Using the Lost Space – as an Urban Regeneration Strategy: A Case Study of Sylhet, Bangladesh

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Abstract
The rapid urbanization with uncontrolled urban growth and obsolete management process may generate a meaningless, misused or neglected space in urban area. In this paper these space is termed as lost space. It may be found anywhere unattached from a vibrant space and often in a commercial area that generally fails to catch people's attraction though these spaces could be transformed to a potential public space with economic, social and ecological values. Urban lost space, due to unplanned development is a common scenario in the most of the cities of Bangladesh where Sylhet is one of them. But an attentive urban regeneration could be a process to open up new opportunities by using lost space for achieving future goals including the social and economic development of Sylhet. The aim of this paper is to address lost space in the heart of Sylhet city through a case study and analyze the responsiveness of the case as well. It will also provide some strategic guideline in order to regenerate the lost space. City super market at Bandar bazaar area has been taken in this paper as a case to demonstrate the evolution of a lost space and how it could be converted into a vibrant urban area through responsive intervention.

Keywords: urbanization, regeneration, environment, lost space.

INTRODUCTION

Sylhet has grown rapidly in the recent years and improved steadily its ranks in the urban hierarchy. The foreign currency earned by the Sylhet Nationals residing abroad also makes a significant contribution to the city as well as the country's economy. The developments that occur are mostly unplanned and inconsistent. For instance, the municipality of Sylhet completed a project of a new a shopping complex in Bandar Bazaar area by filling up part of the historic Lal Dighi (pond). This city super market not only destroyed a natural source of water but also failed to attract city people due to lack of proper integration and responsive environment, resulting in lost space in the city heart, generating crime and degrading surrounding environment. Lost spaces in urban areas need redevelopment to improve the local living environment (Trancik, 1943). It is not enough to think only about individual built form to design a successful project but it should incorporate social, economic and other urban aspect for ultimate rejuvenation. Regeneration of urban areas aims at revitalizing both physical built environment and socio-economic structure of society by providing for environmental and social rehabilitation. Generally, comprehensive and integrated visions and actions are used in the resolution of urban problems of Cities. An urban regeneration strategy aims at sustainability of environment and making best use of the available resources (Roberts & Sykes, 2000).

Literature review
Definition of Urban Lost Space
Urban spaces are generally classified by square, street, frontage, coast and seashore

and so on where urban lost space is urban space without any use or has evolved as leftover space. Defining lost space requires knowing how these spaces have evolved or originated. The space may be vacant or a built areas or structure that has been abandoned or unused for public activity in urban area (Nefs, 2005). At first Trancik named lost space to describe the space that is needed to re-design, anti- space, making no positive contribution to the surrounding or users. The space are- the base of high-rise tower or unused sunken plaza, parking lots, the edge of freeway, that nobody cares about maintaining, abandoned waterfront, train yards, vacant military sits, and industrial complex, deteriorated park and marginal public housing. (Loukaito-Sider, 1996) is described this kind of space as crack space in city because they correspond to "in–between spaces, residual, underutilized and often deteriorating where abundant and deterioration have filled vacant space with trash and human waste (Loukaitou-Sideris,1996; p.91). But according to Franck and Steven this sort of space allow the spontaneous events and practices so people can relax, observe, buy or sell, protest and celebrate without permission.

Table 1: An overview of under managed space (Girolamo, 2013)

Year	Author	Definition
1974	Sommer	Tight space, hard space
1986	Trancik	Lost space
1996	Loukaitou-sideris	Crack in the city
2000	Pagno & Bowman	Vacant land
2001	Hajer & Reijndrop	In between space
2002	Nielson	Superfluous landscape
2003	La Varra	Post-it city
2005	Clement	Indeterminate space
2007	Franck & Steven	Loose space

Values of Lost Space in the Urban Design
Many cities have their specific policies regarding urban regeneration by the urban design and city planning and utilizing unused or lost space. For instance, European cities have adopted "compact city" strategy for their urban development during last decades. According to (Nystrom 1997, p1) "the only effective urban development policy in years to come is renewal within existing urban fabric, and possibly also contraction. Such policies entail raised densities, more intensive land use, including redevelopment of brown land and other kind of underused land" for urban regeneration. Most of the architects and planner says unused space provide different use and activities and have inspired many artist and planners. (Christiaanse 2002, p1) calls abundant industrial and railway sites, offer the unique condition of accessibility, being situated in central areas, but without the restrictions of the over regulated and gentrified center itself. Vacant lots as opportunities for land use transformations that can contribute to community development. Vacant land in cities could provide important social and ecological benefits, including habitat for biodiversity, provisioning of ecosystem services, and new green space for residents in underserved neighborhoods of the city[1]. The potential benefits that small investments to transform vacant land or lost space into more useful spaces could provide to cities:

- Storm water absorption
- Air temperature regulation
- Wind speed mitigation
- Air purification (pollution absorption)
- Carbon absorption
- Flood control

- Habitat for biodiversity (e.g. plants and pollinators)

[1]http://www.thenatureofcities.com/2012/08/21/vacant-land-in-cities-could-provide-important-social-and-ecological-benefits

- Green corridors between urban natural areas
- Recreation space
- Community garden space
- Social gathering space
- Temporary art installation space
- Crime reduction
- Noise reduction
- Neighborhood beautification
- Increased adjacent property value
- Sense of place

Ironically planning strategy always focus on residential (1st place) and work (2nd place) but recreation or public realm (3rd place) is often neglected, that cause deterioration of a city. Cities in this region are growing fast and to keep them in right tract, rethinking of a planning strategy, community involvement and social interaction befitting the transformation is needed. Lost areas have the potentiality to become third place if properly integrated with the urban fabric.

Urban Regeneration in Urban Design
The aim of regeneration is to develop the decline or wasted urban environment in inner city that experienced various shortcomings. These under developed space could be brownfield, industrial area, abandon building, urban floors etc. The regeneration process encompasses social, economic, and physical development of the area. Roberts & Sykes describe the regeneration as: "Comprehensive and integrated vision and action which seeks to resolve urban problem and bring about a lasting improvement in the economic, physical, social and environmental condition of an area that has been subject to change or often opportunities for improvement" (Roberts & Sykes, 2000).

By Hausner who particularly pointed out the weakness of short time regeneration policy without considering the overall comprehensive city development (Hausner, 1993). The above definition indicates that regeneration is package of development but the reality is that regeneration often operates in fragmented means and not all problems are solved.

Comparative regeneration approach between Europe and America
Historically the regeneration process was comparatively different between Europe and America. In USA the city development process named as urban renewal instead of regeneration after World War II. Urban renewal was first introduced by USA in 1940s in order to reconstruct the city after war. The process was based on large infrastructure project and development of interstate highway system which often displaced or separates the community. Slum clearance and offer the land to private company for new developer for new development to achieve the social and economic viability. Apparently, the approach seems more focused on physical development of the city rather preserving social interaction and bonding among city people after the War. At that time urban renewal was described as "those policies, measures, and activities that would do away with the major forms of physical blight in cities and bring about changes in urban structure and institutions contributing to a favorable environment for a healthy civic, economic, and social life for all urban dwellers." (Woodbury1953).

On the other hand the aim of regeneration in Europe was more sophisticated regarding strengthens the social values of city people. For instance in the UK, the government focused on the project to regenerate and reconstruct the social housing in the older place in order to assure the homogenous socio-economic

condition and enhance the living standard after World War II. (Couch, 1990). Although the government faced several challenges of post was slum clearance and the growth of sub urban housing in the city skirt. Urban policy started in UK by 1950s but the regeneration was introduced in 1990 when the city redevelopment project started to co-ordinate social, economic, physical and environmental aspect altogether. This change linked up the past problem and present challenges to successful regeneration in UK (Ho, 2012).

Responsive Regeneration Strategy and Principles
The development of public realm not only signifies the urban spaces but also add value to social and economic sector. In any regeneration initiative, socio-economic and environmental need and demand of local people is an imperative. The Values of urban design that needs to be explored are: Character; Continuity and Enclosure; Public realm; Ease of Movement; Legibility; Adaptability; and Diversity. (Swapan & Mowla, 2012).

The regeneration should-
- Set clear operational objective which should wherever possible, be quantified.
- Be based on detail analysis of the condition of an urban area.
- Adapt physical fabric, social structures, economical base, and environmental condition of an urban area.

- Make the best possible use of existing natural, economical, human and other resources including land and existing feature.
- Support sustainability, biodiversity and adaptability.
- Acknowledge the importance of making provision for the long-term management of an area which has been regenerated.
- Align the regeneration strategy to other strategy of local area. (Roberts & Sykes, 2000).

Case Study Analysis: City Super Market at Bandar Bazaar, Sylhet
The city super market is situated at Bandar Bazar, the central business district of Sylhet, beside the river Surma aimed to serve as public shopping area generally for middle income group. In 1982, City Corporation managed to build this structure by filling up Lal Dighi, one of the largest water bodies in Sylhet town. Being CBD, the area holds a great public interest. Some important public administration buildings are located within a short distance from city super market. Due to lack of proper planning and management the area has failed to catch people's attraction that result economic loss and waste of potential urban space. Now the authority is dismantling all the building of the market area for new a purpose. The information regarding case study was collected through field work, interview, personal experience and print media.

Fig.1: *Location of city super market*

Fig.2: *Existing vehicle and pedestrian route*

Existing Scenario of Study Area: Strength and Weakness

Table 2: SW analysis of City Super Market, Bandar

Urban Design Objectives	Strength	Weakness
1. Character	Economic: Private and public sector benefit. Retail market for middle income group	Imposing settlement failed to create distinct identity and image. Exclude the general people benefit. Total failure to create any sense of community, lack of public engagement.
2. Public Realm	Surrounding administrative zone and business area has created a sense of security and public accessibility respectively (see Fig 6).	Unconscious about existing public space engagement. Shortage of natural surveillance. Degraded local culture and values. Failed to welcome all people including disable.
3. Ease of Movement	Linked with major urban street of the city. Major public building and spaces is situated within short distance	Unidentified entrance and exit facilities. Creates traffic congestion late evening. Inadequate public circulation, (see Fig 3, 4)
4. Continuity and enclosure		Difficult to distinguish public and private space. Lack of place making.
5. Legibility	Located at Bandar bazaar, the main commercial and economical hub of the town.	Compact design amidst busy urban fabric. Open spaces and routes are not well recognizable
6. Diversity & Density		Mainly for commercial uses. Limited access for Recreational and social purpose.

Fig.3: Inadequate circulation

Fig.4: Narrow circulation between shops

Recommendations

Accessibility and Connectivity*:* Connect important public space and Widening and increasing the access point of City Super Market to enhance public accessibility visually and physically (seeFig5, 6). Regeneration of city super market could establish an urban corridor for commercial and public recreational purpose by connecting city center (Zinda Bazaar), Hasan Market and River Front of Surma river (see Fig 7).

Legibility: A place that has a clear image and is easy to understand. Proposed urban pedestrian as main entrance of city super market with landscaping, and the market plaza collectively attract people's attraction easily and help people find their way around**.**

Adaptability: Attributes that contribute towards developing adaptability *are*: Value culture; respect current trend; engage community. Consider local trend and spatial pattern for redesign of city super market. The central court ensures natural ventilation of retail shop area and sometime act as bicycle parking lots.

Robustness: The robustness is the quality of space which can be used in different purpose. The public edge of market place should house activities which benefit from interaction with public realm. The robustness of s building depends on access depth and height of building. Consider the height and depth of building so that it can use in different purpose according to needs (See Fig 8).

Comfort (Daylight, wind & temperature): Daylight and the overcast shadow of the existing structures have been approached to find out shadow pattern and thermal analysis to assess suitable pavement pattern. Creating areas of shade or sun traps and channeling or filtering the wind thorough appropriate position of building, plants and different shading devices.

Pedestrian connection: Encourage pedestrian friendly environment and discourage vehicular traffic. Visual and physical connections are made with repetitions of space connected routes. A bold pedestrian has developed public accessibility from major routes of the city.

Maintenance: Maintenance is an expression of property ownership. Broken Windows theory proponents (Atlas, 2008) support a zero tolerance approach to property maintenance, observing that the presence of a broken window will entice vandals to break more windows in the vicinity. In short, local community involvement can ensure the best maintenance level with the least effort.

Safety and security: Natural Surveillance can be ensured by urban design (Angel, 1968). Street design emphasized on pedestrian rather than on vehicular traffic, landscape design also provide surveillance, especially in proximity to designated points of entry and opportunistic points of entry.
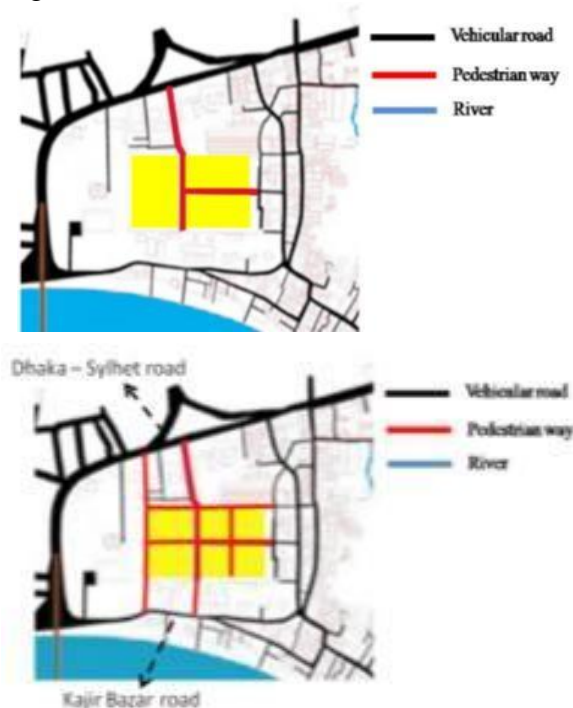

Fig.5: Existing and proposed access route of study area

Fig.6*: Widening pedestrian access from the node*

Fig.7*: Creating new public and commercial corridor through regeneration of study area*
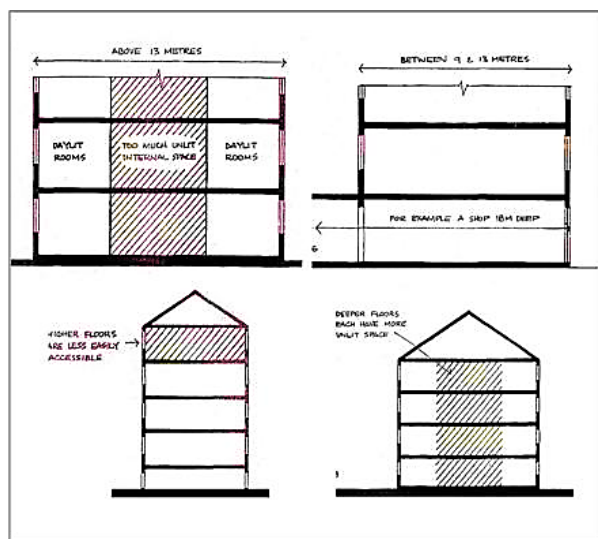

Fig.8*: Propose building typology to ensure robustness and environmental issues*

CONCLUSION

The initial planning and architectural design of city super market was lack of some basic principle of urban design as a public space. As city growth, the space becomes more unexploited in the city heart. The paper initiate with the attempt to sort out the accurate problem and use regeneration as urban design intervention process to revive the lost space. Here it follows some fundamental principle to solve the problem to support regeneration strategy. To ensure accessibility, adoptability, robustness, legibility of the space and environmental sustainability could lead the area to a successful public space. Obviously the market place should integrate with surrounding urban fabrics not as an individual piece of land that would welcome city people and connect with them. This exercise shows that lost spaces can be used to regenerate whole urban LIFE and LIVING.

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