Urban Regeneration and its role in today's society

By Amanda Legros
Urban and Regional Planning
Ryerson University, 2013

This paper describes the particular responses of various jurisdictions to the need for urban regeneration growing out of an appreciation for local distinction. While there appears to be some overlap in how each place responded to the need to incorporate "greening" strategies in their overall urban enhancement, a careful reading reveals how each achieved this through projects tied directly to local initiative. This balancing of shared performance outcomes, i.e. increased greening as an economic development strategy, with discreet respect and attention to peculiar local circumstances is a fine demonstration of the paradoxical quality of authentic urban regeneration. Increasingly we are discovering that the best solutions for urban challenges emerge from these types of distributed local projects, rather than those that are centrally produced out of one formula. While the projects described herein have significant replication potential, the ultimate strategy for any place, particularly one anxious to borrow successful models from others, is a fundamental tempering through respect for their distinct local circumstances. The application of this distributed approach within a number of different and separate geographic locations is described as "Mass Localism".

1. Introduction

Major cities affected by urban decay resulting from overcrowding, over utilisation of the land and poor environmental conditions are starting to rely on the process of urban regeneration to restore both environmental health and urban prosperity. Urban regeneration is a process focusing on all elements of an area that help contribute to the creation of a more sustainable city and environment. According to Chris Couch and Charles Fraser, "Regeneration is concerned with the re-growth of economic activity where it has been lost; the restoration of social function where there has been dysfunction or social inclusion where there has been exclusion; and the restoration of environmental quality or ecological balance where it has been lost"(Couch, Fraser & Percy, 2003, p. 2). Therefore, urban regeneration deals with the planning of existing urban areas instead of the development of new ones.

Every place is different. They all have their own problems that are constantly changing and they all have their own opportunities that can act as the base for their renovation. However, despite the fact that every place is different the same framework is used to help re-develop the area in question.

There are always three common elements that must be reviewed: the economic, the social and the environmental profiles. The economic profile observes the local economy, the unemployment rate, and any economic links that the city might have. The social profile reviews the socio-economic status, human resources, social deprivation and ethnic exclusion. The environmental profile looks at the amount of pollution, the waste management system, and the quality of the infrastructure of the area. (Tsenkova, 2002)

Once these aspects are reviewed, the suggestions for re-development can be divided into four different groups; the economic, the social, the physical and the environmental conditions of the area. The economic section deals with ideas for new economic opportunities; the social deals with suggestions based on the improvement of healthcare and education services; the physical section deals with on the rebuilding and improvement of the city centre with housing and transportation; and the environmental section deals with the suggestion of 'green' policies and environmental action a city can undertake. This process must be taken to ensure that the area being reviewed becomes competitive economically, that it is liveable, and socially inclusive; ultimately becoming a sustainable and environmentally friendly area. (Tsenkova, 2002)

2. Why we Need Urban Regeneration

Within the last few decades we have been mainly concerned with the creation of homes, as "the population [from 1961 to 2001] grew from 18.2 million to 30.0 million" (Minister of Industry, 2004, p.17). As we've developed these homes we've focused on building them as fast as we could, and recently, as big as the plot of land will allow. Our disregard for the environment and the land has finally caught up to us. Many neighbourhoods that have been built within the last few decades are robbing people of their ability to live fully. This is due to the fact that the newer neighbourhoods are poorly designed and allow people to live in big homes with no space for vegetation, as well as being overly dependent on their vehicles instead of alternative types of transit such as walking, cycling or public transit.

According to a Statistics Canada Health Report in 2006, "Three times as many young teenagers are overweight now as there were 25 years ago" (Rochon, 2011). People who live on the outskirts of big cities are said to live a shorter life and possibly be overweight or get diabetes due to their lack of mobility. In fact, "In the last 10 years, the number of New Yorkers diagnosed with diabetes has increased by 250 percent. Meanwhile in ...Manhattan, the rate of diabetes is six times lower." (Rochon, 2011)

This increase in diabetes and obesity is observable in the more recent design of suburban and ex-urban New York neighbourhoods in the last few decades which feature poor connectivity and limited opportunities for walkability forcing citizens to rely on automobiles more than ever. Manhattan however was designed before the car reached its level of current dominance and accordingly more people walk both because of forced circumstance (limited parking space, urban congestion etc.) but also because of the general ambience and quality of life in an urbanized setting.

It is for this reason that urban regeneration is needed to redevelop cities and ultimately improve the well being of the area. Throughout this report one will notice that many of the urban regeneration projects happening in North America involve the creation of green space and vegetation. This is because after years of neglect we have finally realized how important these spaces are to the environment and our survival.

3. Applications of Urban Regeneration

The process of urban regeneration is occurring all over the world. It can be as simple as creating a small urban garden in one's backyard or as complex as restructuring an abandoned area or city. This report will focus on the urban regeneration projects currently being worked on in Chicago, Detroit, Manhattan and Cleveland, although there are many other projects happening all over the world.

3.1. Manhattan's Restructuring of Railways

Manhattan has recently completed an urban regeneration project that involved the restructuring of an abandoned railroad into parkland, now called High Line Park. The successful outcome of this project has inspired other cities across the United States to plan out similar restructuring projects for their abandoned railways and highways.

High Line railway was built in the 1930s to transport manufactured goods to factories and warehouses. However, it was abandoned in the 1980s. In 1999, the residents of the High Line neighbourhood formed a non-profit group to preserve the tracks and use it as a public open space. They got the City's support for the project in 2002, and in 2006 they started the construction. The first section, from Gansevoort Street to West 20th Street, of the park was opened to the public in 2009, and the section half, West 20th Street to West 30th Street, is set to open in 2011. (High Line History, n.d) Once the construction is complete, High Line will be a mile-and-a-half-long route of elevated parkland that runs through the lower West side of Manhattan.

Over the years, we have been so fixated on creating residential, commercial and industrial sites that we lost focus of the creation or preservation of green spaces in the city. People want to live close to open/green space, which is why when a park or green space is created we tend to move to the surrounding areas. And "Cities [are starting to] recognize [that] parks are ... no longer a nice thing to have, but a must," (Shevory, 2011) as they contribute to the sustainability and the well being of the city.

It has been about five years since Manhattan started the construction of High Line, and, in nearby proximity, they have already "...generated an estimated $2 billion in new developments... [In addition], 29 new projects have been built or are underway in the neighbourhood, according to the New York City

Department of City Planning. More than 2,500 new residential units, 1,000 hotel rooms and over 500,000 square feet of office and art gallery space have gone up" (Shevory, 2011). Therefore, not only are parks and open green spaces good for the environment and the sustainability of the city, they also contribute to the economic status of the city.

The restructuring of the High Line railway has been very successful and in turn has inspired other cities in the country to do the same; including: Chicago, Philadelphia and St. Louis. Many cities are starting to realize that they "...badly need more parks, and High Line has taught them that renovating an old railway can be the spark that helps improve a neighbourhood and attract development" (Shevory, 2011).

In St. Louis, they are planning on restoring their waterfront, and as a part of that project they want to transform their elevated rail trestle, which is 2.1 miles long, into a park. In Seattle, they have a highway running alongside their waterfront that is at risk of collapsing, if a natural disaster were to occur. Therefore, they are planning on replacing it with parks and a new transit system. Atlanta was also inspired by Manhattan's High Line project and decided that they wanted to redevelop their rail corridor that runs 22 miles long around the city by increasing the amount of green space, public transit and trails around the city, within the next few decades. (Shevory, 2011)

Since we as a human race, have not stopped building in the past few decades it is hard to find the space for parks. However, the High Line Park project demonstrated that any area can be renovated into parkland, including spaces one would normally not think of, such as abandoned railways.

3.2 Chicago's Urban Regeneration Plan

Chicago is a city that is always trying to improve, and always seems to be ahead of the curve. Chicago is well known by planners, architects, designers etc., for all the urban regeneration projects it has undertaken. Millennium Park is one of the well known urban regeneration projects of Chicago. Millennium Park was once an industrial wasteland; however after the restoration of the land, it is now a 24.5 acre urban park that features work from planners, architects, designers and artists. (About the Park, n.d) Chicago's newest urban regeneration project involves the preparation of the city for the climate change that is predicted to occur this century.

Climatologists have said that Chicago could, by the end of the century, have “as many as 72 days over 90 degrees.... [and by] 2070, Chicago could expect 35 percent more precipitation in winter and spring, but 20 percent less in summer and fall” (Chivers, 2011). It is because of these predictions that Chicago has decided to change the layout of their roads, plant more vegetation on roofs, ban certain types of trees that cannot survive in the predicted climate, and alter the type of pavement used in some areas.

Chicago is planning on locating the city’s hot spots using thermal radars, and in these mapped out areas they are going to add vegetation to the rooftops of the buildings and they are also going to remove the pavement in the located hot spots. The removal of the pavement will limit the amount of additional heat absorbed in the area; the addition of vegetation will also reduce the amount of heat as vegetation reduces the amount of greenhouse gases.

Like every other city, Chicago is covered with concrete roads and alleyways, which provide little form of local infiltration. A hard rain therefore often is swept in with untreated sewage in the city’s combined sanitary and storm sewer systems. These in turn often overwhelm treatment facilities and so are dumped in their raw form into the environment. Therefore, Chicago is planning on changing the way the sidewalks and roads are designed in the hopes of re-using the rain for local groundwater recharging.

Chicago wants to widen the sidewalks, so they can add planters that will be lower than the surface of the sidewalk. The planters will be “...filled with drought resistant plants... [to] sponge up the excess water and help filter the pollutants...”(Chivers, 2011). The water that is not absorbed will be gathered in storage tanks below the street, which can be used at a later date instead of it being wasted and letting it seep into the sewage. When it comes to the roads, Chicago plans on making the pavement permeable in the bike lanes and parking spots, to allow rain water to seep through to the ground beneath the pavement, instead of it collecting on the impermeable pavement and eventually draining into the sewage system. In fact they have already started to use permeable pavements in alleyways. The main idea behind the restructuring of the sidewalks and roads is the re-use of the excess amount of rain water that they are expected to receive over the years, instead of wasting the precious resource.

3.3 Cleveland's Urban Regeneration Project - Urban agriculture

Traditionally we have depended on the agriculture from local farms to provide us with our daily nourishment, however, over the years; we have destroyed most of these farms and replaced them with subdivisions, apartments and commercial buildings. "In fact, of all Canada, only 7% is used for agriculture, and 80% of that agricultural land is in the Prairie Provinces – Alberta, Saskatchewan and Manitoba"(Minister of Industry, 1999, p.11). There is a constant battle in Canada between what land should be used for agriculture and what land should be used for development. Prime land for both is located in the same area - the southern part of Canada. Within the last few decades the 'need'for developments have outweighed that of agriculture, which we now realize was not the best plan as agriculture is needed for our survival.

With our constant decline of farms in the country and surrounding the cities, citizens have found the need to create urban gardens. Urban gardens also referred to as urban farms or urban agriculture can be defined as the cultivation of plants, vegetation and herbs, and the raising of livestock in an urban setting. Urban gardens are found to be helpful in the sustainability of an area as well as for the protection of the environment. Urban agriculture can be as small as people having their own gardens in their backyard to as big as cities such as Detroit and Cleveland with urban farms that are measured in acres. No matter how big one's plot of urban agriculture is, it will have an impact.

Cleveland, like any other city in the United States, is suffering from the current economic decline and as a result has many vacant and abandoned lots. People are starting to notice that, within these abandoned lots, vegetation is growing from the various seeds and plants that people have planted throughout the years. Due to the fact that the acres of vacant lots are growing their own vegetation, Cleveland is starting to resemble an ecological experiment instead of an abandoned town. In fact, "...a team of local scientists has designated this accidental landscape as an Urban Long-Term Research Area.... [and are] studying bird and insect populations, watershed systems, soil nematodes and urban farms," (Tortorello, 2011) to figure out how this occurred and to document the potential ecological benefits of these sites. What is happening in Cleveland demonstrates that human's constant urbanization and say in what happens in the world is destroying the true potential of what the land could possibly become.

Detroit used to be known as Motor City and had one of the largest populations in the United States. However, this is no longer the case. The population in Detroit has decreased significantly over the last decade or so, since many of the factories have relocated. Detroit is now seen as a dangerous place as well as a ghost town since most of its population has moved elsewhere. Many people would see Detroit being an abandoned and a basically forgotten area as a negative quality, but not to some people. "Artists, architects, farmers, economists and scientists are increasingly settling down [in Detroit], often for the purpose of testing out creative new projects on land nobody seems to care about" (Farquharson, 2011). One of the main projects being worked on in Detroit, which will end up having a huge positive impact on their economy and environment, is Hantz Farms. Hantz Farms is a project that aims to create the world's largest urban farm, in the city's vacant and abandoned areas, in the hopes of returning Detroit to farmland. (Hantz Farms, n.d) If this project is successful the Farm will provide: hundreds of jobs to local residents, fresh produce, and a cleaner environment, ultimately reversing the physical, economic, social and environmental decay of the city and making it a model of sustainability.

Along with Cleveland and Detroit, Manhattan also has been working on an urban agriculture project, which is located in Columbia University's courtyard. What separates this urban garden from the rest is that they created a river that flows through the garden. The idea of a rain garden came from Colin Schumacher once he realized that the courtyard use to be a swamp. He calculated that "...about 30 000 gallons of rain water pass through this garden annually, most of it absorbed by plant roots. The rest flows into drains in the courtyard..." (Raver, 2011, D6). Because there was so much rain water passing through they created "...a 300 gallon rain barrel that collects water off the roof...and designed a catchment system for the downspout that pours into the garden" (Raver, 2011, D1).The fact that the only source of water comes from the rain, resulted in the garden being called a rain garden. To cut down on the amount of rainwater drained into storm sewers, they slowed down the flow of water (which created the river in the garden), cleaned the rain and re-used as much of it as they could. The idea of re-using the rain water is a very sustainable and an environmentally and economically friendly idea because we as humans, for the most part, no longer understand the value of the resources that the Earth provides and we take them for granted. However these resources are becoming more limited as the environment is changing. Therefore, we are coming up with ways, like this project, to re-use the resources provided.

An advantage of urban agriculture is that there are so many different places in which one can create a garden, and one doesn't have to be a farmer to do it. One can create an urban garden in a backyard, on

a balcony or window sill, in a park or rooftop, by a river or body of water, a vacant lot, a community garden etc. The fact that there are so many possibilities for an urban garden demonstrates that there is a huge potential for the expansion of urban agriculture as it can grow with a city. Creating an urban garden can have a positive impact on the city and environment by contributing to food security.

Ultimately this creates a more sustainable urban area. (*The RUAF Foundation)*

3.4 Economic Example

As stated before, urban regeneration deals with more than the restructuring of run down areas; it also deals with the economic value of each site. In today's society forests are viewed as more valuable if they are cut down, since they can use that space to create new neighbourhoods and subdivisions. However, the National Capital Project was co-founded "...to transform traditional conservation methods by including the value of 'ecosystem services' in business, community and government decisions...[their]goal is to begin making inroads in the decision-making process by including at least some of the value of nature in the economic equation" (Moir, 2011). With our constant destruction of forest and building of concrete areas we are losing a lot of biodiversity, which is not reversible, and if continued, will alter the way in which we live in future years. It is for this reason that we need groups like the National Capital Project to demonstrate how valuable green spaces are.

4. Summary

Urban regeneration is a new term that is becoming more important in today's society as we realize the harm that our past actions have done. Urban regeneration deals with the revival of cities by reviewing the social, economic, physical, and environmental aspects and problems to help in the re-envisioning and re-structuring of an area. The recent population spike in urban areas has forced us to transform, most of the, forests and green spaces surrounding the major cities into suburban areas to support this change. This transformation has turned the Earth into large urban areas covered in concrete and with many unsustainable neighbourhoods.

In the past few years, we have been trying to reverse this affect by balancing the development of suburban and concrete areas with open green spaces. Therefore, most of the urban regeneration projects happening around the world, including the ones talked about in this report, involve the development of more green spaces in abandoned urban spaces.

The restructuring of abandoned areas into green public spaces and agricultural lands are one strategy for making the world a more environmentally friendly and sustainable place in which to live. These projects will reverse the negative impact that the lack of green space has caused over the years by reducing the amount of greenhouse gases, by having better food security, improving the economy slowly, and ultimately reaching every city's goal of becoming more sustainable.

References

About the Park. (n.d.). *Explore Chicago | The Official Chicago Tourism Site*. Retrieved August 12, 2011, from http://explorechicago.org/city/en/millennium/about.html

Bunt, L., & Harris, M. (2010). *Mass localism a way to help small communities solve big social challenges: discussion paper*. London: NESTA.

Chivers, C. (2011, May 23). In Chicago, Leaders Prepare for a Warm Long-Term Forecast. *The New York Times*, p. A14.

Couch, C., Fraser, C., & Percy, S. (2003). *Urban regeneration in Europe.* Oxford: Blackwell Science.

Farquharson, V. (2011, July 16). Keeping the Motor Running; Behind its boarded-up houses and empty shops, Detroit is experiencing an urban resurrection. *National Post*, p. WP4.

Hantz Farms | World's Largest Urban Farm Planned for the City of Detroit. (n.d.). *Hantz Farms | World's Largest Urban Farm Planned for the City of Detroit*. Retrieved August 12, 2011, from http://www.hantzfarmsdetroit.com/

High Line History | The High Line. (n.d.). *The High Line*. Retrieved August 12, 2011, from http://www.thehighline.org/about/high-line-history

Hutchinson, J. B. (1972). *Farming and food supply; the interdependence of countryside and town,* Cambridge [Eng.: University Press.

Minister of Industry (2004). *Canadian Agriculture at a Glance: 2006 Census of Agriculture*. Ottawa: Statistics Canada, Agriculture Division = Statistique Canada, Division de l'agriculture.

Minister of Industry (1999). *Canadian Agriculture at a Glance: 2006 Census of Agriculture*. Ottawa: Statistics Canada, Agriculture Division = Statistique Canada, Division de l'agriculture.

Moir, J. (2011, August 9). An Economist for Nature Calculates the Need for More Protection. *The New York Times*, p. D3.

Raver, A. (2011, June 30). Manhattan's Newest River. *The New York Times*, pp. D1, D6.

Rochon, L. (2011, May 17). Isolation on the Outskirts: Urban wastelands offer little opportunity for active, social lifestyles, instead promoting detachment, obesity and, in turn, diabetes. *The Globe and Mail*, p. A3.

Shevory, K. (2011, August 3). After the High Line, Old Tracks Get Another Look. *The New York Times*, p. B6.

Sissons, J. (2011, August 9). From hobby to high-end, urban farming gets stylish; As more people grow their own food, companies are rolling out products aimed at the aesthete. Chic chicken coops, anyone? *The Globe and Mail*, p. L4.

Tortorello, M. (2011, August 4). What's Left Behind? *The New York Times*, p. D5.

Tsenkova, S. (2002). Chapter 1 Urban Regeneration Learning from the British Experience. *Urban regeneration: learning from the British experience* (pp. 1-8). Calgary: Faculty of Environmental Design, University of Calgary.

Why is Urban Agriculture important? | RUAF - Resource Centres on Urban Agriculture and Food Security. (n.d.). *The RUAF Foundation | RUAF - Resource Centres on Urban Agriculture and Food Security*. Retrieved August 8, 2011, from http://www.ruaf.org/node/513