Reconfiguring urban topography - new paradigms for older cities

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Abstract

Typical of many postindustrial cities in North America, Philadelphia, USA has witnessed a 25% decrease in population in the last half century attributed to a middle-class exodus and a significant decline in the industrial and manufacturing base. This transformation has had its most notable effect on inner-city "first ring" neighborhoods surrounding the historic central core. The district of Lower North Philadelphia for example, currently exhibits more than 50% of its area as vacant land and a population decrease of over 65% since 1950. This condition of vacancy over vast areas of once densely populated residential neighborhoods has inverted in many respects a condition of center to periphery, necessitating a rethinking urban space and developing new paradigms beyond traditional thinking of urban renewal. Similarly, the most trenchant obstacle to urban redevelopment is the increasing competition and adverse relationship between the city and its surrounding suburbs. This inversion of center and periphery expressed in socioeconomic conditions maintains that locality and proximity no longer associate with contemporary forms of production or consumption. As a reactionary response, planners have adopted lower density, suburban prototypes as a redevelopment strategy in an effort to attract a middle-class base back to the city. This design philosophy appears shortsighted, and like its suburban counterpart, is structured primarily around the automobile and are contrary to the goals of sustainable development. If a sustainable future for cities is to be achieved, it must also include as its priority those neighborhoods and communities that are the most economically challenged.
1 Introduction

This paper will address a number of issues regarding the restructuring and redevelopment of postindustrial inner city areas in the United States with a specific focus on the city of Philadelphia. The thesis of this paper focuses on the obstacles to sustainable development in lower income inner city communities and has been developed upon three themes: 1) Urban design strategies must take into account contemporary consumption patterns and ephemeral market forces beyond the scope of traditional urban design and planning. 2) A restructuring of both physical and conceptual boundaries of the city must be developed based on its contemporary and future condition. 3) Sustainability in large postindustrial cities must develop measures that can operate within the confines of social and economic inner city communities.

2 The condition of the contemporary postindustrial city

It can be argued that the city as a physical entity and social construct is most different in our contemporary period than in reference to its entire history. The age-old distinction between what is city and countryside, center and periphery has all but vanished in many if not all of our North American metropolitan regions. We have difficulty expressing the concept of city as a enclosed collective unit that stands in contrast to the areas that surround it. In recent years the population of the United States has surpassed the 50% mark of residents living in what can be described as an urbanised environment, and patterns a similar figure on a global basis. The most peculiar result of this large scale restructuring across much of North America is not the exponential level of suburban sprawl that in most urban regions is far greater in land area than the city proper, but what has occurred within the political boundary of the city itself. In vast areas of many of our large inner cities, expansive areas of industrial, commercial and residential districts have gone beyond the level of decay, but stand as vast wastelands of vacant land, with only skeletal remains of their former urban fabric. As a result of this large scale fragmentation of the city, the interior in many respects has become the inverse of its periphery, in simple terms, a void.

2.1 Depopulation and urban vacancy: the Philadelphia story

The city of Philadelphia is a typical case of postindustrial urban decline that began midway in the last century, losing nearly one-third of its residents from a peak population in 1950 of 2.1 million residents, to just over 1.5 million in 2000, a number that nearly equals the population in 1910. These figures are compounded by the fact that the physical area of the city has increased by some 50% since 1910. Philadelphia is not unique in its population loss over the past 50 years. Cities such as Detroit, St. Louis, Pittsburgh and Cleveland have each lost no less than one-half of their peak population in this same period. Although the population of these comparable cities has roughly stabilized, Philadelphia
continues to lose its population at an alarming rate, exhibiting the greatest net loss in population of any county in the U.S. this past decade. [2] These figures are even more disturbing considering the economic boom the country has witnessed in the 1990s that has posted the some of the lowest unemployment levels in 30 years, and an urban renaissance in Philadelphia's central urban district of a number of large scale development projects such as a nationally recognized performing arts center, new convention and exhibition facilities, new sports stadiums, entertainment and recreation facilities. In contrast to the City of Philadelphia, its suburbs have grown at an near exponential rate posting an fourfold increase in population to approximately 4.5 million spread out over an area of some 412 square miles translating into a 55% increase growth in land area and 48% increase in per capita land consumption. [3] The result of the urban exodus of the past 50 years has been the wide scale disintegration of many inner city residential neighborhoods near what was once Philadelphia's major industrial and manufacturing districts. These areas of the city were part of a major urban expansion after 1854, annexing a number of communities and towns surrounding the historic center, which was at that time about 3 square miles. In the past five years, the City of Philadelphia has undertaken an extensive campaign to study and remediate the condition of land vacancy and urban blight. Studies have identified no less than 30,900 vacant residential lots and over 27,000 "long term" vacant residential structures, two-thirds of which are privately owned. [4] Other estimates place the number of abandon residential structures at over 50,000, and that over the next five years that an additional 5000 to 7000 residential structures will be added to this figure. [5] Plans are currently underway to demolish some 15,000 vacant residential structures, the majority classified as "eminently dangerous" and on the verge of collapse. Outside of these efforts, there has been little headway made into the planning or redesign of these communities.

3 Sustainable potentials, practical realities

In recent years a number of architects, planners and urban designers in the United States have developed of the idea of the Transit Orientated Development (TODs) as a movement towards more sustainable future urban environments. [6] Originally targeted as a series of guidelines for the development of new towns and cities and the reconfiguration of suburban communities, these concepts based on sustainability and urban ecology have recently been proposed for the rehabilitation of inner city neighborhoods and communities. Often referred to as "Neo-traditional Town Planning" TODs work on a number of principles originally developed in response to the dilemma of suburban sprawl with the purpose of re-establishing a "traditional" pedestrian-scale town center. Residents are provided with the majority of goods and services, as well as access to public mass transportation within walking distance of their homes. TODs in essence consolidate the dispersed aspects of the suburb into a more unitary and compact urban form and are designed to connect other similar type developments and central city districts as part of a with retail districts as part of a regional network.
By consolidating residential with retail and commercial services, TODs provide more continuous open space in the surrounding area, preserving both natural habitats and rural landscapes. More specifically, they are designed to curb the use of the travel by automobile and single person commuting, fostering a more efficient use of energy consumption and reduction of emissions. There has been much debate in recent years to whether Transit Oriented Developments can become widespread viable options towards sustainability for either suburban or urban communities. First, TODs are best suited for the developments of new towns and cities, rather than being placed within existing communities with established patterns and habits of the residents. Second, although TODs are designed in principle to function in a wide range of economic and social strata, typically find greater acceptance among more affluent communities in which stable economic, social and community structures are currently in place, and whose residents are generally more socially aware of the nature and purpose of sustainable policies and practices. Third, TODs rely on a concerted effort and collaboration between residents, government and private enterprise for them to be successful, as the idealism of the design and planning of these communities is only part of the process, and a devoted management policy must outlive the expectations of planning proposals and guidelines. As Michael Welbank, past president of the Royal Town Planning Institute in Britain has noted, "There is
little point in developing technical concepts beyond our capacity to receive and use them through human institutions." [6] For the ultimate measure of sustainability in the long run is performance. In consideration of the implementation sustainable practices in severely economically distressed inner-city communities, few if any of these conditions can be adequately met.

3.1 Suburban emulation

As indicated in recent surveys conducted by the Philadelphia Planning Commission, the majority of both buyers and sellers of homes within the city describe their desired living arrangements as typically suburban, placing such items as off street and garage parking for automobiles and private yard space as highest of priorities. [9] A recent survey by the National Association of Home Builders has found that some 83% of Americans would prefer to live in suburban communities. [9] The City of Philadelphia unfortunately has responded to these market studies supporting developments that are suburban in not only architectural style and character, but include the layouts and amenities of most suburban developments, which predominantly cater to an automobile centered lifestyle, often only a few blocks from the central business district of the city. In addition, commercial and retail developments have also followed suit. A number of new commercial and retail developments in North Philadelphia are basically strip malls with acres of parking. One such development recently completed in East North Philadelphia was required by city planners to provide no less than 250 parking spaces in what was once a dense 19th century row house community. Regardless, the lot stands 90% empty during the height of business hours. The idea of cluster or terrace housing has had a number of success stories over the past few decades. However, for most of the U.S. the concept of shared communal space has little or no cultural tradition outside of older urban contexts, and subsequently the "model" home and community for most Americans, particularly those in older dense urban cities and living with the problems of crime, poor schools, and high taxes, remains the detached suburban house. The question remains is the so-called "American Dream" in all of its mythic glory standing as a significant obstacle to sustainable development, or have architects, planners and urban designers failed produce truly viable alternatives. The economy in the United States, as does most of the westernised world functions not only through the constant consumption of goods, it prospers through what can described as conspicuous over consumption. The last decade of unprecedented economic growth has done little to remedy the problems facing inner cities, and the bottom line is that people leave cities for a better life. The cultural necessity to consume leads to certain desires in terms of lifestyles and individual values that are better achieved for the majority of Americans within a dispersed suburban environment. The path towards sustainability remains an option and not a requirement and remains a selective agenda for an individual or community to adopt, if in fact they have the resources to do so. If in fact sustainability is in fact a luxury with an additional price attached, it precludes to a certain extent lower incomes groups that are basically living on a subsistence
level. In North Philadelphia, as well as many urban communities, home ownership is seen by many as one of a number of attributes lending itself to sustaining a more stable community as well as healthy and safe living environment. But in many respects the increased cost of design, engineering, management, as well as the added costs of rehabilitation of existing housing stock, preclude the option for many developers and public agencies to invest the added price of sustainable measures. Although the long-term benefits no doubt pay for themselves many times over, it is difficult to convince the necessary players of the benefits in the short term.

4 First steps: towards a sustainable future

A number of questions arise regarding the development of policies towards sustainable development in inner city communities. Clearly a great deal of empirical study needs to take place, particularly in terms of the implementation process and conversion of existing older housing stock, rehabilitation of existing infrastructure of public utilities and environmental systems, and the development of new housing and community prototypes. The second issue, and perhaps most critical is whether community stabilisation should proceed implementation of sustainable measures, or whether sustainable measures should be developed in concert with community stabilisation. Without economic and social stability of communities it makes little sense to impose a set of living standards and guidelines that are unattainable in transient and distressed communities.

4.1 Downsizing, right sizing

Regardless of efforts planners may make to develop the "right size" communities within postindustrial cities, there are a number of uncertain factors to any such calculations or predictions. It is certain that cities such as Philadelphia will continue to loose population at current rates regardless of any current measures to offset this trend. There remains an outward migration of households, particularly in transitory and distressed neighborhoods, significantly offsetting some recent trends in recently gentrified areas. For those willing to brave fringe areas of the city, Philadelphia offers the possibility of relatively low-cost homeownership. However this trend appears to cater to single and young married couples without children. At the same time, the largest group demographic of residents leaving the city are between the ages of 5 to 9 and 25 to 34, [10] relating to families with school age children who are uncomfortable with the prospect of placing their children in Philadelphia's struggling public school system. It is projected that Philadelphia might well loose an additional 100,00 residents by the end of this decade. The areas hardest hit will continue to be the distressed and transitional inner city neighborhoods in and around the central core of the city.
4.2 Blight elimination and urban resettlement

Since 1970, the City of Philadelphia has demolished over 30,000 residential structures has recently implemented a plan to demolish an additional 15,000 vacant residences over the course of the next few years. In a city that at present is dealing with a number of fiscal imbalances, there is little expectation that any large scale development will be initiated by the City itself, nor through private speculative investment without massive public subsidies. However, in the wake of this seemingly highly politicised agenda a number of unresolved issues remain. Targeted in this plan are approximately 400 neighborhoods classified as severely distressed and current planned demolitions would result in between 60% to 80% vacant land per residential block in each of these areas. Fragmented neighborhoods are extremely inefficient for the city to maintain in terms of sanitation and garbage collection, water, sewer, gas and electricity, and as well and other public services such as public safety and fire protection. One proposal that has been publicly offered by urban scholar Mark Alan Hughes suggests completely demolishing blocks the most severely distressed blocks, those exhibiting over 60% residential vacancy, and relocating these households to neighborhoods that are considered "transitional" with 25% to 60% vacancy, but still remain economically stable. [11] Significant investment would be needed that would include the cost of relocation, including payment to the families that are being relocated, and finding substantially improve these neighborhoods. Although this proposal seems somewhat draconian, it none the less addresses the issue of the inevitable abandonment and further dereliction within the partially demolished areas. However once these neighborhoods have been cleared, it provides a more plausible scenario in which to develop guidelines and implement design strategies towards sustainable development.

4.3 Working with an existing infrastructure

Older urban areas, in contrast to greenfield sites and many suburban communities have a dense network of services and utilities that are often are antiquated, inefficient and wasteful of resources and energy. Water and sewer disposal systems are often archaic collections of mechanics from various generations of installation and repair. The cost to replace utility and environmental systems on a large scale basis is beyond the scope of most if not all large urban centers. Empirical study needs desperately to be undertaken to assess the viability and transformation of older urban infrastructure particularly in terms of mechanical environmental systems and public services. As cities begin to resettle their interior populations, new transportation networks need to be designed as part of the planning process, and not as an ad hoc result of scattered and disjointed communities. It is interesting to speculate at a first glance that Transit Orientated Developments may actually be suitable for inner city locations for several reasons. First, stable urban communities are typically dense and already connected through nodes and networks of public mass transit
and it appears reasonable to consider that existing transportation networks expand as new communities become developed. In the areas previously described, there is no shortage of open space which could be converted to a number of passive and active uses, such as parks and recreation areas, urban agriculture, the rehabilitation of natural drainage systems, and naturalised habitats. The downside is that many sites contain high toxicity levels and a considerable amount of soil remediation would be necessary for many of the above uses.

5 Reconfiguring urban topography: new divisions within the city

One of the more radical proposals that have surfaced in recent years regarding postindustrial cities is their division into smaller more manageable districts or "towns" of between 50,000 to 100,000 residents. In Los Angeles, a proposal that is working its way to the ballot box would divide the city into 2 or 3 smaller cities. In New York, a proposal has surfaced for the division of the five borough governments into 80 towns, each with its own school board. A University of Pennsylvania Professor is conducting research into the division of Philadelphia into 8 to 12 smaller municipalities. [12] Although pride in the city as a whole is shared by the great majority of its residents, Philadelphia has been often referred to as a "city of neighborhoods", with the majority of its area consisting of relatively low density urban residential communities. Similarly, the vast stretches of the northeast, west and southern areas of the city appear to have more in common with the adjacent suburbs in terms of architectural character, community layout, as well as economic and social relations than with the central core and 19th century first concentric ring. This condition of distinction has been further exacerbated by the last 50 years of decay within these districts that has by default fractured the city into a series of distinct and isolated districts. The area of the city that was once home to thriving communities centered around large scale factory and industrial production has disappeared, and with its disappearance, the impetus for the large industrial based urban typology. When considering the restructuring of local, national and global economies in the last 30 or 40 years from large centralised economies of scale to small scale, flexible and decentralised economies, as geographer David Harvey has described, it makes sense that our cities should follow suit, rather than clinging to failed utopian visions of the urban metropolis inherited from the last century.

6 Conclusion

It appears that many planners descending from the orthodox school of urban renewal are determined to rehabilitate a section of the city that has already been lost, in other words trying resuscitate a body that has long since died. As a contra measure to traditional urban thinking, we are faced with both an external condition of the periphery that has rendered previous historical notions of urbanism obsolete, and an internal condition that is rapidly approaching what the
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periphery once was. Perhaps the most viable path towards sustainability in the inner city is to first consider what it has become and leave it as it is, vacant. It is within the confines of the city boundary that we may regain a condition of the mythical pastoral landscape that has been sought after throughout the history of human settlement, and come to terms with the scale of the city finding the scale of the human being.

References