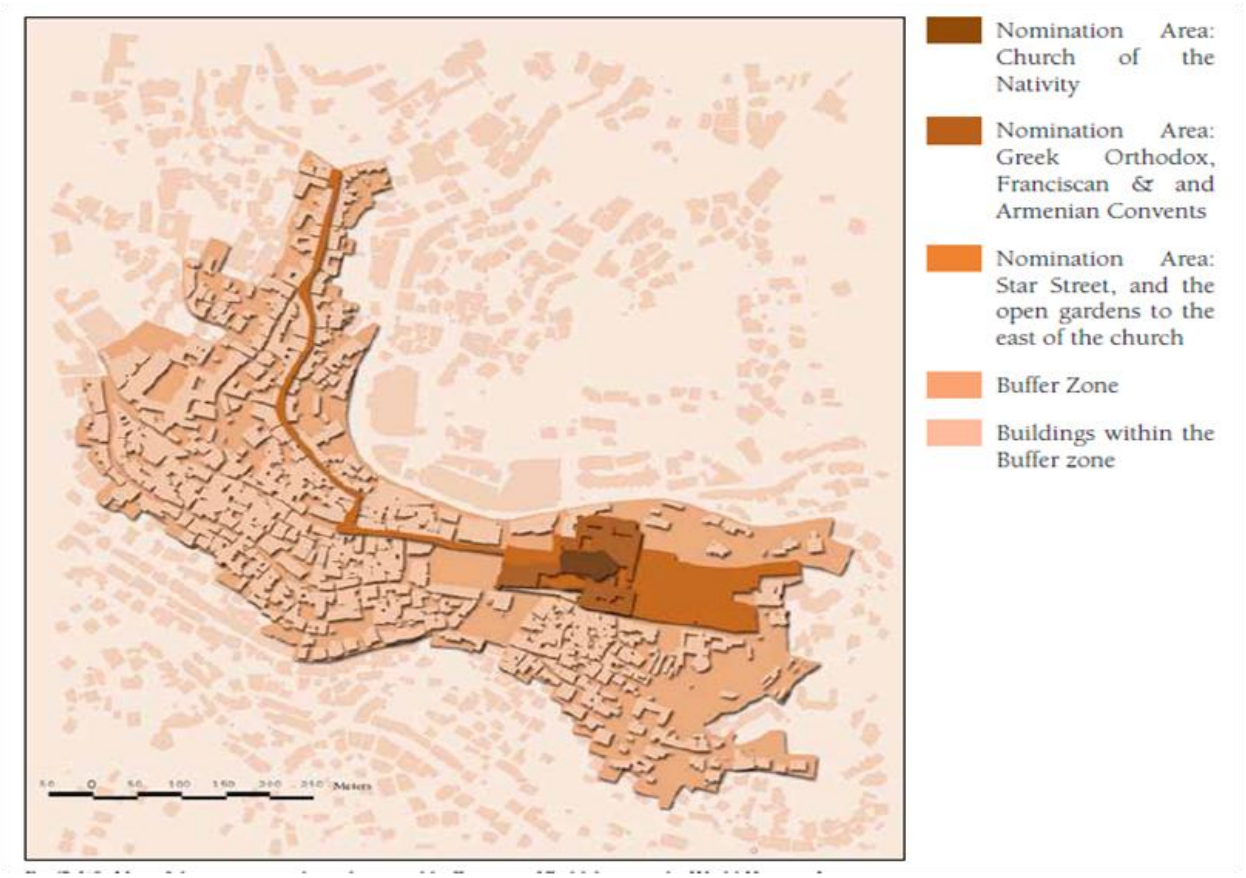

Figure 2. The historic Old City of Bethlehem
Source: Center for Cultural Heritage Preservation, Bethlehem, 2013

Figure 4. Bethlehem Old City
Source: Center for Cultural Heritage Preservation, Bethlehem 2013.

surrounded and provided a view of the cave where Jesus Christ was born. The church was partially destroyed in 529 AD during the Samaritan Revolt and was later overlaid by the present church on a much larger scale by Emperor Justinian (530–533 AD). Although it has undergone numerous alterations, the Church of the Nativity is considered the oldest Christian church in daily use in the world.

The unique cultural assets in Bethlehem old city has been internationally accepted and recognized on UNESCO's World Heritage List as the 'Birthplace of Jesus: Church of the Nativity and the Pilgrimage Route. It is considered one of the World cultural heritage attraction cities for millions of tourists and pilgrims as well.

Contrasting the two old cities

Based on the data and information collected during the field research, the adaptive reuse development activities in both historical cities are contrasted by influences of external capitals, government interventions, funds for cultural heritage maintenance, and the number of historical adapted and reused buildings. Although there are many similarities in the revitalization contexts between the two old cities, the contrast between them reveals astonishing differences in their processes and outcomes of utilizing adaptive reuse for economic developments, particularly from the perspective of their local communities.

ANALYSIS AND MAIN FINDINGS

Question 1: Is it economically more viable to extend the life of existing historic buildings through conservation followed by adaptive reuse?

All the respondents have agreed that it is preferable rather to adapt than demolish the two World Heritage towns, Visby and Bethlehem. From their experience, they believe that adaptation is a more sustainable alternative despite it being sensitive.

In Bethlehem, they feel that the adaptation of historic buildings is cheaper than building from the scratch. On the long term, historic buildings are more sustainable than existing modern building materials (concrete and steel). The life cycle of historic buildings can extend for hundreds of years if they are well conserved and adapted. They argue that adaptation offers an opportunity to reuse traditional materials which are friendly to the environment and applicable to recycling. Additionally, they argue that building technique depends mainly on local materials, local labor and craftsmen; which on the other hand contribute to local economy and help decreasing the level of unemployment. After restoration, historic buildings have functioned as active spaces and places for the benefit of local services and institutions. Statistically, it was shown that this process has (in Bethlehem) raised employment up to four times than before adaptation and reuse. They consider restored historic buildings, mainly adapted for touristic attraction, can contribute to empowering the local economy, attract more visitors and help market local products.

A number of the interviewees argued that the Israeli restrictions on the land, namely due to the subsequent divisions of the Oslo Interim Agreement, have contributed to an inflation in the prices of the land that is located in urban areas such as Bethlehem city. Respondents thought that it is critical to find an effective use of land aiming at increasing density. Accordingly, they feel that it is more economic on the short time to replace the existing buildings and replace them with new ones with more flexibility in space and the number of levels design. On the other hand, they agree that the experience of investing in historic buildings has proven that the adaptive reuse of these buildings can have good revenue on the long run. In the case of Bethlehem, investing in traditional buildings for touristic purposes is more viable than replacing them.

In Visby, interviewees have agreed that adaptive reuse has multi benefits including the economic viability. For example, it reduces costs related to environment resources and saves budget needed for demolishing and transferring the rubbles of old buildings; in addition to the resources designated for cleaning and insuring that the sites are uncontaminated from polluted materials. One of the interviewees felt that the costs to demolish and clean the site overshadowed the costs to improve the building:

I have studied the economic viability in terms of the demolishing procedures and requirements, not only in Sweden, but also in the USA and Italy, where demolishing old buildings and adapting the field from Brown field to a green one is not an easy task. There are different costly measurements and policies attributed with demolishing and rebuilding.

Other interviews from Visby have indicated that here are no accurate answers whether there is an adaptive reuse viable to extend the life of existing heritage building or not. They highlighted the importance of awareness on how heritage buildings might be supported to promote economic outcomes from preservation and adaptive reuse.

An interviewee, who owns a historical brewery which had been adapted to be one of the famous hotels in the old Visby, said:

I think my old Brewery was closed due to the new beer industry and I decided to readapt it to be a hotel. Visby has memories from medieval period and I feel that I am part of this traditional heritage atmosphere. I realized that visitors come here to see the style of the old city and according to that, I made my decision to adapt the vacant brewery into hotel. I managed to keep the brewery as a vibrant heritage place as well as preserve the 17th century brewery.

Generally, all the interviewees have agreed that best practices of adaptive reuse usually lead to economic, social, and environmental sustainability and they give a new momentum to extending the life of heritage buildings. It would appear from the interviewees that adaptive reuse of existing buildings provides an opportunity to making them more productive and

adaptive.Reuse of historic buildings is also seen as an effective economic viable tool.

Question 2: To what extent are heritage buildings in Visby and Bethlehem exemplars of sustainable development principles?

Interviewees generally felt that because heritage buildings become cultural icons, their preservation impacts on community well-being, sense of place, cultural identity and therefore social sustainability. In Bethlehem, for example; one of the interviewees who represent a non-governmental organization, which is active in the field of historic preservation, indicated that:

Rehabilitation of historic buildings creates community hubs in abandoned centers. RIWAQ (NGO) works on the approach of bringing life back to historic centers. These historic centers are mostly treated as dumps before rehabilitation. Bringing life back includes means of providing suitable and livable spaces, such as houses with modern facilities, infrastructure, green areas, playgrounds and public space. This creates an opportunity for locals, owners and local institutions to benefit from these programs. Additionally, rehabilitation process creates short terms job opportunities for locals during restoration. Labor regains lost traditional building and restoration skills.

Interviewees in Bethlehem, and due to the importance of social, economic, and environmental factors, feel that it is preferable to revitalize heritage buildings rather than replacing; them regardless of the bad need for land and sometimes the lack of efficiency. Heritage drives local communities with a powerful reason to look after their local environment and lead more sustainable lifestyles.

In recent years, many institutions in Bethlehem have worked together on the adaptive reuse of traditional buildings to contribute to the sustainable development of tourism in town. Even though, the governmental and non-governmental initiatives have encouraged some private owners to rehabilitate and readapt their vacant historic buildings in the historic center of the town.

It is worth mentioning that Bethlehem municipality has ratified bylaws (the bylaws were prepared by CCHP) that provide the protection for the historic center and the individual traditional buildings in the town; and accordingly it is not allowed to demolish any traditional building in the town.

In Visby, the majority of interviewees felt that there was no doubt that those heritage buildings are exemplars of economic benefits, but the most important in their opinions is that heritage buildings give its inhabitants the feeling of history of the past civilizations. Demolishing heritage buildings and building new ones is very costly in terms of financial cost, energy efficiency, and environmental protection. They felt that adapting and reusing vacant heritage buildings not only extend the life of these buildings, but also it generates revenues for their owners and revitalizing the historic neighborhood as whole.

In terms of buildings that provide exemplars of sustainable development, the interviewees felt they are good examples and they felt that heritage buildings were seen to represent both the state's history and the sense of place. Hence, adaptation is a process that supports the idea of preservation and conservation of the buildings and it as a process which leads to sustainability. One of the interviewees said:

Saint Nicholas church ruin (Sankt Nicolai kyrkoruin) is located in Visby and it was first built in 1220 – 1225 as a parish church for the Germans in the north parish of medieval Visby. But the church was abandoned after a fire that destroyed it. However, the church has been renovated and readapted and the ruin is now open to visitors during summer and can also be hired for weddings, cultural activities, and private events. The adaptation was conducted without decreasing or hindering the cultural value of the place and the cost of adaptation is not too much compared to leaving it as an obsolete or disused place. Thus, protecting heritage buildings by adaptation is a process which leads to sustainability.

The interviewees have indicated that keeping historic buildings in good conditions is matching the sustainability benchmarks and giving the opportunity for local community to regain a sense of their place. Other interviewees specify the importance of the mixed use city and feel there is no sustainability without integrating the old city to be alive city by its community, economic activities, cultural activities, as well as friendly to the environment. They argue that visitors come to the old city in order to experience social and cultural life. They are looking to experience a city which is vibrant by its people not only alive city in terms of economic returns and revenues. Other interviewees feel that there are pushing factors that might hinder the image of the live old city of Visby. They show that there are some challenges facing the future of the old city. One of the Interviewees said:

We have two big problems: First: there is a phenomenon resulted from some rich people from outside Gotland who are purchasing mediaeval houses in the old city to be used as summer vacation private residency (4 weeks) These houses usually stay vacant and dark during the rest of the year which could lead after a while to a dead old city. Second, the small workshops and some businesses are looking to moving outside the old city as a result of the shortage of parking space. Despite that, we still have many heritage buildings as exemplars for the sustainable development by preserving them through adaptive reuse approach.

From both old cities Bethlehem and Visby, the majority of interviewees are certain that adapted heritage buildings could be exemplars of sustainable development, provided that they retained the dignity and

the character of the original building while at the same time providing modern facilities and character.

Question 3: What examples of buildings in Visby and Bethlehem illustrate the opportunities of adaptive reuse?

In Bethlehem, there are many non-governmental and governmental organizations that have been involved in the rehabilitation of buildings for the use of institutions, local youth clubs, women centers and children care. The challenge of defining spaces for contemporary use is highlighted differently in various examples. There are many good examples of restored historic buildings functioning today as centers for local institutions. Almost all historic buildings can be adapted to be reused for different purposes based on factors that include: the area of the building, the location, accessibility, surroundings, and morphology.

Examples mentioned above include a vast variety of projects implemented on different scales and typologies of buildings. They also include severely damaged buildings that required consolidation of the structure and rebuilding some of its parts.Jasser Palace, Morah Palace, Mansour house, Shomali house, Holy Family hospital, Dabdoub house, Hermas Palace, Jakaman Palace, Dar Abu Saide and many other site. These are good examples of adaptive reuse of many buildings which are adapted for business purposes, hotel industry, or to be used for civic centers to serve women, youth, and children.

In Visby, interviewees identified a wide range of opportunities to adaptive reuse. There is an evidence of community understanding of sustainability, in its economic, social, and environmental context. People who are working in cultural heritage, academic representatives, as well as the community leaders are feeling that it is more difficult to provide a value of the social and environmental factors of sustainability. Generally, interviewees identified a need for awareness to demonstrate and raise the possibilities that adaptive reuse presents.

In Visby, Campus Gotland, Björkanderska, restaurants, and PayEX offices, Strand Hotel, Donnerskahus 1, StoraTorga ruins, and Munkkällaren house (it was adapted to host a modern night club) are good example of adaptive reuse.

Question 4: What examples of buildings Visby and Bethlehem that illustrate obstacles of adaptive reuse?

There are a number of barriers to adaptive reuse that concerns the process and the time related to adaptive reuse. Some interviewees felt that it was easier for everyone in the development process to produce a new building rather than to implement adaptive reuse of historic buildings. Other interviewees felt that many buildings would be suitable for some form of adaptation for certain specific function and others would not.

Adapting vacant industrial heritage buildings into public buildings or restaurants is well-known as a successful preservation approach. But on contrast, we need to adapt historic industrial buildings for housing. Adaptation for mixed-use purposes might strengthen the image of the old city as a mixed-used city not only by activities, but also by its social fabric.

Adaptation would be cost-effective in most cases but the availability and price of materials to match the existing one might be a problem. Some local people see that adaptive reuse may also obstruct the opportunity to increase urban density.

In Visby, interviewees feel that there are some buildings that must be kept as they are without adaptation. These buildings have a narrative meaning such as Burmeister building which used to be a mixed-use building for a German merchant's family during the medieval period.

We have many examples where we must preserve them without any adaptation. These buildings represent the brand mediaeval image of Visby.

Other interviewees are worried about the misunderstanding of the adaptive reuse by the owners.

We are facing problems with the owners who intend to change the medieval facades by their own desire to open big windows in order to have more light. Changing the interior and exterior layout is considered a serious challenge of adaptive reuse in Visby.

One interviewee has a different understanding of adaptive reuse. He felt that adaptive reuse is a creative architectural intervention and historic buildings might be preserved by specific additions or interventions without harming the original features.

There are different creative ways which enables adaptive reuse to add more values to the cultural heritage vacant buildings. Not using the building means costing money, but reusing it with a good intervention and interpretation will preserve the building itself and makes it more viable and live. Every heritage building is unique in its story and architectural characteristics. And once one decided to adapt heritage buildings, he or she will face barriers regarding the building reuse for new use. Good adaptation and overcoming the barriers are resulted from good understanding and careful studying of the heritage building.

There are additional barriers facing adaptive reuse in the old city which include the lack of parking spaces for restaurants and office buildings in the old city.

In Bethlehem, interviewees felt that the suitability of the historic structural complexes and spaces' order is a major challenge to meet contemporary use and designing restoration plans. Lack of interior services such as kitchens and bathrooms in the original schemes, the lack of interior circulation between rooms are

considered obstacles facing adaptive reuse of vacant historic buildings. Additionally, different levels between courtyards and rooms or street levels make sewage and drainage treatments difficult.

Interviewees in Palestine felt that adaptive reuse of all historic buildings entails challenges and unforeseen complications during the rehabilitation works, but still almost all buildings can be adapted for certain purposes. In some cases, buildings were either connected together, or spaces were added to ensure a successful adaptation; hence here added parts are always reversible.

Question 5: How adaptive reuse of historic buildings generates added or Less social and economic values to old city?

Interviewees in Bethlehem and Visby feel that adaptive reuse gives added value and it gives also the opportunity for people to live, work and to make shopping at the same place. The majority fee that heritage buildings with a good adaptation would add more values to the city image and they generates surplus values to the old city. However, in Visby, interviewees indicated that living life in the old city is represented not only by adapting historic buildings for economic activities and purposes, but also adapting historic buildings for housing and places for work:

In Visby, there were about 2000 people who have been moved from the old city to live outside the city at the time both the Municipality and the County administration had moved outside the city. Sustainability not only means that adaptive reuse must generate economic benefits, but also to keep the city lives by its inhabitants. If the public authority decided to bring back its offices to the old city, then this symbolic step will give a social appreciation to the cultural heritage.

Generally, the interviewees in Visby rarely found less value for adaptive reuse, and usually they touch an added value in different areas of sustainability.

Upon the inscription of Bethlehem (Birthplace of Jesus: Church of the Nativity and the Pilgrimage Route) on the World Heritage List, the various stakeholders realized that traditional buildings represent an important component of the town, its heritage and its legacy. NGO's and local community leaders in Bethlehem have worked on raising the awareness of the local community on the role of cultural heritage as a tool for sustainable development.

Accordingly, historic buildings represent an asset to both the social and economic value of the city. In a survey conducted in 2013 (500 respondents), the majority of participants confirmed that the historic town is a very important component of its identity and hence they called for its protection.

Interviewees in Bethlehem indicated that adaptation is a comprehensive process, which includes physical and nonphysical methods. The aim of the process is protecting cultural heritage by locals through investment and proper use. The physical interventions and improvement of built heritage provide suitable indoor and outdoor spaces for contemporary use. Non-physical interventions provide a link between users and restored spaces, and help envisioning potential use of spaces. Bringing locals, who are used to modern spaces, and privacy, back into historic fabrics with more shared spaces, and visual connection creates a new form of social values to the space, and redefines collectiveness and sharing within communities and neighbors. Families used to living in isolated apartments in high-rise buildings are not only brought back to the concept of connectivity with surrounding green areas and spaces, but also to regaining relations with neighbors, and sharing spaces and services. Restored spaces are environmentally efficient regarding thermal comfort, water management, and ventilation and recycling. This contributes to the better use of resources.

Question 6: To what extent are heritage buildings in Visby and Bethlehem protecting the cultural identity of their local communities?

Interviewees highlighted that heritage buildings as units within historic fabrics present the traditional life style in both old cities. This life style includes traditional building techniques, building material, income resources and they argue that historic centers were built in relation with their surrounding natural landscape. Overseeing heritage buildings in historic and contemporary contexts (after experiencing adaptive reuse) highlights the city's cultural identity and collectively reflects rich social values. The adaptation and rehabilitation process supports the use of historic buildings to pavea future, building on the past by linking younger generation with their ancestors' living spaces, and interprets restored spaces by a contemporary meaning.

Interviewees in Visby claimed that without restoring the feelings of heritage identity, visitors will not come to have the experience of Visby heritage. Hence, sustainable tourism of Visby's heritage must be thrived by the cultural identity of the place and its local community. They added that cultural heritage identity is an outcome of social values as well as architecture characteristics; whereas, people are the main pillar in shaping and forming the cumulative identity. Thus, individual owners are considered a very important actor in protecting cultural heritage identity.

…Visby became a World Heritage because of the identity of the old city. Old city of Visby is a great part of Gotland and Sweden Cultural Identity….Cultural Heritage buildings with their mediaeval brand keep and protect the cultural Identity of the city.

Bethlehem's interviewees show that the heritage buildings in Bethlehem are considered an integral part of

the cultural heritage of the city. As mentioned earlier, the survey has reflected that the historic center is considered a main component that reflects the identity of the city. In addition, the local community accepted Bethlehem bylaws when they were presented for objection; the municipality received only three minor objections regarding the interventions. A key interviewee indicated that:

…another issue is worth mentioning here, in the past Center for Cultural Heritage Preservation in Bethlehem(CCHP) found it difficulties to convince the local community to grant their buildings for a 10-year lease in return of the rehabilitation work. Today CCHP offers a 15-year lease and we have tens of buildings on the list. This reflects the willingness to preserve the buildings as a part of the cultural identity of the city.

Question 7: What issues should be included in the decision process used to assess the suitability of a building for adaptation and reuse?

Interviewees acknowledged several aspects that should be considered during the decision process phase. They feel that cultural significance should be assessed in cooperation with stakeholders and the adaptation plan should determine whether projected outcomes would meet sustainability benchmarks or not. The assessment process should consider the main elements of sustainability: economic sustainability, environmental sustainability, and social sustainability. Interviewees also provided general issues on decision making concepts used to assess adaptive reuse plans in conjunction with sustainable development strategies.

Interviewees in Visby highlighted a variety of issues which should be included in the decision process. These issues include the following: building's life cycle assessment, economic viability, environmental measurements, social viability, value for local community, technical ability of building to adapt, structural stability, stakeholders and public opinions, legal regulations, traffic and parking spaces, traffic safety; especially in summer time, the situation of the building within the old urban fabric, security and risk management, and the city image.

Interviewees in Bethlehem claimed that almost all buildings can be adapted for reuse for different purposes based on many factors that mainly include and not limited to: building orientation, location, surroundings accessibility, morphology. building size and rooms' layout, structural system, outdoor spaces, accessibility for handicapped, new functional reuse, thermal comfort and energy efficacy, technical ability to provide basic services (kitchens and bathrooms), ventilation system, light openings, affording a new water supply and sewage system.

Question 8: Should there be an assessment process in place in Visby and Bethlehem that considers sustainability methods when reusing buildings?

Interviewees in Visby and Bethlehem argued that there is no sustainable reuse for historic buildings without sound and practical assessment process during the implementation phase. Interviewees feel that a concept plan and assessment should be produced for every building under consideration. It should be prepared by an architect and based on a brief prepared in conjunction with the potential user. The assessment should also incorporate social, environmental and economic impacts of the adaptation. An interviewee in Visby said:

The building ordains is a good one and the building permits procedures are also working well. However, there is no on-site assessment and follow-up concerning the implementation of the approved plans. The suitable building materials, paintings, techniques and others interventions must be decided and followed up on site. Heritage impact assessment is a good international follow-up tool for World Heritage Sites; however, municipalities must have a closer on-site engagement concerning the choices of colors, painting, materials, and techniques during the professional site works.

Interviewees also insisted on having a sustainable management audit for historic buildings in waiting for adaptive reuse. The sustainable management audit could be incorporated within the implementation action plan. Interviewees agreed that prior to any intervention; historic buildings should be assessed up on technical criteria for their sustainability to undertake adaptation as part of a sustainable reuse feasibility study.

On site works during the implementation of the restoration and adaptation plan is very critical; hence, evaluation and monitoring process should be followed by the municipality permits officer and by the professional team of the World Heritage Committee in Visby. On site monitoring and assessment process is needed and is very important in order to match the preservation plan with the issued permit of adaptive reuse.

Other interviewees seeing that the problem is not related to the regulations that the municipality follows and adopted in adapting reuse, but it is related to the unskilled craftsperson and the lack of awareness of good practices in historic restoration or renovation. Assessment procedures on site to be carried on by heritage officer are much needed. Additionally and in parallel to the heritage officer's engagement of the on-site assessment process, awareness and training programs for non-skilled workers and crafts people have to be raised and conducted.

One interviewee claims that architects who draw and prepare the conservation and adaptation plan are the first responsible people on matching the renovation plan with the field work and practices. Municipality must

prevent any of the non-skilled craft persons or non-trained workers to get involve in adaptation work. On the other side, the municipality has to afford training programs for skilled and non-skilled workers who are interested in working in the field of historic preservation and adaptation process.

In Bethlehem, CCHP has already completed an assessment process for all historic buildings and based on the evaluation Bethlehem municipality and CCHP were able to prepare:

- Bylaws for the Conservation of Historic Centre and Traditional Individual Buildings in Bethlehem (ratified by Higher Planning Council in October 2014),
- Manual for the Rehabilitation of the Historic Centre of Bethlehem,
- Guidelines for the Management of the World Heritage Site in Bethlehem,

Additionally, Bethlehem Municipality has also established a Management Unit for the World Heritage Site (WHS) and a committee to oversee the implementation of the bylaws.

The WHS Unit is managed by a steering committee that includes Bethlehem Municipality, the Ministry of Tourism and Antiquities, the Presidential Committee for the Restoration of the Church of the Nativity and Centre for Cultural Heritage Preservation.

Question 9: How can local governments, non-governmental organizations, academic institutions, and local community assist and become engaged in the process of adaptive reuse of historic buildings?

Interviewees in Visby state that there should be cooperation among different stakeholders in terms of adaptive reuse decision making. Universities can offer advice on good practices in the field of historic conservation. Additionally, universities can offer an academic venue aiming at sharing the municipality with the mainstream of world discourse in terms of adaptive reuse practices as well as paradigms. Having said that the vision is keeping the old city to be more vibrant as living space, cooperation among different stakeholders is very important.

The interviewees felt that each institutional body has its own interest and the municipality is working with different agencies and stakeholders concerning adaptive reuse decision making. However, the municipality is the responsible body which knows and decides which stakeholder must be engaged and which is not.

Another interviewee highlighted the importance of Visby non-governmental organization called Visby Centrum. Visby Centrum represents businesses in the old city and their responsibility is to be the intermediary institution between the local government and the businesses and it represents needs and thoughts of the local community and puts it on the politicians' desk:

Visby centrum is a non-governmental institution that represents businesses in the old city. We have 177 members and our vision is to protect and to drive the old city of Visby to be more vibrant and active. We are an intermediary institution which has three units, of which one is the research and development unit. R and D Unit's members represent academia, the county, local community, businesses, and municipality.

In Bethlehem, interviewees felt that non-governmental, private sector, and universities have a substantial role in the field of historic preservation and adaptive reuse. Since 2007, the four organizations working in the field (RIWAQ, HRC, OCJRP and CCHP) started working together to exchange experiences in adaptive reuse. Institutions in Bethlehem have worked together on various initiatives to work on adaptive reuse of buildings. So far none of these initiatives are considered comprehensive neither sustainable. Therefore, it would be more appropriate to start a consortium in which all parties work together to ensure their engagement in the process.

Question 10: Which old city that you prefer: a cultural heritage tourism city by its living in people (Cultural context within social fabric), or a tourism city vacant from its people (Fantasy city-Museum)?

Interviewees in Visby agreed on a living city that is sustainable and Visby is facing a risk to be vacant from its inhabitants and the threads of changing the social image of Visby. However, the risk is limited to a short period during the year; summer tourist's city for about two months; where the indigenous people left the city in order to rent it for tourists aiming at gaining money as economic revenues. Interviewees in Visby feel that mixed activities of the city make it a living city all the year and not limited to a few months in the year. Hence, balancing among housing, employments and space for work, shopping, and cultural activities would keep the city more vibrant.

Other interviewees saw that Visby is not going to be a sustainable city if it shifted from a city for its inhabitants to be a summer houses' city. Tourists are not coming to see buildings, but they are more interested in the cultural image of Gotland. The image of the old city is shaped not only by the heritage buildings, but also by the narrative and ethnography of the local people is a core component of the image.

Mixed-use activities of the old city spaces and spatial is the central factor for keeping the city vibrant and sustainable. Today, the old city of Visby faces challenges of being a summer city and a non-winter city, transportation and parking problems concerns, little interests from the politicians towards the old Visby, whether it is a city of overlapping and continuous historical periods or it's only a mediaeval era, and how does tourism innovation and architecture creative intervention might be introduced to the old city.

In Bethlehem, interviewees saw that efforts exerted by the stakeholders in the city are usually approaches within the theme of bringing life back to the historic city, which celebrates the local cultural assets and traditional life style, by its community. The efforts aim at protecting the cultural heritage image and identity of Bethlehem. The interviewees addressed that working on bringing sustainable life for the old city also strengthens the relation between locals and young generations and their cultural heritage.

CONCLUSION

The adaptive reuse of historic buildings in the two old cities of this study, Visby and Bethlehem, presents a wide range of opportunities and challenges. The research reveals that when beginning an adaptive reuse project it is important to start with a clear frame of reference and a coherent strategy for determining the heritage value and significance of the building and the ways to work with it. A Conservation Management Plan, including a Statement of Significance, developed in accordance with the World Heritage Council process, will enable considered and meaningful decisions for new uses and approaches, when assessing what to keep, and what to change, and for the long-term management of the site. Responding to challenges in creative ways can result in opportunities that might not otherwise be identified or realized. Working collaboratively with stakeholders is a significant factor in effectively realizing the opportunities presented by vacant historic buildings.

The research finds that the concept of adaptive reuse has significant support as a positive strategy to make the built environment more sustainable. Adaptive reuse enhances the longer-term usefulness of a building and is therefore a more sustainable option than demolition and rebuilding. The positive benefits for adaptive reuse identified during the research also support the tests of sustainability and include:

Social Values and Community Expectations

Heritage buildings play important roles in the lives of communities. They provide tangible links to the past and may provide livelihood of a substantial section of the community. Different communities and individuals value heritage buildings as a source of pride and bearers of important memories. Heritage can make a strong contribution to social sustainability. As a result of this study, historic buildings is important in the life of communities, providing a link to the past and contributing to the development of new identities as communities change. It is recommended that it is important to have a community consultation and engagement to the ongoing effective adaptive reuse of historic buildings, particularly at an old city scale.

Environmental Sustainability

Retaining existing built fabric provides a number of environmental benefits. These include reduced demolition waste, reduced resource consumption compared to a demolish-and-rebuild scenario, and the retention of the original building's embodied energy. Embodied energy is the energy and materials already used in making a building. It is defined and agreed by different scholars as the energy consumed by all the processes associated with the production of a building, from the acquisition of natural resources to product delivery, including mining, manufacturing of materials and equipment, transport and administrative functions. Reusing buildings retains their embodied energy, and the materials generally kept in a building adapted for reuse are also often the most energy intensive materials. This paper shows that adaptive reuse of historic buildings has significant environmental benefits, in terms of reduced waste and the retention of embodied energy of the materials reused.

Economic Viability

Adaptive reuse of historic buildings has economic benefits and costs at a range of scales, which impact on both the owner and the community. Disused historic buildings can have a negative socioeconomic impact on surrounding areas. In contrast, it has shown, adaptive reuse of historic buildings can have a significant positive impact on the economic situation of the old city and it identifies a number of ways that historic buildings can contribute to sustainable economic development and prosperity. These include the following: providing landmarks, brand image, extending the useful life of a buildings, retaining the identity and cultural image of the old city, creating proportionately more jobs than new construction and providing better local expenditure retention; providing important tourism draw cards in old cities and regional areas, and attracting people and investment by enhancing the amenity or "liveability" of World Heritage old cities. However, non-governmental organizations in Visby and Bethlehem, local authorities, and politicians have an important role in establishing economic development and planning settings that will encourage good conservation and adaptive reuse. And finally, leaving historic buildings to decay can have a negative impact on the broader community.

There are also barriers to adaptive reuse, which invariably concern cost. The range of barriers to adopting adaptive reuse for an existing historic building identified during the research includes: inability to match the performance of a new building, ongoing maintenance costs may be higher than a new building, lack of experiences craftspeople, and maintaining the structure integrity of older buildings

may be difficult.

The research has revealed different opinions concerning the extent of the benefits and barriers to carry out adaptive reuse. Despite this, it receives substantial support as a process that has potentials to satisfy the principles of sustainability. However, any consideration of adaptive reuse should certainly incorporate an assessment of the merits of reusing a building on an individual basis. The projected outcomes of the projects should be matched to sustainability benchmarks as part of a feasibility study. Additionally, universities have to be more active and supportive to cultural heritage conservation efforts in terms of utilizing education to raise awareness regarding the possibilities that adaptive reuse presents. It also indicates a need to politicians' support to the extent to which allocating suitable public fund for adaptive reuse. The research has highlighted broad question concerning the future image of the old city of Visby and whether it is going to be a museum or being a live city. This might be investigated in future phases of research to answer the overarching question of where adaptive reuse fits within development planning of a live sustainable old cities.

REFERENCES

Babbie E (2001). "The practice of social research", 9th ed., Thomson Learning Inc., Wadsworth.

Balaras CA, Dascalaki E, Kontoyiannidis S (2004). "Decision support software for sustainable building refurbishment", ASHRAE Transactions, Vol. 110, pp. 592-601, Part 1.

Ball R (1999). "Developers, regeneration and sustainability issues in the reuse of vacant buildings", Building Research & Information, Vol. 27 No. 3, pp. 140-8.

Ball R (2002). "Re-use potential and vacant industrial; premises: revisiting the regeneration issue in stoke-on-trent", Journal of Property Research, Vol. 19 No. 2, pp. 93-110.

Bon R, Hutchinson K (2000). "Sustainable construction: some economic challenges", Building Research and Information, Vol. 28 Nos 5/6, pp. 310-4.

Brand S (1994). "How Buildings Learn: What Happens After They're Built", Viking Penguin, New York, NY.

Bromley RDF, Tallon AR, Thomas CJ (2005). "City center regeneration through residential development: contributing to sustainability", Urban Studies, Vol. 42 No. 13, pp. 2407-29.

Bullen PA (2007). "Adaptive reuse and sustainability of commercial buildings", Facilities: Vol. 25, p20-31.

Byard PS (1998). "The Architecture of Additions: Design and Regulation", W.W. Norton& Co., New York, New York.

Cooper I (2001). "Post-occupancy evaluation-where are you?", Building Research & Information, Vol. 29 No. 2, pp. 158-63.

Coupland A (1997). "An introduction to mixed-use development", in Coupland, A. (Ed.), Reclaiming the City; Mixed Use Development, Spon, London.

Curwell S, Cooper I (1998). "The implications of urban sustainability", Building Research & Information, Vol 26 No. 1, pp. 17-28.

Davidson S (2004). "A bold blueprint", ECOS, Vol. 2004, January-March, pp. 13-14.

Dolnick F, Davidson M (Eds) (1999). "A Glossary of Zoning, Development and Planning Terms", Planning and Advisory Service Reports Nos. 491/492, American Planning Association, Chicago, IL.

English Heritage (1999). "The Heritage Dividend, Measuring the Results of English Heritage Regeneration", English Heritage, London.

English Heritage (2000). "Power of Place: The Future of the Historic Environment", English Heritage, London.

Final Report of the Urban Task Force in Australia (1999). "Towards an urban renaissance", Final Report of the Urban Task Force. E. and F.N. Spon, London.

Fitch JM (1999). "American Building: The Environmental Force That Shape It", Revised and Updated; Ch. 2, "The Social Consequences of Architectural Intervention" , pp 24-37, Oxford University Press, NY/Oxford.

Gallant BT, Blickle FW (2005). "Managing redevelopment of brownfields with major structures", Environmental Practice, Vol. 7 No. 2, pp. 97-107.

Gallop G (2004). "Sustainability- Lets take the next step", Newsletter of the Government of Western Australia, Department of the Premier and Cabinet.

Graham P (2003). "Building Ecology", Blackwell Science, Oxford.

Gregory J (2004). "Rehabilitation-new ways for older housing", New South Wales Department of Housing, available at: www.housing.nsw.gov.au/rehab.htm.

Hassler U, Kohler, N, Schwaiger B (2000). "Industrial culture and preservation of resources: the industrial building stock", Proceedings International Conference Sustainable Building, Maastricht, The Netherlands.

Holyoake K, Watt D (2002). "The sustainable re-use of historic urban industrial buildings: interim results and discussion", COBRA 2002, available at: www.rics-foundation.org/index.html

Jacobs J (1961). "The Death and Life of Great American Cities", Random House, Inc., New York, New York.

Kendall S (1999). "Open building: an approach to sustainable architecture", Journal of Urban Technology, Vol. 6 No. 3, pp. 1-16.

Kohler N (1999), "The relevance of green building challenge: an observer's perspective", Building Research & Information, Vol. 27 Nos 4/5, pp. 309-20.

Kohler N, Hassler U (2002). "The building stock as a research object", Building Research & Information, Vol. 30 No. 4, pp. 226-36.

Latham D (2000). "Creative Re-Use of Buildings", Donhead Publishing Ltd, Shaftesbury.

Lowe RJ (2004). "Lessons from climate change: a response to the commentaries", Building Research & Information, Vol. 32 No. 1, pp. 75-8.

Lutzkendorf T, Lorenz D (2005). "Sustainable property investment: valuing sustainable buildings through property performance assessment", Building Research and Information, Vol. 33 No. 3, pp. 212-34.

Moore C, Keim K ed. (1962). "You Have to Pay for the Public Life: The Selected Essays of Charles Moore, "Towards Making Places," (orig. pub. In Landscapes, Autumn 1962, pp 31-42) and, "You Have to Pay for the Public Life," (orig. pub. In Prospecta, 1965, no.9-10, pp 57-97); Massachusetts Institute of Technology; Boston, MA, 2001.

Myers D, Wyatt P (2004). "Rethinking urban capacity: identifying and appraising vacant buildings", Building Research and Information, Vol. 32 No. 4, pp. 285-92.

Pearce AR (2004). "Rehabilitation as a strategy to increase the sustainability of the built environment", available at: http://maven.gtri.gatech.edu/sfi/resources/pdf

Rohracher H (2001). "Managing the technological transition to sustainable construction of buildings: a socio-technical perspective", Technology Analysis & Strategic Management, Vol. 13 No. 1, pp. 137-50.

Rovers R (2004). "Existing buildings, a hidden resource, ready for mining", available at: www.sustainbalebuilding.info

Rudlin D, Falk N (1999). "Building the 21st Century Home: the Sustainable Urban Neighborhood", Architectural Press, Oxford.

Vanegas JA, DuBose JR, Pearce AR (1995). "Sustainable technologies for the building construction industry", paper presented at Symposium on Design for the Global Environment, Atlanta, GA. November 2-3.

Walljes I, Ball R (1997). “Exploring the realities of the sustainable city through the use and reuse of vacant industrial buildings”, European Environment, Vol. 7, pp. 94-202.
Ying T, Zhou Y (2007). “Community, governments and external capitals in China's rural cultural tourism: A comparative study of two adjacent villages”. Tourism Management ESEVIER, Vol. 28, No.1, pp 96–107

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