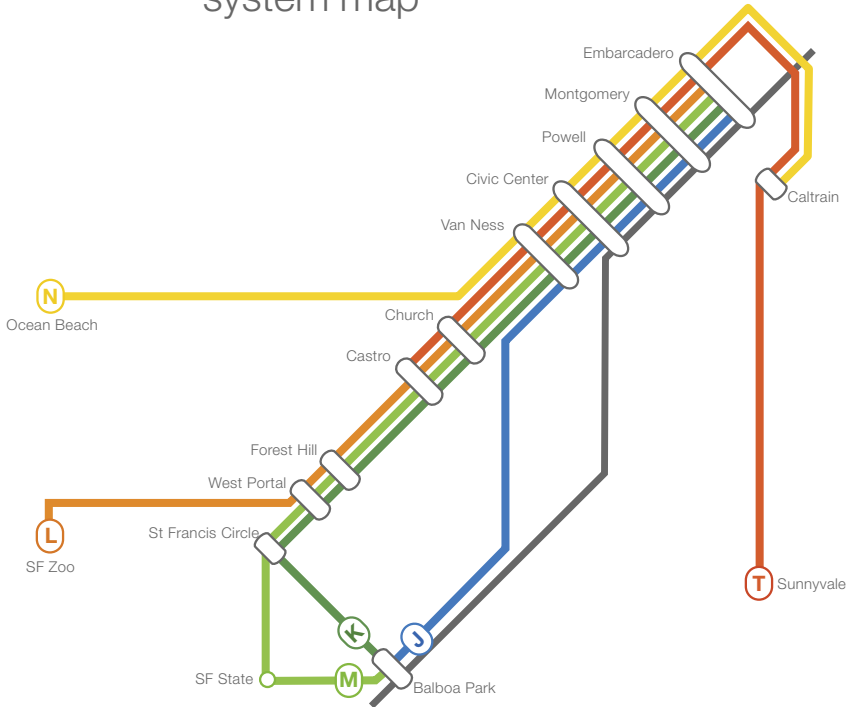




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a Journal of Urban Affairs

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San Francisco Municipal Railway
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Letter from an Advisor:

It gives me great pleasure to write this note about this year's issue of *Urban Action*, the entirely student-run journal of the Department of Urban Studies and Planning (DUSP; previously, the Urban Studies Program) at the San Francisco State University (SFSU). This year is particularly special because it marks the 30th anniversary of the journal, and it is also the first issue to be launched since the Urban Studies Program gained departmental status.

This year's issue continues to strengthen and improve upon a long-standing tradition of excellence and voluntary service by students from DUSP as well as other departments at SFSU, including Environmental Studies and Political Science. This issue that you are holding is purely the product of student initiative. Everything, such as holding informational sessions, sending out the call for papers, reviewing and editing of articles, designing the layout, and working with the photographs and graphics, has been decided and managed by our students. At the heart of this process has been a core team of extremely dedicated and talented undergraduate students. I salute the core team and all the involved students for extending an invaluable service to our department, college, and university, for which I express deep gratitude on their behalf. As faculty advisor, I had the easiest task of all. Such were the levels of dedication and competence of the *Urban Action* team this year, that never once did I feel the need to advise the team on any matter.

The substance of the issue speaks for itself. It is comparable to the very best student journals in Urban Studies and Planning anywhere in this country or elsewhere. The content is superior, the editing is excellent, the photographs are brilliant, and the graphic quality is peerless. Kudos to the team for attaining such high levels of professionalism and quality. I am convinced that this issue will serve as an inspiration to other students who will steer *Urban Action* in years to come.

Thank you.

Ashok Das
Urban Action Faculty Advisor, 2008-09

Cover Design & Muni Map
Jose Ramirez Calamateo

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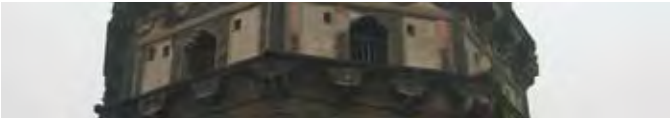
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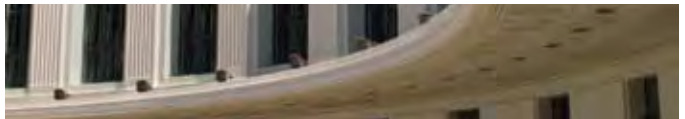
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53 Columbus Avenue: From Land-Use Dispute to Land Trust Solution

Dan Taylor

Editors' Introduction:

In a city as packed as San Francisco land is decidedly scarce, and the battles that ensue over land can get downright ugly, as the developers, residents, and politicians butt heads over the merits and demerits of proposed developments that will be seen by one side as necessary and beneficial and the other side as being self-serving and intrusive. In this article, Dan Taylor examines one such battle over a low-income residential apartment complex that was slated for demolition in favor of a new building for the City College of San Francisco that would serve residents of Chinatown. The end result was a rare victory for both sides: the residents' strong stand engendered a formation of a land trust and culminated in the building being spared, while the college was given the thumbs-up to erect its new campus annex near by, as long as they left the apartments alone.

Beginnings of a land use dispute:

Fifty-three Columbus Avenue is prime San Francisco real estate. Sitting right in the middle of where the Financial District, North Beach, and Chinatown meet, the property is and has been the home of many elderly Chinese immigrants (Serna, 2008). A twenty-one-unit apartment complex containing approximately 80 people, officially known as the Fong Building, it was the site of a heated land use dispute from the late 90's until 2006 (Wetzel and Tracy, 2006). According to the San Francisco Community Land Trust (SFCLT), none of the residents were well off, all earning less than 80% of the area median income. City College of San Francisco (CCSF), who owned the building, was pitted against these tenants and many grassroots organizations in a campaign that had the potential to exert drastic effects on the whole of the neighborhood.

The trouble began in 1998 when CCSF, after purchasing the building, began issuing eviction notices so they could use the space for a new campus. While tenants had lived there for years, CCSF had planned to empty the building and use the land for a much-anticipated new branch, and foresaw no trouble in doing this. Tenants did not want to go quietly, though, and began to organize to fight the evictions (Serna, 2008). According to James Tracy, the president of the SFCLT's Board of Directors, "The residents organized a Tenants Association, and started to work with Chinatown Community Development Center and Asian Law Caucus. Originally, the residents agreed to move and negotiated a pretty decent relocation deal with the college. Then the college decided to only pay deep relocation benefits to the seniors. To their credit, the seniors rejected the offer first because it would harm the rest of the community, especially the youth" (J. Tracy, personal communication, November 17, 2008).

Many older tenants, like Ji Jian-guang, who was interviewed in the San Francisco Chronicle, were monolingual and dependent on the neighborhood and the services that catered to them. Ji, a 62-year-old restaurant cook, told reporter Vanessa Hua, "When you're living in someone's home, your life is dependent on other people. When you have your own home, you have autonomy" (Hua, 2006).

For many residents, it was an issue of self-determination; they did not want to move to other parts of the city and lose their community. Susie Wong of the Chinatown CDC voiced, "The Fong residents wanted to stay together – they are like a village within a building" (Phelan, 2006). It was this village mentality that led to them stick together throughout the ordeal. From the point of view of these residents it was a matter of forced displacement from their homes and their long time community, plus drastic changes for older residents, who were typically low-income Asians. Caught up in a development battle not of their own choosing, it cut right to the heart of land use in the City and the limited area available

for development. While the dwindling amount of affordable housing placed increased pressure on people like the tenants of the Fong Building, it also created opportunity for innovative action, like the formation of a community land trust. It was through issues related to the Fong Building's condition in which the tenants fought the City College of San Francisco's proposed development. In bringing up the fact that the building needed massive seismic upgrades, CCSF began to reconsider using 53 Columbus as the campus site. Eventually, Board of Supervisors President, Aaron Peskin, got involved and helped push through zoning legislation that outlawed building anything on the property above the existing height of the Fong Building. Because the CCSF plan called for buildings higher than this, it made the property useless to them. The College's plan for a new campus on that site was thus abandoned (Hua, 2006).

The residents formed coalitions and partnered with such groups as the Asian Law Caucus, Chinatown Community Development Corporation, and the Asian Neighborhood Design, which became the nexus of a future community land trust. When CCSF abandoned the campus plan, their next idea was to transfer the property to a for-profit Chinatown developer who wanted to bulldoze the whole building and put up a new residential tower for higher-income residents. The tenants of 53 Columbus, through the Asian Law Caucus, looked into the idea of a lawsuit arguing that they were being pushed out and that City College was violating previous assurances made to them. State law also stipulated that non profits should get first say on land purchased with public tax dollars, which was how CCSF had acquired the building.

Formation of a land trust

At the same time, the land trust idea was gelling and activists were pushing for more city legislation that would allow the tenants to purchase the building for themselves as limited equity condos with permanent resale restrictions on the price. Not wanting to deal with a lawsuit while seeking public funding for a new site for the proposed campus, City College of San Francisco eventually settled with the residents and offered to sell the building for below market rate—\$1.5 million—to the SFCLT in May 2006 (Phelan, 2006). A loan was taken out from California Bank and Trust, and money for the purchase and renovations was raised by the Asian Law Caucus and through city government.

The ways in which the Land Trust works and continues to evolve are very interesting as a model for preserving affordable housing. San Francisco has a very low rate of homeownership, 38 percent, and the Trust offers low-income people a very unique opportunity. The SFCLT is very much its own entity, but it did fashion itself somewhat after some already established urban land trusts, like

the Sarah Cole House in Burlington, Vermont, and the Irvine Community Land Trust, borrowing from their ideas and applying them to its specific locale. The SFCLT is a limited equity-housing cooperative, which means that property value growth is limited and resale value is restricted to ensure affordability in the present and future (SFCLT, undated). There is a set of bylaws that govern these price limits. Also, because the Land Trust provides a service to local governments by providing permanent affordable housing, they can often receive grants and loans from the city and non-profits. They are also seen to help with urban improvement as permanent housing can stabilize neighborhoods and strengthen the local economy and tax base. Families no longer have to deal with rising rents or threats of eviction, and can develop their assets as a means of being upward economic mobility. When members do sell a unit in a land trust building, the return is based upon a predetermined formula set by the co-op, so real estate speculation isn't possible.

The SFCLT operates as a membership-based, democratically controlled, non-profit organization (SFCLT, undated). Their bylaws also maintain that the board of directors should be 33 percent co-op residents, 33 percent community organizations, and 33 percent members at large. Each of the residents paid \$10,000 to buy into the co-op. This money, along with other funds SFCLT cobbled together, was contributed towards building renovations and seismic upgrades that were needed (Hua, 2006). As stated previously, the City, along with various non profits and businesses have all helped, too. As members, the residents pay dues of \$24 per year to the group, and community members may also join to help support the acquiring of more sites for affordable housing.

Issues at play

Beyond the innovative way in which the Land Trust has approached the situation to help the tenants, there are other issues at play in the land dispute. Chinatown, as a mostly lower income community of color, desperately needs better access to schools like CCSF and the branch they intended to build. But, in such a highly dense city with limited land, where do they build? They must be careful when picking fights, as was shown before, due to the fact that they rely on voters to approve public financing for the service they are providing. If voters feel that CCSF, or any other public institution seeking bond money, is being unfair to local residents, they can effectively veto all expansion and extra funds. The issue of education ties in with many other issues in the community, like affordable housing, and it is hard to determine what is best for the residents in an area. But, what may be most important to residents, as this dispute shows, is the idea of local self-determination. Let the residents decide for themselves what they

want and where it should be in their own community. Organizations like the San Francisco Community Land Trust and the Asian Law Caucus help local residents use their power to influence land use decisions and overcome cultural barriers. This is yet another issue raised by a 53 Columbus resident. Larry Lee, who is 82 and lived in the building since 1992, told the San Francisco Chronicle, “The Chinese are like a pan of loose sand. They never stick together. No one in Chinatown likes to stick their head out. I try to show the Chinese do have complaints. If I do something, maybe someone else will follow” (Hua, 2006). Much like the International Hotel struggle of a generation earlier, this struggle negates the idea of the “passive Asian,” and ranks right up there with similar heated land use battles of the same era in the Mission District.

The issue of empowerment and defying stereotypes seems like something that drives these residents. Not being moved from their homes is important on the most basic level to residents; they are not just fighting to “preserve housing,” but to preserve their own lives and culture. The idea of helping others is positive, too, but they themselves needed the immediate victory for their families. Chinatown, though, does have deep structural issues and inequalities in housing. One stated reason why gentrification has not hit the area is the deplorable condition of most of its housing stock. According to the Chronicle article, 60 percent of all Chinatown rental units are single rooms without bathrooms or kitchens, and the homeownership rate is extremely low (Hua, 2006). Most lots are small and owned by local benevolent or fraternal associations in buildings that are paid for. This drives away buyers and gives owners little incentive to seek them. Things are kept the way they are and owners keep bringing in profit. To upgrade or renovate a building could put the owners in debt, as they would lose rental revenue. Small landlords, in this way, are at a disadvantage to larger land owning groups.

In the end

City College of San Francisco is still looking to open a new campus to serve the Chinatown and North Beach districts, as they currently operate out of a dozen different sites scattered throughout Chinatown (Schevitz, 2007). They have been the subject of further land use disputes, including when controversy erupted in 2007 over CCSF’s plans to erect its main building near Portsmouth Square. Nearby residents claimed that the proposed fourteen-story tower would cast a shadow on the square and lower property values. They filed a lawsuit, complaining that CCSF illegally circumvented local planning and environmental standards for the project (Schevitz, 2007). There was also speculation that that some of this discontent sprang from the fact that the nearby Hilton hotel objected to the project as they felt it would hurt their revenue. Regardless, this project was approved, and a

groundbreaking ceremony was held on November 1st at Kearny and Washington. The new campus' two buildings will be set on parcels of land adjacent to the Fong Building, but closer to Washington Street. A four-story building will be located at Columbus and Washington; the main building—a 14-story tower—will be at the northeast corner of Washington and Kearny (Pang, 2008; also, see accompanying photos).

Even though the land use dispute was solved by residents forcing City College of San Francisco to look for a new site, the core issues remain unresolved. The Land Trust does inch towards a more permanent solution against gentrification in the City. In some essential ways it also appeals to activists outside just the affected community. It is seen as a long-term solution—a way to prevent housing modification in the city. The self-management aspect also appeals to the more democratic ideas of most housing activists, as this approach attempts to push out real estate speculation and exploitation by community outsiders. But is City College a community outsider? While it is a large organization with clout, it is also local and responsive to the need for a campus in the area. In a city as crammed together as San Francisco, and therefore lacking in space, conflict does seem unfortunately inevitable even between two local organizations looking to do something positive for the community. SFCLT is currently seeking its next property to bring into the Land Trust and working to pass legislation to make it easier for housing co-ops form. In a city as fraught with housing and tenant battles as San Francisco, there is no doubt that it will find a good candidate for conversion soon enough, and a fresh housing battle over land use will begin.

References

- Hua, V. (2006, July 25). Reaching for the American Dream: Chinatown Renters Unite to Own Homes. *San Francisco Chronicle*. Retrieved March 14, 2009, from "http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2006/07/25/BAGEVK4NS11.DTL&hw=Chinatown+Renters+Unite+to+Own+Homes&sn=001&sc=1000"
- Pang, A. (2008, November 6). City College Chinatown Campus One Step Closer to Reality. *Asian Week*. Retrieved March 14, 2009, from <http://www.asianweek.com/2008/11/06/city-college-china-town-campus-one-step-closer-to-reality/>
- Phelan, S. (2006, May 23). 21 units, affordable forever. *San Francisco Bay Guardian*. Retrieved March 14, 2009, from <http://www.sfclt.org/content/view/31/70/>
- Schevitz, T. (2007, November 27). Chinatown Neighbors Sue to Block City College Building Plans. *San Francisco Chronicle*. Retrieved March 14, 2009, from <http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2007/11/27/BA1LTJA21.DTL&hw=Chinatown+Neighbors+Sue+to+Block+City+College+Building+Plans&sn=001&sc=1000>
- Serna, R. (2008). Tenants Plus Land Trust Beat Gentrification. *Urban Habitat*, 15, 1. Retrieved March 12, 2009, from <http://www.urbanhabitat.org/node/1815>
- Wetzel, T. and James T. (2006, April 4). *San Francisco Community Land Trust: Victory for Low Income Tenants*. Retrieved March 14, 2009, from National Policy & Advocacy Council for Homeless: <http://www.npach.org/04apr06.htm>

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Bayview-Hunters Point Shipyard Controversy

Ruslan Filipau

Editors' Introduction

The Editors of this year's Journal are especially proud to publish the following piece by Ruslan Filipau, a native of Belarus who moved to San Francisco at the age of 20. This "hidden history" surrounding the redevelopment of Bayview-Hunters Point and Naval Shipyard is a must-read for anyone concerned about the future of San Francisco. The article details a shocking story of reckless endangerment of human life on the part of the U.S. Navy, combined with an egregious lack of respect for community health shown by the lead developer, Lennar Corporation.

"The revitalization of Hunters Point Shipyard is creating a vibrant and exciting new neighborhood featuring a mix of housing, parks and businesses."

- Lennar Corporation.

Introduction

The large chunk of relatively undeveloped land in the extreme southeast end of San Francisco is known as Bayview-Hunters Point and Naval Shipyard. These valuable territories are key features in the City's future development. Predominantly African-American, this historically blue-collar, industrial area is now the center of political, economic, and environmental controversy. Given the complexity and wide range of problems that this neighborhood faces, this paper will cover the most pressing environmental and public concerns. The majority of information gathered comes from: The Hunters Point Community website, an official publication of Lennar Development Corporation; The San Francisco Redevelopment Agency; non-profit organizations and independent researchers; but most importantly, sources come from neighborhood residents and activists themselves. These are the witnesses to the rise and fall of a community that not only contains a brief and bizarre history but a potentially dangerous future that could ultimately hinder and dramatically alter San Francisco's necessary growth.

History

The history of Hunters Point dates back to before the Second World War when the Shipyard was constructed to service and repair the Navy's ships. It was a well-developed system of piers and docks, capable of accommodating the world's largest aircraft carriers and submarines. Just to name a few of the shipyard's biggest clients: the 90,000 ton nuclear aircraft carriers Abraham Lincoln and Carl Vinson; the famous eight-reactor Enterprise; and nuclear giants Texas and California. All of these found their home in the Shipyard where their mechanical components and atomic hearts were maintained just "less than three miles from the most densely-populated urban center in all of Northern California" (Bloom, 2002, p. 44).

The rapid growth of this area would not have been possible without a massive, Navy sponsored relocation of the Black Diaspora from the South. Men, women, and their families came from Louisiana, Alabama, Texas, and Arkansas to find work here during the 1930s and 40s. This migration to Hunters Point created the largest African-American community in the Bay Area. Initially, the life of a worker was good. Over 14,400 people had fair paying and meaningful work; growth in the local business sector also helped lead to greater homeownership in the area (Bloom, 2002). But by the late 1960's, the number of employed decreased to 4,000, and by 1972 it fell to under 1,000; consequently, many businesses closed or moved, creating what would become the Bay Area's poorest neighborhood (Bloom, 2002).

Health Issues

The deterioration of the community was not the only struggle the few remaining residents were about to face. The US Navy accumulated and abandoned enormous amounts of hazardous materials, most of which still remain since its last occupation nearly forty years ago. Recently, controversy has erupted over the uncertain nature of the experiments the military performed on the site. Thanks to recent environmental impact reports, what was left afterwards has begun to surface and has resulted in greater attention and investigation.

Currently the area is profoundly burdened with heavy metals, asbestos fibers, fuels and fuel related chemicals, PCBs, pesticides, and residual radiation contamination from military experiments and services on nuclear ships and submarines (U.S. Environmental Protection Agency, 2008). Each of these contaminants, even in small concentrations, is potentially harmful to the health of local residents. It must be mentioned that some pollutants were not only illegally also but intentionally dumped by the military, while others were left in ignorance and total disregard to their potential harmfulness. ARC Ecology files suggest that radioactive uranium and cesium were purposely spread throughout the area in order to study their effects on human health (Dawson, 2004). Unlike the present day, precaution was not a law, nor was it even a fully articulated idea. Today, the consequences of these actions can be discussed with real scientific understanding and solutions. Until we realize that humanity, more than money and legality, should shape our vision about the future of this land we are predestined for inevitable failure.

To build the Shipyard, two natural hills were flattened. The excavated earth was used to create two hundred acres of landfill stretching into the San Francisco Bay (Bloom, 2002). Besides the obvious environmental destruction, the landfill created another issue that has continued to negatively affect the local population. Serpentine, a mineral that is a part of the natural geology of the region, contains large amounts of deadly asbestos fibers (Arc Ecology, 2007). When disturbed, the dust of the mineral becomes airborne and when inhaled, microscopic fibers settle into the lungs and irritate them, causing micro-bleeding; over time, this will cause mesothelioma, a fatal form of lung cancer (Arc Ecology, 2007). Naturally found in the environment in very low concentrations, asbestos rarely leads to mesothelioma or lung bleeding; however, its concentration in the air significantly increases during construction, digging, grinding, or any other form of soil disturbance where dust is not manually controlled.

Naturally, the perfect concentration of asbestos in the air is zero, yet since Serpentine is one of the most abundant components in the environment, this scenario is virtually impossible to achieve. Therefore, the question becomes,

what concentration of asbestos fibers in the air is acceptable for humans? While it is difficult to establish scientifically, Lennar Corporation's official Hunter's Point Community website states:

[...] in separate studies, federal, state and local public health professionals concluded that grading operations at Hunters Point Shipyard did not pose a significant long-term health risk. Their studies found that any airborne asbestos particles were not present long enough or in high enough concentrations to present such a risk. (Environment page, Public Health section, n.d.)

The Hunter's Point Community website also lists the relevant agencies who concluded that the current area was of "no real danger for the residents" (Environment page, Public Health section, n.d.). Among those listed are The San Francisco Department of Public Health, The Bay Area Air Quality District, and The Agency for Toxic Substances and Disease Registry (ibid.). Dr. Balmes, a local environmental and air quality inspector concludes, "I agree with DPH that it is highly unlikely that exposure to naturally occurring asbestos from grading operations at Parcel A will create a significant risk to human health in the community" (ibid.). Fortunately, many citizens understand such quotes to be carefully constructed general statements. More deliberate examples can be found on the same website.

Regardless, former Shipyard workers are dying from mesothelioma. According to the San Francisco Chronicle, "A San Francisco jury has awarded a total of \$33.7 million to a former Navy electrician and his wife in what is believed to be the largest asbestos verdict ever awarded in California" (Zamora, 2002, para. 1). The jury ruled that sixty year old Alfred Todak, who is suffering from mesothelioma, was legitimately exposed to asbestos while working at the Shipyard (Zamora, 2002). It is difficult to estimate the doses of asbestos he was exposed to, but the results are obvious.

One can fathom the lethal risks asbestos posed upon the shipyard workers; while its effects may take years to surface, what if today's "acceptable" doses ultimately prove to be lethal 20 or 30 years from now?

Another major problem has been the methods and regularity of air quality monitoring. Finding satisfactory answers to these questions has been difficult; however, an interview with a long-term Hunter's Point Shipyard resident suggests that the previous and current monitoring levels are not adequate. Lynne Brown is one of the community leaders and a member of Hunters Point Shipyard Restoration Advisory Board. He said that in 2003, when Lennar was doing grounding in their neighborhood, the dust was so thick that everything

was covered by it (personal communication, July 10th, 2008). He also noted that no attempts were made to suppress the dust or to notify the residents about the potential danger of inhaling it (ibid.). As noted earlier, Serpentine is a naturally occurring part of the region's geology and is normally benign until disturbed due to construction or digging when it becomes airborne. According to Brown, not one of the organizations listed above ever came to test the air for Serpentine/asbestos concentrations while the dust circulated throughout the neighborhood (ibid.). Clearly disregarding precautionary principles and written guidelines, the contractor's behavior was quite inhumane. Brown's opinion, based on his own personal observations, shows how cursory Lennar's concerns regarding public safety truly were. Fortunately, Brown is not alone, nor his voice unheard. California law now requires Lennar to monitor air quality and notify residents in the event of any air quality changes. However, Lennar has repeatedly failed to do so. On May 30th, 2008, due to Lennar's digging, as much as 138,000 particles per cubic meter of cancerous asbestos were sent in the air (Ruiz-Litcher, 2008). This concentration greatly exceeds regulations. The residents discovered this six weeks after the incident (ibid.). Because of this infraction, The Bay Area Air Quality Management District (BAAQMD) "voted to fine Lennar for not accurately monitoring toxicity level during construction" (Ruiz-Litcher, 2008, para. 3). This example and many others suggest that the levels of toxicity and environmental degradation are consequences of racism in this poor, predominantly African-American neighborhood.

While this neighborhood desperately needs redevelopment and rehabilitation, the best possible, immediate solution would be to hire an independent organization to constantly monitor the air quality for the entire neighborhood, particularly near the schools and residential complexes. Local government also must thoroughly enforce regulation by citing and fining those who violate the law. Developers should also be required to announce every major construction activity that could potentially threaten the air quality. To help aid in the process of putting these changes in practice, a mechanism or technique must be developed to suppress the dust from becoming airborne before any major construction begins. Financing for such initiatives could come from a specially created fund established by the City or the developer themselves. We should remember that environmental racism plays a large role in redevelopment of the neighborhood. Low income communities often cannot protect themselves from powerful and wealthy developers. To balance the powers, the local community should be involved in the decision making process and given the power to control the future of their neighborhood. Many official organizations have sections of their websites devoted to how they involve the community in the decision making process, but this involvement often ends in educational sessions that only provide

general information rather than residential empowerment. Involvement should mean control of the process by the community with help of independent and non-profit organizations. No one can better ensure environmental control and prevent discrimination than people living in the neighborhood themselves.

Radioactive contamination

Another serious environmental concern is radioactive contamination that has been inherited from the Navy's nuclear activities. The nuclear history of the Shipyard began in 1945 when the "horribly famous light cruiser, Indianapolis, had 'Fat Man' the world's first atomic bomb welded to its deck [...]" and made its final stop at the Shipyard before heading towards Japan (Bloom, 2002, p. 44) . Shortly after its departure, the Naval Radiation Defense Laboratory (NRDL) was founded on the Shipyard, according to Saul Bloom (2002). After that point, and throughout the lengthy Cold War, the laboratory had conducted different nuclear experiments. It is not a conspiracy that "The NRDL undertook experiments in which both animals and people were exposed to radiological sources to investigate their physical impacts" (Bloom, 2002, p. 44).

Before NRDL was closed in 1980, it conducted a broad range of experiments on humans, often without the knowledge or consent of the participants. The scale of these experiments is difficult to measure as well as the harm it imposed upon the people who worked and lived in the neighborhood. Ultimately, the Navy's intentions raise many ethical questions, but undoubtedly the practice of intentionally irradiating humans is a crime against humanity.

Another major source of radioactive contamination in the Shipyard was the Navy ships themselves. After the Second World War, and throughout the early stages of the Cold War, the Navy began testing nuclear weapons on the island of Bikini in the Marshall Islands (Kyne, 2005). Many of these experiments tested the durability of US naval ships against the impact of a nuclear missile. This resulted in the destruction and contamination of many US ships with "fission products, including strontium 90 and cesium 137, as well as residual plutonium from the bombs," as suggested by Dennis Kyne in his article "Hunters Point Shipyard. Don't Drink the Water" (2005, p. 4). The piece refers to "The Hunters Point Shipyard Historical Radiological Assessment" (HRA), a document prepared by the military and released in 2004, which states that, "the most severely contaminated ships were eventually transferred to HPS for decontamination. Radioactively contaminated marine growth attached to ship hulls was removed with sandblasting" (Kyne, 2005, p. 1). The remaining fuel from the ships was burned, and paint from the ships was also sandblasted. Generous portions of sand and other materials were dumped in the bay or buried in the Shipyard's landfill; remaining sand and other highly

radioactive materials were shipped to the Farallon Islands and dumped offshore (Kyne, 2005). According to HRA, the Navy found ninety potentially radiologically impacted sites on the Shipyard; only twenty six of these sites were cleaned and recognized as non-hazardous, while HRA recommends further investigation of fifty eight of the remaining sites (ibid.). The number of contaminated sites is shocking and tells us that the land requires more research before it is ready contain residential housing.

Conclusion

Although the land will inevitably be transferred to the City and put to use, there should be no residential or commercial developments of any sort until every parcel of the Shipyard is free of contaminants. Ideally, the military would play the main role in the initial stages, handling and disposing of the most toxic and dangerous items. After this, a compilation of independent organizations and Governmental agencies would conduct their own research to make sure that the military did not bypass any necessary steps. These processes should be under the scrutiny of residents from the local community, followed by an open flow of information to the media for public consumption. Incidents jeopardizing safety that may take place during construction, especially those occurring near schools, cannot be tolerated. After a complete cleanup, another study should be conducted to prove that the land no longer poses a threat to any incoming residential or commercial development. Furthermore, existing residents of the neighborhood should be offered the opportunity to relocate while the cleanup takes place. Finally, to guarantee a successful new beginning, a clear and thorough report should be released to the public in a manner that is comprehensible for anyone with or without an advanced degree.

While everyone agrees that the Shipyard must soon be redeveloped into a healthy and vibrant neighborhood, too much control still rests with a single contractor, Lennar, who remains irresponsible. This exclusivity might be an easier way to rebuild the land, but it is certainly dangerous as the absence of competition allows for lower standards during the redevelopment process. Sloppiness and mistakes often happen when there is exclusive management by a single contractor. Perhaps Lennar is the only willing developer out there who dares to engage such a monstrous project; perhaps its methods are the best, most advanced and time tested. One thing is presently clear: it is not advisable to live on this land. The land is heavily contaminated and the scale of the contamination remains unknown. While scientists and specialists attempt to determine proper regulation levels, very little is known of the effects the contaminants will have on people over time. Would anyone want to be the part of the experiment to find out in twenty years

that they are incurably sick, like Mr. Alfred Todac did? The answer is no. Any person provided with truthful information regarding the land's history would not want to live, drink water, or even eat there. People do not want to be part of a game in which the players are dishonest and what is at stake is unclear. People want and deserve to participate in a fair game, where they know the rules, where they have easy access to the information they need, and where they see and feel that the developer is conscious of them and their children, rather than neglecting the law and proper practices. People want to have power to change things that are unjust. Is this too much to ask for? If it is true that politicians and businessmen alike have forsaken their human responsibility to protect the public's interest, then perhaps hopes for common decency are too high. indeed realized. As a San Franciscan living during the program's early years, I am very excited to participate in the process, and look forward to experiencing the positive change in our city's neighborhoods in the coming years.

References

- Bloom, S. (2002, January). Shame About The Shipyard: The History of Environmental Contamination and Management of the Hunters Point Shipyard. *Verdict, Vol. 8 (1), 41-48*
- Bloom, S. (2002, April). Shame About The Shipyard: The History of Environmental Contamination and Management of the Hunters Point Shipyard. *Verdict, Vol. 8 (2), 35-48*
- Dawson, C. (2004, February 3). *ARC Ecology Comments on: HPS Draft Sapling and Analysis Plan*. Retrieved April 5, 2009, from http://www.communitywindowontheshipyard.org/cleanupguide/comments/20040203_ArcEcology_HPS-GWMP_letter.pdf
- Hunters Point Community Website. (n.d.). Environment. Retrieved April 5, 2009 from <http://www.hunterspointcommunity.com/environment.html>
- Kyne, D. (2005, March 30). *Don't Drink The Water*. Retrieved April 5, 2009, from http://www.prpblog.com/public/hunterspoint/downloads/033005_Kyne,%20San%20Francisco%20Bay%20View.pdf
- Loizos, L. (2004, April 29). *Draft Final Historical Radiological Assessment, Volume II, History of the Use of General Radioactive Materials, 1939-2003, Hunters Point Shipyard, dated February 25, 2004*. Retrieved April 5, 2009, from http://www.communitywindowontheshipyard.org/cleanupguide/comments/20040429_ArcEcology_DF-HRA_comments-final.pdf
- U.S. Environmental Protection Agency. (2008). *Hunters Point Naval Shipyard*. Retrieved April 5, 2009, from <http://yosemite.epa.gov/r9/sfund/r9sfdocw.nsf/vwsoalphabetic/Hunters+Point+Naval+Shipyard?OpenDocument#descr>
- Ruiz-Lichter, R. & Arrieta, R. (2008, Jul 17). Toxic Construction and Environmental Racism in Hunters Point Shipyard. *Indybay.org*. Retrieved April 5, 2009, from <http://www.indybay.org/newsitems/2008/07/17/18517118.php>
- Zamora, J. (2002, April 3). Couple awarded \$33.7 million in SF. *San Francisco Chronicle*. Retrieved April 5, 2009 from <http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2002/04/03/BA144902.DTL>

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Life Full of Bikes:
A Photographic Essay

Noriko Kakue

Illegal Parking

One problem with bicycle use in Tokyo is the illegal parking of bicycles in public spaces. In 2007, the Tokyo Metropolitan Government found 85,000 bikes illegally parked in public spaces, primarily in front of train stations. This was the smallest number in the past six years, down from 171,000 in 2001. Currently, Shinjyuku station has the third highest number of illegally parked bicycles in the Tokyo Metropolis.



Student Bikers

Bicycling is a common form of transportation to and from activities such as school and grocery shopping. In the congested city of Tokyo, particularly within the 23 most densely populated neighborhoods, it is considered to be the most convenient way to move around.





Bike Sign

Almost every pedestrian crosswalk has a bicycle crossing lane. There are 700,000 bicycles running in the Tokyo metropolis everyday.



Legal Parking

The amount of paid bicycle parking is increasing every year; there are more than 820,000 bicycle parking spots in the Tokyo metropolitan area. Bicycle parking spaces are usually available under elevated rail lines or buildings, though recently, on-street parking structures are increasingly found in some neighborhoods.





References:

Tokyo Metropolitan Government. (2008 June 2). The issue of neglected bicycles in front of train stations in Tokyo. Retrieved March 3, 2009, from <http://www.metro.tokyo.jp/INET/CHOUSA/2008/06/60i62100.htm>



Concentrated Poverty in America

Dylan Dekay-Bemis

Editors' Introduction:

In light of the recent economic crisis, Dylan Dekay-Bemis' article on concentrated poverty is an important and timely topic. It gives one a bird's eye view of why we have poverty in America, how it plays out geographically in an urban setting, and why it persists. More specifically, it imparts to the reader an understanding of the important role that spatial hurdles play in compounding the problem of poverty in cities, and how it interacts with other factors such as economic disinvestment and social-cultural isolation. It is my hope that future planners and policymakers will take away from this piece the need for a comprehensive set of solutions when tackling the problem of urban poverty, with the explicit goals of spatial, economic, and social inclusion of the urban poor.

Traveling through any major American city offers a glimpse into the poverty and extreme wealth disparity within the U.S. today. In San Francisco, a trip from the Sunset or the Marina districts to the Tenderloin or Hunter's Point reveals contrasting pictures of the economic and social opportunities afforded to residents in these distinct neighborhoods. Like San Francisco, the story of any large U.S. metropolitan area is a tale of two cities, one comprised of residents who are given the opportunity for upward social mobility, and one made up of the poor residents who have been left behind amid a landscape that is increasingly bleak and hopeless. Poor communities are often populated by largely minority residents and characterized by high unemployment, sub-par housing, poor schools, and a lack of economic opportunity. Moreover, poor communities are often perceived of as something that exists outside the normal social fabric of society. Higher crime rates lead to further isolation and the labeling of those areas as places to be avoided by outsiders. Place and poverty are often inextricably intertwined, and the environment in which people find themselves has been proven to greatly impact their individual life chances.

Neighborhoods of concentrated poverty are defined as communities comprised of least 40 percent of households with incomes at or below the poverty level. This presents a number of especially daunting obstacles for residents to overcome in order to climb out of poverty and improve their situation. This report will examine the inherent obstacles of being poor and living in an area of concentrated poverty. Conditions in the West Fresno neighborhood of Fresno, California, will also be compared with those in the Inner Sunset neighborhood of San Francisco in order to illustrate how the makeup of a neighborhood can greatly affect the life outcomes of its residents. Finally, some measures will be suggested which could help to combat concentrated poverty in America.

While poor neighborhoods have existed for years, the recent history of concentrated poverty can be traced to a number of factors. First, the massive out-migration of middle-class residents to the suburbs in the 1960s-70s led to a large increase in the proportion of poor residents occupying the inner cities. As middle income residents left the city, many poor, mostly minority residents were left behind and poverty became clustered in inner-city neighborhoods. In a 2008 study on concentrated poverty by the Brookings Institute, Alan Berube noted that from 1970-2000 there was a "dramatic decline in the share of central-city neighborhoods that had a middle income or mixed-income profile" (p. 9). Out migration also took much of the middle class tax base and infrastructure funding to the suburbs, leaving cities in a state of decline.

Secondly, de-industrialization that led to the decline of manual labor industries decreased the number of low-skill jobs available to inner-city residents, many of whom were undereducated, thus pushing many into poverty. De-

industrialization led to slow or non-existent economic growth in many industry towns, crippling cities in the Northeast and Midwest, which lead to a subsequent rise in the poverty level (Berube, 2008). Additionally, research has shown that the decline of blue-collar jobs and the rise of the service and information industries have largely disadvantaged poor individuals, many of whom possessed little education and lacked the necessary skills to adapt to dramatic changes in the economy (Berube, 2008).

Third, discriminatory housing policies have also played a role in concentrating poverty in many American cities. Redlining, blockbusting, and other questionable real-estate practices helped spur the white flight of the 1970s and left poor, minority populations concentrated in areas with dilapidated housing stock. In addition, the clustering of public housing developments in poor, inner-city neighborhoods served to foster the concentration of impoverished residents into specific sectors of the city (Berube, 2008). As Mary Austin Turner notes:

HUD policies targeting public housing assistance to households at the lowest of income levels and giving priority to those in the most extreme distress exacerbated the concentration of poverty in these developments. In many cases, therefore, severely distressed developments increased the overall poverty rates in the surrounding neighborhood. (quoted in Berube, 2008, p. 9)

Moreover, many affordable housing initiatives have often blatantly disregarded the potentially negative effects that clustering of low-income housing projects may have on the community in terms of housing prices and on the local economy (Berube, 2008).

Finally, massive immigration—particularly from Latin American countries—has also led to concentrated poverty in immigrant gateway communities. Lower levels of education, coupled with the additional challenge of overcoming language barriers, make immigrants more likely to live in poverty. Consequently, as Berube (2008) notes, “the foreign-born constitute a disproportionately large share of the poor, particularly in high-immigrant regions like Los Angeles, New York, Miami and Chicago” (p. 10). As the foreign-born population has more than tripled since 1965, so has the concentration of poor populations grown considerably in recent years (Berube, 2008). An additional factor has contributed to rising poverty rates: a rise in the birth of babies to single mothers. These root factors have left an indelible mark on high poverty neighborhoods. In addition to harsh economic circumstances, the separation of neighborhoods with high-poverty concentration resulted in a host of other ill effects that served to disadvantage poor communities even further and left underprivileged residents worse off than those in more affluent areas.

The proliferation of under-educated and low-skilled workers, coupled with higher crime rates, serve to make high-poverty neighborhoods seem risky to private investors. Consequently, businesses choose to locate elsewhere, thereby limiting growth and job opportunities in neighborhoods with high levels of concentrated poverty. Lack of investment also results in a dearth of competition, which drives up the price of local goods and services (2008, p. 13). As Berube (2008) notes:

[Research has shown] how a lack of business competition, gaps in market information, and higher costs for doing business in poor neighborhoods can raise the prices charged for basic goods and services, such as food, car insurance, utilities, and financial services, in low-income neighborhoods. [...] poor residents may end up paying more than families in middle-income neighborhoods for the same good and services. (2008, p. 13)

Such higher prices for goods and services put further strain on the already tight budgets of poor residents. Moreover, high-poverty neighborhoods are often without adequate public transportation services, creating a “spatial mismatch” between job centers and residence, leaving poor individuals largely confined to an area with dim job prospects (Berube, 2008).

In addition to discouraging private business investments, falling housing prices often discourage residents from investing in their own community. Whereas in recent years home prices in other areas have appreciated, the housing stock in poor communities has been shown to depreciate over time. The higher likelihood of diminishing returns on their investment discourages residents from purchasing homes (Berube, 2008).

Lower quality schools are also often found in distressed neighborhoods, diminishing the skill levels of future generations. Students attending schools in concentrated poverty neighborhoods are more likely to drop out, score lower on standardized tests, and fail to advance to higher grade levels. Further exacerbating the situation, those schools often aren’t able to attract and retain qualified teachers. Research has shown that “children who grow up in poor areas face reduced educational expectations and homework demands, which in turn diminish their educational opportunity” (Berube, 2008, p. 13). Also, education may be an undervalued amenity in a climate where there is no tangible evidence of its benefits. Finally, educational opportunities may be further limited for young women living in highly impoverished neighborhoods, where they face an increased likelihood of teenage childbearing and its associated negative effects on income and education level attained (Berube, 2008).

High poverty inner-city neighborhoods generally have higher crime rates, and research has shown a connection between poverty and local crime. Not

only is crime higher in underprivileged communities, but as Berube (2008) notes, “the social penalties for criminal activity may be lower, and reduced access to jobs and quality schools may further reduce the opportunity costs of crime” (p. 13). High crime coupled with the stress of being poor and living in a depressed environment can also lead to worsened health outcomes among residents of deprived communities. Research has shown links between living in high-poverty neighborhoods and higher incidences of depression, asthma, diabetes, and heart ailments (Berube, 2008). Furthermore, Berube (2008) explained that there may also be “higher risk of exposure to other environmental hazards, such as lead-based paint, cigarette smoke, and pollution from heavily-trafficked roads nearby” (p. 14). Lastly, the quality of available medical care may be inferior to that available to residents in the more affluent surrounding areas (Berube, 2008).

The above factors describe the difficult situation of being poor in America and contribute to the negative outcomes of many inhabitants of poor communities. The strength of the aforementioned dynamics in influencing life outcomes of the poor can be further illustrated by contrasting two neighborhoods on opposing sides of the economic spectrum. The West Fresno neighborhood of Fresno, California, and the Inner Sunset neighborhood of San Francisco are two such seemingly different neighborhoods, and yet, they both have geographic isolation in common. Comparing them can help illustrate the impact of neighborhood quality on the lives of its residents. Like West Fresno, the Inner Sunset is a semi-isolated neighborhood relative to its city’s downtown central business district. However, the community differs from West Fresno in that it still seems to be able to provide a full range of socio-economic opportunities and some degree of self-sufficiency for its residents. The remaining sections of this paper will examine the underlying trends that explain why there are such disparities between the two similarly isolated neighborhoods.

In 2005, West Fresno had the highest concentration of poverty in America, and its unemployment rate has been nearly twice the average for the state of California in the past 10 years (Cytron, 2008). Like many poor communities nationwide, West Fresno is largely comprised of black and Latino minority residents. It is located in the San Joaquin Valley, the agricultural hub of California, and many of West Fresno’s Latino residents are immigrants who were attracted to the abundance of agricultural jobs and low-cost housing available in the area. The vast majority of West Fresno’s residents are employed in agricultural occupations. In contrast, the majority of residents in the Fresno Metropolitan Statistical Area (MSA) are largely employed in businesses and professional occupations. Unfortunately, many agricultural jobs are relatively low paying, and the average wage per job in Fresno is only a tiny fraction of the total jobs in the rest of California (Cytron, 2008). Additionally, many of West Fresno’s

residents have little education; nearly 63 percent of residents are without a high school diploma as of 2000 (Cytron, 2008, p. 26).

West Fresno is located in the Southwest corner of Fresno and geographically isolated from the rest of the city by Highway 99, which serves as its Northern border. The highway keeps West Fresno cut off from the wider opportunities available in the rest of Fresno. The majority of the city’s publically subsidized low-income housing has historically been located in West Fresno, further concentrating the percentage of low-income residents in the community. West Fresno has only one shopping center, Kearny Palms, which contains West Fresno’s first supermarket and is the area’s only job center and source for competitively priced goods and services. Schools in the West Fresno district also struggle to keep up with surrounding districts, and banks have not typically located there. Until 2006, the neighborhood was without an ATM machine, and the lack of available financial institutions has increased residents’ reliance on “nontraditional” financial services providers, such as check cashing and payday advance services. These institutions often practice forms of predatory lending, adding further financial stress to individuals who can least afford to bear it. Furthermore, it is difficult for people to improve their financial standing if they do not have access to the most basic financial planning services. These institutional factors greatly limit life choices and opportunities available to residents of West Fresno (Cytron, 2008).

In contrast to West Fresno, the Inner Sunset neighborhood of San Francisco is populated mostly by Asian and white families of mixed incomes. The majority of residents are high-school graduates (85 percent) and a good percentage of them have some college education—over 28 percent as of 2002 (City and County of San Francisco, 2002). English is the dominant language of the neighborhood, the median household income is around \$70,000, and residents are employed in a variety of industries (ibid.). The neighborhood contains decent public schools and a mix of commercial businesses, with chain stores, supermarkets, local boutiques, salons, and restaurants being a few of the businesses that line the commercial corridors along Irving and Noriega streets. Many residents of the neighborhood shop at local businesses ensuring that money stays within the community.

Inner Sunset residents have access to many more beneficial social and economic opportunities than are available to those living in West Fresno. Quality housing, good schools, competitive businesses, supermarkets, and financial institutions can all be found in the Inner Sunset but are not readily available to West Fresno residents. In addition, less crime in the area likely amounts to less stress and better health for Inner Sunset residents than for West Fresno residents. The majority of individuals in West Fresno live in poverty, while many of those living in the Inner Sunset would be considered middle-class. The higher

incomes of Inner Sunset residents allow for more tax money to be allocated to infrastructure and other public services, including building good schools and retaining talented teachers. There is more overall investment in the area, with long-standing businesses and more growth opportunities occurring in the area than in West Fresno. Additionally, the higher incomes of Inner Sunset residents give them more political clout, which can help to streamline needed improvements in the neighborhood. The improved social and economic prospects available to Inner Sunset residents provide them with more choices and opportunities. Furthermore, the accessibility of choices in the Inner Sunset gives residents significantly more control over their community's fate than West Fresno residents.

Comparing the Inner Sunset and West Fresno helps to illustrate how a person's environment can greatly affect their life choices. After identifying factors that inhibit the self-determination of the poor, the question then becomes one of how government and other social agencies can work to diminish the relationship between place and poverty.

One of the first issues that need to be confronted in the fight to eliminate concentrated poverty is education. In today's increasingly competitive economy, education is a strong determinant of job placement, and schools in poor inner-city and rural communities must be improved in order to ready impoverished individuals to compete for well-paying jobs. Introducing incentives such as higher wages could help to attract more qualified teachers to schools in neighborhoods where the concentration of poverty is high. Alongside attracting and retaining talented teachers, schools in poor communities should encourage parent participation in their child's education and teach both children and parents about the importance of education in expanding life choices. Federal funding policies for schools also need to be inverted, with schools that score lower on standardized testing receiving more—rather than less—Federal funding. Additionally, comprehensive sex education programs and free health clinics are needed to help curb the prevalence of teenage pregnancy in poor communities.

Aside from education, more inner-city investment is needed in order to improve the economic prospects for poor residents. Investors need to take another look at the advantages of locating businesses and job training programs in poor, inner-city communities. In "The Competitive Advantage of the Inner City" (1995), Michael Porter outlines reasons why businesses should consider locating in the inner-city. Porter (1995) notes that the benefits of inner-city location can include strategic location, local market demand, integration with pre-existing regional clusters, and the availability of a large and ready workforce. Instead of being given incentives such as tax breaks or subsidies for locating in the inner-city, Porter (1995) explains that in order for inner-city business investment to truly succeed it must be based on the competitive advantages of the community and

capitalize on the needs of the local economy. The possibility of locating “green” industry manufacturing centers in inner city neighborhoods is one possibility for creating much needed jobs in inner-city communities while at the same time taking advantage of an inclined workforce.

Historically, declines in poverty have followed large overall improvements in the economy, such as in the vast economic expansion during the 1990s. With the current economic crisis, however, it seems that the problem of concentrated poverty is likely to worsen before it improves. With the seemingly dire economic future ahead, now more than ever is an opportune time to reexamine and confront concentrated poverty in America.

References

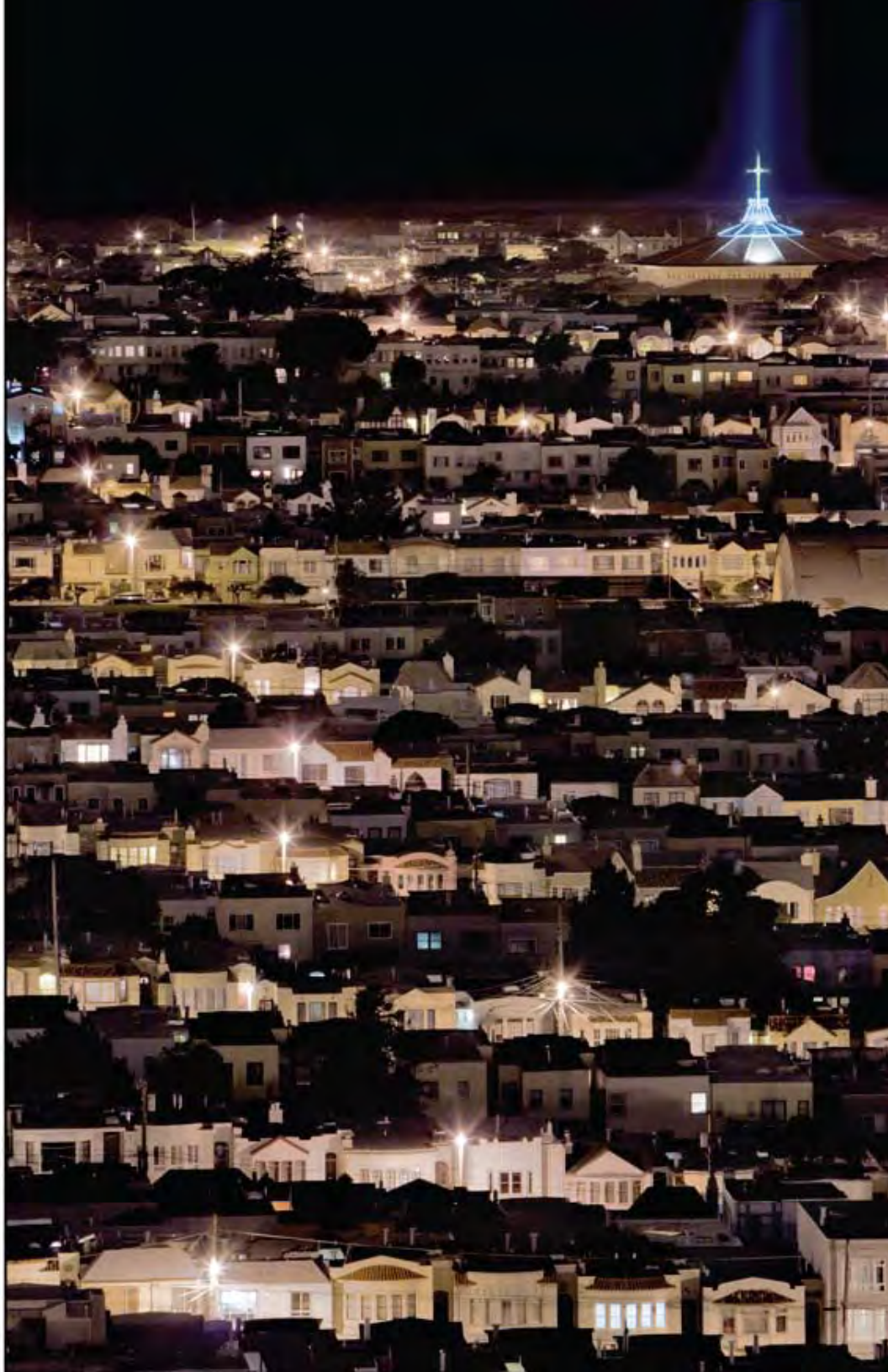
Berube, A. (2008). Concentrated Poverty in America: An Overview. *The Enduring Challenge of Concentrated Poverty in America*, 3-15.

Berube, A. (2008). Learning from Concentrated Poverty in America: A Synthesis of Themes from the Case Studies. *The Enduring Challenge of Concentrated Poverty in America*, 169-192.

Cytron, N. (2008). Fresno, California: the West Fresno neighborhood. *The Enduring Challenge of Concentrated Poverty in America*, 25-32.

Porter, M. (1995). The Competitive Advantage of the Inner City. In Richard T. LeGates and Frederic Stout (Ed.), *The City Reader* (pp. 274-286). New York, NY: Routledge.

City and County of San Francisco. (2004). *Demographics report for Inner Sunset neighborhood*. Retrieved December 13, 2008, from SF Prospector Website: “<http://gispub02.sfgov.org/website/sfprospector/ed.asp?cmd=demognei2&distance>”





Metapolis:
Polarizations Within the Urban Vernacular

Charles P. Cunningham

Metapolis

Is the name given to those urban phenomena which, going beyond the metropolitan scale, free themselves from any territorial medium to base themselves on interconnection networks composed of visible means of transport and invisible means of communication. Under the denomination of *metapolis*, urban attributes are acquired by all those spaces which, whether they belong to the city or not, comply with the condition of taxing its resources, work forces, and habitat to the metropolis by guaranteeing its daily functioning.

Lacking a physical substrate, and as a consequence of the absolute leading role played within it by flow and movement, the form of the *metapolis* differs radically from that we knew of the metropolis.

-François Ascher



























Our House of Cards

Gene Waddell

Editors' Introduction:

In the following article, author Gene Waddell tackles a difficult and controversial subject: the decline of suburban America. In the first half of the piece, he draws upon much of his own lived experience in order to explain the dominant cultural narrative behind the rapid growth of suburbia and meteoric rise in personal consumption. He concludes that the physical deterioration of the suburban landscape and its concomitant costs are parallel with an aging Baby Boomer generation that will soon be depending on dwindling social safety nets. The second half is devoted to the formation of a cogent argument for how our National tax system might be restructured in order to pay for these costs, as well as mitigate America's penchant for unbridled consumerism.

Introduction: The Rise of Suburbia

In the spring of 1970, many of the oldest of America’s Baby Boomer generation were getting ready to graduate from college and embark on their life’s journey. The Class of 1970 had much on their minds: the assassinations of political figures and political turmoil during the 1960s; civil unrest and racial strife in the nation’s cities; as well as the Vietnam War and the beginning of the Nixon era. The first wave of “Boomers” was exposed to the pronounced political and cultural changes that were taking place during their tumultuous, pre-oil embargo college years. Unlike previous generations, the early Boomers were less inclined to accept the status quo and were determined to make a difference by flexing their political muscle during public protests and acts of civil disobedience.

However, after nearly a decade of strife and frustration, plus a desire to start their own lives, the graduating Boomers wanted a safe haven to call home. In fact, one of the more popular songs of 1970, “Our House,” by Crosby, Stills, Nash and Young, a band whose protest songs became anthems of unrest during the 1960s, harkened to a more peaceful and pleasant way of life:

*“Our house is a very, very fine house
With two cats in the yard
Life used to be so hard
Now everything is easy
‘Cause of you...”*

In most cases, “our house” meant a house in the suburbs. Most of America’s cities were in the latter stages of “white flight” and a post-industrial state of decay, with a crumbling infrastructure, high crime rates, and high levels of racial tension. Crowded, run down cities did not hold much appeal to the Class of 1970, and a large percentage of them decided to become part of the “silent majority” living their life in an attempt to achieve the American dream of owning a home and having a family. Such goals were by and large within the reach of many of the Boomer generation.

For example, without much effort a college graduate could easily afford a home in the suburbs, away from the rough and tumble of urban life. With the ongoing war in Viet Nam, the economy was expanding and well paying jobs were available to most graduates. At the time, salaries for most jobs allowed a college graduate to absorb housing costs without much sacrifice, amounting to approximately 30 percent of annual income. Buying a home in the suburbs provided many with a fresh slate; almost everything was clean and new, most of the people looked like you (i.e., mostly white), and most of your neighbors were in the same social class and shared similar values. Away from the gritty, crime-ridden city, the suburbs were a good place to start and raise a family.

It was a good investment too, as the government actually subsidized the purchase of homes by allowing the deduction of mortgage interest and property taxes from annual income tax returns (Gottdiener, 1994). Even though mortgage interest rates at the time were about 8 percent, government tax breaks and write-offs reduced the effective cost of a mortgage to about 6 percent, which was about the same as the average level of inflation in the early 1970s (Forecasts.org, 2008). At the time, schools were generally better in the suburbs, thus adding another layer of assurance to newly married Boomer couples. Their children could have a better life than their own, and the message of “Our House” seemed to be real. Everything could be easy. It was indeed possible to have a very fine house, and life might not be too hard after all.

From the Boomer point of view, the vision of a future of endless opportunity was well within their grasp. In most cases, jobs and services in the city were only a half-hour commute by freeway and gas was cheap, about 35 cents per gallon; the average person could “fill up” their twenty gallon gas tank for about \$7, or a little more than half an hour’s wage (California Department of Energy, 2008; U.S. Census, 2007). Two or three car families became common as both members of a couple would need to get to work, shop, or shuttle the kids to endless scheduled activities. In the early 1970s most freeways were fairly new as the last sections of roadway that were part of the massive Interstate Highway system were being finished during this time (Lewis, 1997). Although congestion on the freeways was a bit of an issue, most people thought that a bit of time battling traffic was well worth it for their little piece of paradise. In essence, life in suburbia, with its two-car garages, was centered on the automobile; one would commute to work, drive to a shopping center, and easily travel great distances to visit friends and family.

The first Arab oil embargo in 1973 proved a sudden shock to this system. The cost of fuel nearly doubled overnight, and with supply drying up, once plentiful gasoline now had to be rationed. Nevertheless, despite this shock and a similar one that followed in the late 1970s, the Boomers persevered, and lived out their suburban dream. Although the government made a concerted effort to conserve fossil fuel products during the Carter Administration by reducing the speed limit on freeways, increasing fuel efficiency requirements, and imposing stricter emission standards, successive administrations did not encourage restraint, and consumption of fossil fuels increased to ever-higher levels.

Unbridled Consumerism

Now that the Boomers were well-established, children, of course, soon followed. Due to an unprecedented rise in consumerism amongst the “Me” generation of the 1980s, “our house” was soon too small to make “everything

easy.” Fueled by the easy credit made available by deregulation in the banking industry, middle class America loaded up consumer goods, cars, gadgets, and toys, most of which were manufactured overseas. Prices of homes had been rising for several years, and with new rules and mortgage schemes it was easy to “take money out of your house” by borrowing against your home’s equity. Being in debt became a hallmark of the American way. Actually, according to U.S. Census data, between 1980 and 2005, the total debt load for American consumers grew nine-fold from \$1.2 trillion to \$11 trillion (2007). Not surprisingly, personal bankruptcies during the same period increased 450 percent from two bankruptcies per thousand people to nine bankruptcies per thousand people (Economic Policy Institute, 2007). Although seemingly innocuous at the time, the climate of easy credit that began in the 1980s was the foundation of the house of cards that snowballed into the 2008-09 collapse of the world’s financial system.

Nevertheless, Boomers continued their relentless consumption and responded to their ever-increasing cache of material goods by either moving further away from job centers to larger dwellings or expanding their existing homes. In fact, even though average family size has shrunk from 3.5 to 3.1 persons between 1950 and 2004, the average area of a home has increased from 983 square feet to 2,349 square feet during the same period of time (Census, 2007; National Association of Homebuilders, 2008). Larger homes meant more consumption of goods and energy and an unrestrained reliance on a finite resource: fossil fuel. Further, during the same time, “leapfrog” development continued all around the edges of cities, creating urban sprawl connected by an overbuilt spider’s web of roadways (Gottdiener, 1994).

Housing

Fast forward to the present time, when most of the Class of 1970 is nearing age sixty and approaching retirement. By now, their oldest children are approaching forty years old and are (hopefully) living their own life. The large house that served them well during the family-building years is becoming more and more unmanageable and expensive to maintain. With the cost of fuel just off an all time high, even after adjusting for inflation, simply heating a house during the winter can be burdensome. Fuel cost is not the only problem for many of the Boomers, as a large part of the population is now suffering from the effects of years of easy credit. For the first time since the Great Depression, more than 10 percent of homeowners are “upside down,” meaning they owe more on mortgage debt than their home is worth. Years of borrowing against home value to pay for consumer goods—effectively using one’s home as an ATM machine—has left many Boomers in dire financial straits. This incessant borrowing was based on the

belief that home values were on an endless upward slope, a common sentiment fed by unscrupulous lenders who lured large numbers of homeowners to borrow against their the value of their house (Andrews, 2008).

Failure of Social Safety Nets

To make matters worse, safety nets such as Social Security and company pension plans that were once taken for granted can no longer be counted on as a guaranteed source of income during retirement. In 1950, the ratio of workers contributing to Social Security compared to the number of retirees receiving benefits was about 16:1. In 2005, this ratio was reduced to 3.3:1; a further drop to 2:1 is projected by 2040 (White House, 2008). Further, deposits by working people to the Social Security Trust Fund are being used by the government to cover day to day operations, and retiree payments are made on a “pay as you go” basis. In an effort to rectify this situation, retirement eligibility ages have been adjusted upward and benefits have been reduced. Additionally, many company pension plans are either under funded or have failed, further exposing the aging population to financial stress.

Health Care

At the same time, the combined forces of an aging population and advances in medicine will only increase demand on an already over-burdened health care system. The aging Boomers represent a huge block of the population that will demand a disproportionate amount of health care over the next several decades. To further complicate the matter, advances in medical treatments have extended the average lifespan and increased burdens on what remains of the aforementioned social safety nets. The current state of the health care industry is tenuous at best, producing high costs and relatively poor outcomes. According to the World Health Organization (2007), although the United States spends nearly twice as much per capita on health care than any other developed nation, other developed countries enjoy the same or better “healthy life expectancy.” Possibly the most distressing factor of all will be the ultimate fate of Medicare: its associated costs are projected to greatly outpace the system’s ability to provide health care to elderly people. The unpleasant reality is that social policy surrounding health in the United States may be headed toward making more pointed decisions about who gets care and who does not.

Transportation

Because most suburban areas were designed for low-density housing and automobiles rather than public transit and higher density living spaces, most homes

remain somewhat isolated from stores and services. Consequently, the need to drive everywhere is becoming an increasing burden both in terms of cost and time for an aging population. Since mass transit was effectively abandoned after World War II, the aging Boomers have few transportation options other than their not-so-beloved automobiles. Going to the store to buy groceries, visiting the doctor, or even just getting a cup of coffee and mingling with other people all require a car. Much like health care, this problem will only get worse as the population ages; the possibility of having a large segment of the population living as shut-ins is a real concern. Again, social policy needs to be aimed at providing basic services such as access to food, medical visits, and social interaction for people no longer able to drive.

Suburbia in Decline

Once gleaming, suburbia's infrastructure is failing; local government, reeling from years of tax revolt and deferred maintenance, is unable to maintain its roads, schools, or other infrastructure. Furthermore, with the new reality of high home foreclosure rates, many suburbs are withering away with municipalities losing a large portion of their tax base. Foreclosed homes sit empty, leading to blight and further degradation of the neighborhood. Homelessness, crime, and drug use are no longer limited to the inner city; all of these activities are now front and center in many suburbs, piercing the veil of the once-perceived safe haven of suburban life. To make matters worse, because many suburban homes were built quickly and cheaply to handle the great post World War II suburban expansion, quality of much of the nation's housing stock is quickly deteriorating (Leinberger, 2008).

Critical components of suburban infrastructure, such as bridges, sewers, and wastewater treatment facilities, are reaching the end of their useful life and will soon require replacement. In fact, according to the American Society of Civil Engineers, about 27 percent of bridges in the United States are thought to be structurally deficient (City Mayors, 2008). The pavement on which our vehicles travel may be most troubling of all as the (over) extensive system of roadways throughout the country continue to deteriorate at a rapid pace. Most local jurisdictions are far behind on pavement maintenance and face nearly insurmountable funding deficits to keep existing pavement in good condition. In fact, on a local note, while the City of Fremont spends about \$5 million per year to maintain its 500 miles of roadway, it is projecting a nearly \$150 million shortfall over the next five years in funds necessary to maintain pavement to an acceptable level (City of Fremont, 2008). This shortfall is not unique to Fremont; most all local agencies have had to defer maintenance due to shrinking budgets and rapidly increasing asphalt and concrete prices. Even more insidious is the fact

that although fuel prices are on the rise the “gas tax” that cities use to finance road maintenance is a flat fee rather than being calculated as a percentage of the price of fuel.

Now What?

The picture I have painted is alarming and will only become worse if no action is taken. From my point of view, the Boomer’s penchant for consumption, low-density housing, and reliance of the automobile are the key issues; it is a lifestyle that simply cannot be sustained. As witnessed by the recent economic collapse, this problem is paradoxical; consumption, which has fueled out economy for the past sixty years, has currently stalled. However, in light of the Government and banking industry’s attempts at reviving the debt-fueled “bubble economy,” we can expect it to eventually return, particularly due to the fact that six decades of conspicuous consumption and planned obsolescence are imbued into the American psyche. Yet, in order to prevent even further financial ruin, future consumption must be restricted to the degree that it is economically and environmentally sustainable. Ultimately, the market, and more specifically, the cost of goods, will be the most effective measure toward achieving this goal. I propose that a “consumption tax” is in order. This approach could also be applied to housing in order to encourage the adoption of higher density living spaces in compact communities. By pairing a consumption tax with smaller living spaces in compact communities, private vehicle use should ultimately decline, lessening the long-term burden on the nation’s finances and infrastructure as well as reducing the impact on the environment. It appears that it is time for the Boomers to get back to their activist roots and become part of the solution to our Nation’s decline. We have to get beyond “Our House.”

Financing Future Generations

Taken individually, a meaningful solution to any of these problems would be complex and nearly impossible, particularly when social equity is considered. However, if the problems are viewed as a whole and taken on as a national issue—a sort of 21st Century Manhattan Project—a consumption tax such as a National Retail Sales Tax (NRST) provides some interesting alternatives to resolve these problems while leveling the proverbial playing field for all income groups (Gale, 2001). A similar model, the Value Added Tax (VAT), was pioneered in Europe and is now used in most of the developed and developing world. It should also be noted that this concept has been discussed several times in the past, as recently as 2005, but has failed to make headway in Congress (Bickley, 2006). However, with a new administration in Washington, use of some form

of a consumption tax may be a viable option to resolve the looming human, environmental, and financial issues discussed above.

What is a Consumption Tax?

Simply put, a NRST consumption tax would collect taxes from targeted business-to-household transactions on a national level (Gale, 2001). One ideal would be to target natural-resource dependent goods and services including fuel, electronic items, and durable goods such as automobiles. By targeting certain items, taxes levied would encourage consumers to conserve resources. The NRST would come into play at the point of purchase of a certain good or service. For example, if the NRST is set at 10 percent, the buyer of a \$30,000 vehicle would be levied a \$3,000 NSRT; if the cost for a gallon of fuel is \$4.00, the NSRT would add \$0.40 to the price of fuel. In other words, as shown below, the more one consumes, the more one pays. On the other hand, incentives to purchase an energy-efficient hybrid automobile could be built in by reducing or eliminating NSRT on these items. Additionally, the greater financial costs associated with the purchasing and fueling of automobiles would most likely encourage individuals to forgo personal vehicle use in favor of public transit where it is possible and support initiatives for increased public transit where it is not. Table 1 illustrates the effect of a 10 percent NRST.

Table 1: Breakdown of NRST

Cost	\$1	\$5	\$10	\$20	\$50	\$100	\$1,000	\$10,000	\$100,000
10 % NRST	\$0	\$1	\$1	\$2	\$5	\$10	\$100	\$1,000	\$10,000
Total Cost	\$1	\$6	\$11	\$22	\$55	\$110	\$1,100	\$11,000	\$110,000

It seems apparent that use of the NRST would most likely have an immediate effect on consumption, as the cost of all goods and services would increase by 10 percent. By itself, use of a NRST is most likely to be untenable and burdensome, especially for people in lower income brackets. However, when combined with a “flat-tax” style income tax reform that subsidizes the lowest income earners while eliminating income tax deductions and loopholes for upper income earners, the NRST becomes more manageable and helps to smooth out the divide between rich and poor.

NRST and Tax Reform

Use of the NRST approach would require income tax reform by replacing the current system with a simpler and more progressive “flat-tax” on income (Hall, 1996). The goal of having a flat-tax would be to eliminate most of the

complexity associated with the current U.S. tax system by standardizing the tax rate via a negative flat-tax on lower income earners and a positive flat-tax on higher tax brackets. The criteria for the flat-tax would be gross income without regard to traditional deductions such as interest on mortgages, number of dependents, etc. Using a hypothetical 20 percent negative/positive flat-tax factor, federal tax rates are reflected in Table 2.

Table 2: Breakdown of Flat Tax percentages based on income

Income	\$20,000	\$30,000	\$40,000	\$50,000	\$60,000	\$70,000	\$80,000	\$90,000	\$100,000
Flat Tax %	-20%	-10%	0%	10%	20%	20%	20%	20%	20%
Flat Tax \$	(\$4,000)	(\$3,000)	\$0	\$5,000	\$12,000	\$14,000	\$16,000	\$18,000	\$20,000
Net Income	\$24,000	\$33,000	\$40,000	\$45,000	\$48,000	\$56,000	\$64,000	\$72,000	\$80,000

As shown above, people earning less than the median U.S. income would either be subsidized with a negative tax (similar to the earned income tax credit in use today) or not be taxed at all. The theory is that negative or zero tax treatment would offset the NRST. On the other hand, most high income earners would be subject to a 20 percent flat-tax in addition to the NRST.

There is no doubt that most Americans will be hard pressed to embrace the tax reform outlined above, particularly in the context of the current economic climate. However, the popular, current Presidential Administration could convince the public that this new system would better sustain this country over the long term and help prevent further decline in the Nation’s social services and infrastructure, if those in power have the strong political will to do so. In order to help the new Administration analyze this somewhat radical tax policy, I will first define the evaluation criteria and follow up with policy options and a recommendation.

Evaluation Criteria

1. Equity: Are current and proposed policies fair and equitable to all U.S. residents?
2. Net Benefit: Does the proposed policy have a net benefit to society?
3. Efficiency: Are there any efficiency gains possible with the proposed policy?
4. Administrative Ease: Will the proposed policy be less difficult to administer than the current policy?
5. Political Acceptability: Is the proposed policy politically viable?

Policy Options

Status Quo – Retain Existing Tax Structure

As discussed above, the current tax structure is a complex system that favors and subsidizes higher income groups. With its loopholes and tax deduction arrangements, the current system encourages consumption of goods and services and does not provide adequate support toward housing, social safety nets, healthcare, public transportation, or

infrastructure. Furthermore, because lower income groups are more exposed to the failures of the current system than their higher income counterparts, the system is not equitable.

Alternative Policy: Impose NRST or Other Form of Consumption Tax

As is the case in Europe, imposition of a NRST or other type of consumption tax in the U.S. would most likely result in an immediate and lasting reduction in use of finite natural resources (Beatley, 2006). Targeted goods and services that heavily rely on finite natural resources would have a Federal levy at the point of sale and would serve as a disincentive to over consume. Such a tax is already present to some extent in the form of Federal excise taxes for certain goods; a NRST would represent an expansion of this practice. However, use of a NRST could also contain incentives for goods that minimize use of finite natural resources, such as a hybrid automobile, which would provide a NRST credit. Similarly, purchasing smaller housing units in high-density, mixed use developments could be encouraged by exempting such units from a NRST.

Alternative Policy: Combine NRST and Flat-Tax

A combined flat-tax on income and a NRST would be designed to simplify the income tax system while levying a tax on targeted goods and services as described above. On the flat-tax side of the equation, the basis for tax levies would be gross income without regard to traditional “write-offs” such as the mortgage deduction. Lower income groups would either be subsidized with a tax credit or pay no tax at all; most of the higher income groups would be taxed a flat percentage on their gross income. This arrangement removes many of the existing government subsidies that have evolved over time into permanent elements of the U.S. tax code. On the NRST side of the equation, all income groups would be impacted by a consumption tax, which would encourage a reduction in the use of finite natural resources.

Evaluation of Alternative Solutions

The matrix that follows shows an evaluation of the status quo and alternative policy options to solve problems identified earlier in this report. As discussed above, the status quo represents a very complex system that is difficult to administer, politically unpopular, ineffective, and inequitable.

Use of a NRST alone is very likely to have an immediate net effect on reducing consumption of finite natural resources, but will also be likely to have a negative financial effect on lower income groups as the NRST would impose additional burdens on the people who could least afford to pay additional taxes; higher income groups would be financially constrained to a lesser extent. Logistically, a stand-alone NRST would not present much of an administrative burden to implement and could be modeled on existing excise tax arrangements. On the other hand, use of an NRST without any additional tax reform action is very likely to be politically unacceptable to stakeholders and politicians alike (Gale, 2006; Mitchell, 2005).

A combination of a flat-tax and NRST may be worth considering. This sort of an arrangement greatly simplifies the tax code while providing incentives to reduce

consumption of finite natural resources. Consumers who choose resource efficient goods or services would be rewarded with tax credits while those who choose resource laden goods and services will be taxed accordingly. A combined flat-tax/NRST provides much more equity than the current system as lower income groups would be subject to a “negative tax” and would receive a tax credit that would supplement their income and help offset NRST cost. Moreover, a simpler tax code devoid of loopholes, deductions, and government subsidies would levy fairer and more consistent taxes on people earning higher incomes (Hall, 1996). Such a policy has the potential to modify consumer behavior by making people more mindful of their impact on the environment as well as altering traditional beliefs about the six problems discussed in the beginning of this report. A simpler tax code would offer much greater ease of administration and would lessen the chance of fraud and abuse (Gale, 2001). It is very likely, however, that this policy option would be politically unacceptable unless the merits of what it can achieve are strongly conveyed to American voters via an affirmation by the current Administration that it is committed to resolving these very difficult problems (Mitchell, 2005).

The following matrix (Table 3) discusses three policy options: the status quo, in which existing systems are left in place; introduction of a national retail sales tax (NRST); and finally, a combined NRST and “flat tax.” These three policy options are weighted against five criteria for measurement: equity, net benefit to society, efficiency, administrative ease, and political acceptability.

Table 3: Three policy options weighted against five criteria for measurement

Policy Alternative	Status Quo	NRST Alone	NRST/Flat Tax
Equity	Low: Not equitable – favors high income groups	Low: Not equitable – greater impact on lower income groups	High: Improved equity – tax breaks to lower income groups; resource reduction incentives
Net Benefit	Low: Six problems remain <ul style="list-style-type: none"> - Environmental damage - Unbridled consumerism - Housing - Failure of social safety nets - Transportation - Suburbia in decline 	Medium: Would reduce resource consumption	High: Would reduce resource consumption and provide a means to fund resolution of other problems
Efficiency	Low: Complex, burdensome system that has not addressed the six problems in a meaningful way	High: Simple and straightforward structure that would reduce resource consumption	High: Straight forward structure to address all six problems
Administrative Ease	Low: Complex	Medium: NRST Low: Existing tax structure	High: Simple and straightforward structure
Political Acceptability	Low: Current system is unpopular	Low: NRST alone would be viewed as oppressive	Low/Medium: Strong political will required to implement; could be viewed as socialist

Another way to look at this would be to analyze each of the six problems using the three suggested policy alternatives.

Table 4: Three policy options weighted against six specific problem areas

Policy Alternative	Status Quo	NRST Alone	NRST/Flat Tax
Resource Consumption	Low: Little or no incentives to reduce resource consumption	High: Would reduce resource consumption	High: Would reduce resource consumption
Housing	Low: Current system subsidizes higher income groups; little or no investment in government sponsored housing	Low/Medium: NRST would provide additional funding for housing	Medium/High: Provides additional funding for government sponsored housing; would eliminate housing subsidies for higher income groups
Social Safety Nets	Low: Social Security and Medicare are failing	Low/Medium: NRST would provide additional funding for social programs	High: Provides funding for social programs
Healthcare	Low: System is failing – US spends more than EU countries with less return	Low/Medium: NRST would provide additional funding for healthcare	High: Potential to provide most funding for healthcare
Transportation	Low: Current system depends on private automobile; public transportation system is poor.	Medium: NRST provides incentive to build and use public transportation	High: Potential to provide most funding for transportation; diminished reliance on private auto
Suburbia in Decline	Low: System is failing	Medium: NRST provides infrastructure funding	High: Potential to provide most funding for infrastructure

Recommendations

Although use of a combined NRST/flat-tax will not initially be palatable to many Americans, it seems that it may be worth consideration, particularly if one assumes a long-term view. If such an arrangement is put into place, it has the potential to fund solutions to a number of difficult issues that have only worsened over the past three decades. In reality, a reformed tax structure will not increase revenue to the government but would rather rearrange and better prioritize spending by American consumers and the government. The truth of the matter is that we have sufficient funding; the problem is in how we use it. A combined NRST/flat-tax would force consumers to think about what they are consuming and why they are consuming it; the NRST would serve as a constant reminder of this. A flat-tax structure devoid of deductions and loopholes would be met with strong opposition by upper income groups and it would take strong and courageous leadership of the Obama administration to shepherd the process along. However, as in Europe, perhaps implementation could come in phases over a long period of time to allow Americans to become accustomed to this new way of thinking (Beatley, 2000). Decisions about land use, the environment, social programs, and healthcare could be modeled on the European experience which, although not

perfect, appears to be a better system than ours (Beatley, 2001; Lambreau et al., 2005). Like their European counterparts, it is possible for all Americans to live in decent housing, even housing sponsored by the government. If the political will prevails, it is entirely possible that public transportation could ultimately overtake use of the private automobile, and American social programs and healthcare could one day be as successful as those in Europe.

References

- Andrews, E. and Uchitelle, L. (2008, February 22). Rescues for Homeowners in Debt Weighed. *New York Times*.
- Beatley, T. (2000). *Green Urbanism: Learning from European Cities*. Washington: Island Press.
- Bickley, J. (2006, August). Value-Added Tax: A New U.S. Revenue Source?. Congressional Research Service: Order Code RL33619 Retrieved April 1, 2008, from EBSCOhost database.
- California Department of Energy. (2008). Retrieved February 18, 2008, from http://www.energy.ca.gov/gasoline/statistics/gasoline_cpi_adjusted.html.
- City Mayors. (n.d.). Development. Retrieved February 24, 2008, from www.citymayors.com/development/infrastructure
- City of Fremont. (2008, January 22). Legislative Policy and Funding Priorities. City Council Report. 2.5.
- Economic Policy Institute. (n.d.). Retrieved November, 2007, from www.epi.org.
- Forecast.org. (n.d.). Retrieved February 22, 2008, from <http://forecasts.org/info/inflation.htm>
- Gale, W. (2001, July 17). Tax Simplification: Issues and Options. Testimony submitted to the U.S. House of Representatives. Retrieved April 15, 2008, from EBSCOhost database.
- Gottdiener, M. (1994). *The Restructuring of Settlement Space: 1960 to 1990*. The New Urban Sociology (Chapter 5). New York: McGraw-Hill.
- Hall, R. (1996, April). Flatland 1996: It is Well-Tested and Fairer than You Think. *ABA Journal*. Retrieved April 1, 2008, from EBSCOhost database.
- Lambreau, J, Posesta, J. and Shaw, T. (2005). Change in Challenging Times: A Plan For Extending And Improving Health Coverage. *Health Affairs: 2005*. Retrieved April 10, 2008, from EBSCOhost database
- Leinberger, C. (2008, March). The Next Slum. *The Atlantic*.
- Lewis, T. (1997). *A Grand Plan. Divided Highways: Building the Interstate Highways, Transforming American Life*. New York: Viking
- Mitchell, D. (2005, May). Beware the Value-Added Tax. *The Heritage Foundation*. Volume 1852, pp. 1 - 11. Retrieved April 15, 2008, from EBSCOhost database.
- National Association of Home Builders (NAHB). (2006, March). Housing Facts, Figures and Trends for March 2006. Retrieved February 24, 2008, from www.nahb.org
- U.S. Census. (2008) Median and Average Family Income by Family Size, U.S., 1947-2001. Retrieved February 24, 2008, from www.census.gov
- U.S. Census. (2007). Statistical Abstract 2007. Retrieved November, 2007, from www.census.gov
- White House. (2008). Social Security. Retrieved February 15, 2008, from www.whitehouse.gov/infocus/social-security
- World Health Organization (WHO). (2007). Retrieved January, 2007, from www.who.int



Examining New (Sub)Urbanism

Mike Brestel

Editors' Introduction

Much discussion in the urban planning world revolves around how to design communities that are cohesive and livable. “New Urbanism” is commonly offered as a means to accomplish this goal; traditional design practices are incorporated with cutting-edge community planning techniques to create spaces that resemble towns of yore, yet maintain 21st century functionality. Despite its many positive aspects, New Urbanism manages to inspire a good deal of vitriol, particularly amongst those who view it as something other than simply a design philosophy. In the following article, author Mike Brestel attempts to deduce whether such criticisms are grounded in fact or based on ideological bias. Brestel writes with a social scientist’s knack for uncovering truth combined with an incisive wit reminiscent of many great urban critics.

Introduction

New urbanism is currently the city planning technique du jour. For those interested in community design it is hard to escape the voluminous praise heaped upon this design philosophy. But inevitably one question must be asked: *Is this admiration well deserved?* It is the intent of this paper to investigate and provide some answers to that question.

For the informational purposes of this article there is no intent to define New Urbanism in depth or provide sublime examples, but rather to approach it from a more abstract angle. Anyone familiar with city planning is probably already aware of the tenets of New Urbanism and this paper assumes the prospective reader possesses reasonable knowledge of the subject. Generally, we tend to hear unrelenting praise about New Urbanism and how it can create a wonderful community. However, there are critics of this planning technique; this endeavor will focus on and analyze these various criticisms. This disapproval comes from a variety sources, including well-known planning web sites, famous social scientists, and lesser-known ideologues. An attempt will also be made to research and discuss the following components related to New Urbanism: elitism and exclusivity of New Urbanist developments; what effect—if any—New Urbanism has on crime rates; environmental determinism; and how this design philosophy is being integrated into the profession of architecture via mandatory testing. Lastly, this paper will also discuss esoteric items such as whether or not New Urbanism contributes to social capital, and what relationship might New Urbanism have with the Christian faith.

Nostalgia, Elitism, and Exclusivity

As previously noted, New Urbanism is most often discussed in a positive light, but it is interesting to note that even renowned planning entities provide some alternative viewpoints. An excellent example is provided in an op-ed article posted on the well-known planning website, Planetizen.com. Author Chris DeWolf also discusses the shortcomings of New Urbanism in the provocatively titled article, *Why New Urbanism Fails* (2002). This article presents one of the most widely repeated criticisms typically heard about New Urbanism: that these towns are basically a false façade pretending to be something they are not. DeWolf (2002) notes that, “They are feel-good faux-towns, cosy (sic) and nostalgic developments which feign urbanity without making the effort to actually be urban” (para. 2). It is difficult to not concede that the “feeling” of old town community in New Urbanist developments is extremely contrived, especially when considering well-known examples such as Celebration, Florida. In this particular community—created by the Disney Corporation—old town nostalgia is imbued via strict architectural

controls that promote the aesthetics of a small 1950's town reminiscent of Mayberry (seen on television in *The Andy Griffith Show*).

There is one particularly salient comment in DeWolf's (2002) article: "[...] the popularity of the new urbanism [...] has led us to neglect the old urbanism. What is wrong with the organic neighborhoods that fill in our cities?" (para. 8). One can imagine what Jane Jacobs might have to say about this given her propensity for promoting the positive aspects of inner cities. While it is arguably undeniable that New Urbanism promotes nostalgia, some purport that this design philosophy also promotes elitism and projects impressions of inequality.

Some critics of New Urbanism claim that the typical design style employed—Cape Cod/New England type architecture with white picket fences—sends not-so-subtle elitist messages about who is welcome into the neighborhood. Obvious examples of this aesthetic include Seaside, Florida, as well as the aforementioned Celebration. Neil Smith discusses such notions of elitism in *Which New Urbanism? The Revanchist 90s* (1999). In his discussion, Smith attempts to denigrate the tenets of New Urbanism as being vehicles for exclusionary practices; he notes that the style codified in New Urbanist practice harkens to a past where racism and inequality were commonplace and that this message is still being conveyed in contemporary developments (1999). While his writing style is heavy on over-the-top rhetoric (e.g. Mike Davis) his logic regarding the subconscious messages the developments impart is undeniable. Smith takes particular aim at Celebration, Florida, and laments that it "exudes [...] elitism cloaked in populist garments," while the Seaside design style "[...] speaks the exclusionary message with delicate, handkerchiefed smugness" (1999, p. 105). In another article, *A Remedy for the Rootlessness of Modern Suburban Life?* (1998), author Sarah Boxer (1998) notes that in Kentlands (a New Urbanist community in Gaithersburg, Maryland,) every entrance into the town is framed by decorative gates, and that the gate "[...] evokes the same associations as a real gate. It's a subtle form of 'keep out'" (para. 23). This technique of framing an entrance to a community is not uncommon and it is typically seen in more upscale towns such as Hillsborough, California. (See picture next page.) While the gate does not physically keep out undesirables, the message being sent to visitors is undeniable: *this is an exclusive community*.

New Urbanism and Political Ideologies

Much of the criticisms encountered regarding New Urbanism seem to reflect the particular author's political ideology—generally one of conservative, free-market economics. Some criticisms seem outright laughable. Some prime examples are those presented on the planning website *planningWiki*. Here, the entry on New Urbanism states that, "[...] some members of the right wing view



Hillsborough, California. Gates as subconscious arbiters of those who enter. (Source: author)

new urbanism as a collectivist plot designed to rob Americans of their civil freedoms, property rights and free-flowing traffic” (2008, Criticisms heading, para. 1). Arguably, the realization of “free-flowing traffic” is ultimately a futile endeavor; it has been established that more roads constructed inevitably leads to more traffic, a harmful cycle that has high societal costs such as increased noise and air pollution. In addition, it is difficult to imagine that any objective reader could not find this criticism on *planningWiki* utterly ridiculous.

This bombastic proclamation was extrapolated from an interview article in the free market, pro-capitalism magazine, *Reason*. Titled *Planned Obsolescence*, the article puts forth the theory that sprawl is good because market forces demand it. The author mentions New Urbanists in Portland, Oregon, and asks, “Is putting every decision about painting your roof before a plebiscite the way people really want to live?” (Moore, 1998, para. 37). Answering this question is anti New Urbanist academic Peter Gordon, who replies, “that [New Urbanism] scares off a lot of people because they fear that their own property rights are up for grabs” (Moore, 1998, para. 38). This appears to be a disingenuous answer in that restrictions on subjective aesthetics are not *generally* perceived as overly controversial since they tend to protect property values—a goal near and dear to the hearts of free-market capitalists. It seems astonishing that a design philosophy that promotes idealistic concepts such as increased density and improved design aesthetics could be construed as infringing upon personal freedoms and property rights. Yet that is exactly what all of the aforementioned individuals allege, making clear the notion that New Urbanism probably offends their personal ideologies more than actually impinging upon their individual rights.

New Urbanism and Crime

One of the most interesting as well as provocative criticisms of New Urbanism is that it is “crimogenic,” or in layman’s terms, it is conducive to crime. In the article *Crime Friendly Neighborhoods* (2005), authors Stephen Towne and Randal

O'Toole purport that planners of New Urbanist developments choose "openness" and "accessibility" over safety of residents. To prove this point they began with an example of how crime increased due to a pedestrian connection between a cul-de-sac and an adjacent mall parking lot. According to Towne and O'Toole (2005), "during the next six months, a neighborhood that had been virtually crime free saw its burglary rate rise to 14 times the national rate, with matching increases in overall crime, including arson, assault, and antisocial behavior" (para. 3). It seems to stretch the limits of imagination to attribute arson, assault, and antisocial behavior to a pedestrian connection. The credibility of Town and O'Toole's assertions must be questioned given that they are making connections between two disparate notions: pedestrian access and social maladies. It appears as though the authors' personal biases have trumped all common sense. They never explain precisely how pedestrian access promoted these crimes; rather, they simply correlate increased crime statistics without properly delineating the cause and effect.

Interestingly, Town and O'Toole's article on crime attempts to use Jane Jacobs work as rationale for anti-New Urbanism sentiment. Jacobs is well known for promoting mixed-use zoning within residential neighborhoods because it tends to increase the amount of pedestrian traffic due to people patronizing local businesses. Jacobs purports that this increase in pedestrian traffic creates safer neighborhoods by making the area less desirable to criminals since there will inevitably be more witnesses to their illegal activities (Jacobs, 1992). But according to Town and O'Toole (2005), Jane Jacobs also stated, "'to try to understand towns in terms of the cities will only compound confusion'" (Eyes on the Street section, para. 6), and therefore, attempting to apply small-town techniques, such as New Urbanism or traditional neighborhood design (TND) to community design is inherently bad planning. Town and O'Toole (2005) also go on to note: "Jacobs claims were based solely on qualitative observations, not on any actual crime data" (The Overselling of New Urbanism section, para. 9). While it is true that quantitative measures provide concrete and tangible information, qualitative measures should not be dismissed so easily. In the article *Broken Windows* (2003), authors James Wilson and George Kelling discuss the importance of community inhabitants' perceptions of crime—a qualitative measure—contrasted with actual statistics. They give equal significance to residents "feelings" about crime as they do actual crime numbers, noting that even as the occurrence of crime is level or increasing, the perception that crime is reduced can lead to safer neighborhoods (Wilson and Kelling, 2003). This is due in part to the fact that people are more apt to socialize in the neighborhood, and that the absence of people using the streets undercuts perceptions of safety, which ultimately leads to a malevolent cycle. If the streets 'feel' unsafe less people will use them, the less streets are used the more unsafe they become (Duany, Plater-Zyberk, and Speck, 1980). Clearly, there is

some disconnect between Town and O’Toole’s assertions regarding Jane Jacobs and mixed-use zoning. They take one sentence—out of context—from Jacobs book and use it to dismiss entirely the advantages of mixed-use zoning. This conclusion is arrived at despite Jacobs’ writings to the contrary, as well as much discussion provided by other respected city-planning authorities.

Town and O’Toole (2005) also discuss the theory of *Defensible Spaces* (1973) in an attempt to prove their point. Much of their argument is quite misleading; for example, they delineate how *Defensible Spaces* promoted creating cul-de-sacs as a crime prevention device, and therefore breaching these cul-de-sacs will inevitably lead to an increase in crime (Town and O’Toole, 2005). While it is true that Oscar Newman’s *Defensible Spaces* (1973) promoted cul-de-sacs, these dead ends were created simply by installing a large gate that only inhibited vehicular access and did not prohibit pedestrian access. Ironically, allowing pedestrian access is supposedly what increased the crime rate in the first example! Town and O’Toole also claim, “[...] Newman found, mixed uses ‘generate high crime and vandalism rates, and housing units next to commercial areas suffer proportionally higher crime rates’ “ (2005, *Defensible Spaces* section, para. 10). This finding is questionable in that previous research into *Defensible Spaces* did not reveal any tangible discussions regarding mixed-use zoning. Upon further investigation into Town and O’Toole’s claim, another interesting article on Planetizen.com, *Crime and Urban Design: Oscar Newman 36 Years Later* (2008), by Michael Lewyn, was found that addressed this very issue. According to Lewyn (2008), O’Toole uses Newman’s commentary regarding “hamburger joints” as rationale for stating that mixed-use zoning increases crime. In *Defensible Spaces*, Newman (1973) notes that directly across the street from hamburger joints the crime rate is statistically higher than in other areas. But as Lewyn (2008) notes, O’Toole fails to consider the fact that hamburger joints attract teenagers—not older persons—and this demographic is (generally) more inclined to commit crime, therefore the mixed-use extrapolation is very misleading. Once again it appears as though Town and O’Toole have used quotes from New Urbanist proponents out of context to unfairly denigrate this design philosophy. Stating that mixed-use zoning tends to promote crime without including some historical precedent, or providing verifiable statistics, inevitably leads to questions about the validity of their discourse.

Ironically, two of the originators of New Urbanism, Andres Duany and Elizabeth Plater-Zyberk, use Oscar Newman’s work to *defend* their position. In their seminal book, *Suburban Nation: the Rise of Sprawl and the Decline of the American Dream*, the authors discuss how the tenets of New Urbanism incorporate many of Newman’s ideas, including designing and locating buildings such that they are situated close to the sidewalk, with windows prominently facing the street (Duany, Plater-Zyberk, and Speck, 1980). In yet another twist of irony, the authors note

that mixed-use zoning actually contributes to a reduction in crime because the area is in use during various times night and day, whereas solely commercial areas tend to be deserted at night, which invites criminal behavior (Duany, Plater-Zyberk, and Speck, 1980).

As noted, much criticism of New Urbanism is heard from the politically conservative types, but there are notable exceptions. At least one high-profile exception is Karl Zinsmeister. Here we have a noted conservative who writes for the right-wing American Enterprise Institute, as well as being an appointee of the former Bush administration. A cursory investigation into his background reveals definite far-right leaning ideological tendencies. Therefore, it is surprising that he takes a decidedly anti-suburban stance, but the *New York Times* quotes him as saying that, “ [...] suburbia is actually a fairly radical social experiment,” one that can be linked to “the disappearance of family time, the weakening of generational links [...] the anonymity of community life [...] [and] the decline of civic action [...]’ ” (quoted in Boxer, 2008, para. 1). One must consider that this is a strong condemnation of suburban planning, especially coming from someone whose self-professed ideology generally extols the virtues of suburban sprawl. It is indeed quite refreshing to hear a noted conservative argue that some of the tenets of low density neighborhood design are not always conducive to a high-quality level of living.

New Urbanism, Social Capital, and Environmental Determinism

One of the more intriguing, albeit esoteric, aspects relating to New Urbanism research is how this design philosophy can generate so-called “social capital,” which is defined as the bonds of familiarity and trust that can grow between people within small groups and larger communities (Podobnik, 2002). The obscure concept of social capital gained prominence and credibility upon publication of Robert Putnam’s book, *Bowling Alone: America’s Declining Social Capital* (2002). This theory correlates with the tenets of New Urbanism, and Bruce Podobnik investigates the connection in an article titled *New Urbanism and the Generation of Social Capital: Evidence from Orenco Station* (2002). For this analysis, the author—a professor at Lewis and Clark College in Oregon—created a survey questionnaire (the Portland Neighborhood Survey) to be implemented in three different neighborhoods. The first neighborhood, Orenco Station, is a New Urbanist development. The second neighborhood is a long-established and ethnically diverse section of downtown Northeast Portland, while the third neighborhood is considered to be a traditional suburban location in southwestern Portland. Podobnik selected these neighborhoods due to their stark differences in terms of demographics (e.g., income, race, etc.). The survey asked qualitative questions, such as: “Are people here more or less friendly than where you lived before? Is there more or less of a sense of community here than in other Portland

neighborhoods?” There were also quantitative questions that asked respondents to numerically rate certain aspects including neighborhood design, proximity to stores and businesses in the local area, as well as location within the wider city.

The results were quite intriguing, and as Podobnik (2002) notes, “rather than being focused primarily on structured self protection activities such as anticrime and homeowners associations, group activities in Orenco Station appear to be geared more toward socializing for its own sake. This suggests, at least indirectly, that a higher level of trust and goodwill has been generated within this neighborhood than in the comparison communities” (p. 5). But as any competent researcher knows, one must be careful when surmising the existence of causal relationships, especially with something as subjective as neighborhood design and social relationships amongst the residents. Obviously, such a conclusion treads into environmental determinism territory, which is, depending upon the viewer’s perception, highly controversial and subjective. However, I would argue that it seems illogical to deny *any* correlation between a person’s environment and how they interact socially. Entertaining the validity of environmental determinism need not be based on simple black-and-white conclusions (i.e. the premise is either completely wrong or completely correct). This deterministic theory is subjective and therefore inherently has a certain amount of “gray” area. Podobnik plans future surveys in the same neighborhoods and it will be quite interesting to see if any of the social capital statistics change over time.

Other items revealed by the survey results were rather disheartening. For example, the survey found that some residents of Orenco Station had become exclusionary in their attitudes. This came into view when some respondents openly stated their opposition to persons not living in the neighborhood using their public parks. Another aspect regarding Orenco Station that didn’t bode well for its inhabitants was the survey results regarding ethnic integration. As noted by Podobnik (2002):

In Orenco Station, 65% of respondents replied that they were happy with the existing level of diversity (a time when the neighborhood was 95% white). Only about a third of Orenco Station residents stated that they wished their community were more diverse. In contrast, in the more typical (and majority white) suburban community of Southwest Portland, 52% of residents stated that they wished their neighborhood were more diverse. (p.11)

Another problem—though one not exclusive to New Urbanist communities—is mixed income integration. Survey results also revealed Orenco Station residents’ strong opposition to the introduction of lower income housing units. As poignantly noted in a PBS.org article on New Urbanism, “diversity is perhaps the most challenging aspect of New Urbanism but it is essential to its philosophy” (Calthorpe, n.d., para. 5). It is obvious that diversity, whether in

terms of income or ethnicity, is something that needs to be addressed by New Urbanist proponents in order to realize the full potential of this design philosophy. Ultimately, the question is one of how to accomplish this goal. Exclusionary attitudes, especially those regarding race, are inevitably best addressed by societal attitude changes realized via public outreach and education. There are policy mechanisms that can and must be implemented in order to achieve mixed income integration. For example, all New Urbanist projects should be required to incorporate inclusionary zoning, where a predetermined amount of low-income housing is set aside within the development. Inevitably, the conservative pro-free-market types will complain that the low income units will be subsidized by the standard income units; this is true, but is the alternative of no income integration really better? I would suggest that inclusionary zoning should be required in all New Urbanist projects until a better method for income integration is conceived.

New Urbanism and Christianity

During the course of this investigation, a book by Eric Jacobson was encountered that is intriguingly titled Sidewalks in the Kingdom: New Urbanism and the Christian Faith (2003). My hopes were high that I would be able to provide some enlightening commentary on the relationship between religion and New Urbanism, but unfortunately the book is mostly comprised of short stories about the author's perceptions of his neighborhood contrasted with Biblical verses. However, there are a few interesting chapters; one in particular addresses the issue of loneliness in the suburbs. Here Jacobson (2003) poignantly discusses how “we seem to have forgotten the value of public space in this country,” as well as the idea that auto dependence has isolated us from our neighbors (p. 79). He goes on to note, “As Christians, however, we need to acknowledge that none of these values—freedom, independence, power, or privacy—were held in very high regard in the Bible” (Jacobsen, 2003 p. 80).

New Urbanism's Influence on Architectural Education

The design principles of New Urbanism are even making their way into architectural registration exams (ARE). Tests now include small graphics that portray four different site planning solutions, and applicants must choose the correct solution based upon their knowledge of New Urbanist design principles. I must question the validity of this approach. Does one really need to know that New Urbanism requires porches placed at the front of the home, garages facing a rear alley, and structures situated close to the property line in order to be considered a good architect? I would strongly suggest that the answer is a resounding “No.” Aspiring architects do not need intimate knowledge of New Urbanist principles to

be competent in the profession. Arguably, knowledge of local building and planning codes, possession of a strong design aesthetic, the capability to mediate between contractors and clients, and the ability to design within the constraints of a limited budget are all much more important to being a successful architect. I proclaim this based on actual experience within the architectural field for the last eight years. Also, consider that New Urbanist principles are not always easily implemented in real-world applications; in most instances, local planning “setback” rules restrict the placement of structures close to the front property line, and hiding the garage door, or moving the garage altogether, is often almost impossible due to site conditions. Therefore, requiring knowledge of New Urbanism is probably best left to architectural education and theory, but should be omitted altogether from the licensing exams.

Conclusion:

In the end I must confess that I found the majority of criticisms of New Urbanist principles to be lacking in substance. Though much of the discourse was certainly interesting to read, it generally seemed to lack a certain amount of credibility—from those aligned with both the political left and right. This endeavor began with discussions regarding the idea that New Urbanism presents false façades and sends elitist messages. This may be partially true, but if one looks hard enough for something they will usually find it. Context is everything, and just because Cape Cod architecture, with white picket fences and a storybook aesthetic, was commonplace during slavery does not mean that those who choose to live in such environments still hold those views today. After all, what particular style of architecture cannot be considered to be false or somehow inherently sending subtle messages about its inhabitants? If a client asks someone to design them a house in a Louisiana plantation style this certainly sends a message about the individual’s aesthetic tastes, but obviously does not imply outright racism; yet, Neil Smith’s bombastic rhetoric would have you believe that architectural style inherently connotes unsavory attributes on the part of the inhabitants.

Much time was devoted to analyzing Town and O’Toole’s assertions regarding New Urbanism, and ultimately I found all of their claims to be dubious at best. Consider, for example, how they took both Oscar Newman’s and Jane Jacobs’ comments out of context. In an attempt to bolster their contention that New Urbanism is conducive to crime they mischaracterized other peoples work, thereby causing any informed and objective reader to doubt the veracity of Town and O’Toole’s commentary. Their attempts at implying New Urbanist principles deny individual rights are so patently false that it is hard not to believe that their pro-suburbia ideology supersedes their objectivity as critics.

The research on social capital created by New Urbanist neighborhoods

is truly interesting and definitely sheds a predominantly positive light on this design philosophy. More community surveys should be conducted to confirm that there is a causal relationship between New Urbanism and increases in social capital. However, there is no doubt that New Urbanist neighborhoods often produce feelings of exclusivity. Residents indeed choose to live in such developments based partly upon their own personal ideology. This inevitably leads to a certain “we versus them” perception. Desires for exclusivity are in no way unique to New Urbanist developments; minimizing of this mentality is part of a larger process of social change to be addressed via increased race and income integration, possibly induced through governmental intervention.

Finally, knowledge about the implementation of New Urbanist principles should not be codified via architectural licensing tests. The decision of whether or not to incorporate New Urbanist techniques into a single home, or an overall community design, should be based upon real world factors such as site suitability and cost analysis. It should not be based upon the fact that New Urbanism is currently extolled as virtuous and cutting edge.

In retrospect, there is one positive aspect to all of the criticisms levied upon New Urbanist principles: proponents of this philosophy are forced to substantiate their claims, and if their assertions are proven to be correct the design philosophy will surely propagate and become more ‘mainstream’ over time.

References

- Boxer, S. (1998, August 1). *A Remedy for the Rootlessness of Modern Suburban Life?* Retrieved November 25, 2008, from <http://query.nytimes.com/gst/fullpage.html?res=9405EFDA1038F932A3575BC0A96E958260>
- Calthorpe, P. (n. d.). *Not Perfect, But Improving*. Retrieved November 29, 2008 from <http://www.pbs.org/newshour/newurbanism/calthorpe.html>
- DeWolf, C. (2002). *Why New Urbanism Fails*. Retrieved November 11, 2008, from <http://www.planetizen.com/news/node/42.html>
- Duany, A., Plater-Zyberk, E., Speck, J. (1980). *Suburban Nation: the Rise of Sprawl and the Decline of the American Dream*. New York: North Point Press.
- Goldstein, D. (1996). *Making Housing More Affordable: Correcting Misplaced Incentives in the Lending System*. Retrieved November 25, 2008, from http://www.smartgrowth.org/library/housing_afford_goldstein.html
- Jacobsen, E. (2003). *Sidewalks in the Kingdom: New Urbanism and the Christian Faith*. Grand rapids, Michigan: Brazos Press.
- Lewyn, M. (2008, August). *Crime and urban design: Oscar Newman 36 years later*. Retrieved November 11, 2008, from <http://www.planetizen.com/node/34530>
- Moore, A. (1998). *Planned Obsolescence*. Retrieved November 12, 2008, from <http://www.reason.com/news/show/30660.html>
- Podobnik, B. (2002). *New Urbanism and the Generation of Social Capital: Evidence from Orenco Station*. Retrieved November 14, 2008, from www.lclark.edu/~podobnik/orenco02.pdf
- PlanningWiki. (n.d.). New urbanism. Retrieved November 15, 2008, from http://planningwiki.cyburia.org/New_urbanism
- Smith, N. (1999). Which New Urbanism? The Revanchist 90's. *Perspecta*, 30, 98-105.
- Town, S. O'Toole, R. (2005, February). Crime Friendly Neighborhoods. Retrieved November 10, 2008, from <http://www.reason.com/news/show/36489.html>



Modernist and Post-Modernist Urban Planning Theories

Marie Angel

Editors' Introduction

Sitting at the juncture of an urban future with two distinct possibilities, Marie Angel's informative and poignant essay summarizes key eras of urban planning and explains to us how we have arrived at where we are today. From the birth of contemporary planning in the Modernist era, to the not yet well-understood Post-Modernist movement, the author utilizes material from famous planners including Le Corbusier and Rem Koolhaas. In addition to providing an exemplary timeline of the history of urban planning as a field, the author accompanies each urban planning period with a well-thought out critique that helps the reader to understand how formerly obscure ideas are now commonplace amongst current planners.

Introduction

Urban planning theories have changed drastically over the course of the past sixty years. Though cities have existed throughout much of civilization, it was not until the 20th century that urban planning would be recognized as a legitimate field of study and work. In the United States this occurred in 1909 with the introduction of new college courses, and later on, professional associations, degree programs, and planning legislation (Hall, 2001). During the same year, Harvard created a planning course; however, it was not until the 1930s that other schools followed suit. In spite of this, the field did not become established in the United States until around 1955, though at the time its main focus was on physical space and planning in a broad sense (Hall, 2001). Also at that time, the field split into two factions: theory and real-world planning (Hall, 2001).

By the 1960s, the field of urban planning was evolving. The Post Modern period lasted roughly from the 1960s to the 1990s, and during this time urban planning became a more established field. However, there were still many problems with urban planning at this point, as Nan Ellin (1996) points out in her article, “Themes of Postmodern Urbanism.” In the 1990s, a new school of urban planning, New Urbanism, was founded. Although hailed as a solution to many urban issues, there are a multitude of faults with this notion. Currently, there are many new theories regarding urban planning, such as Rem Koolhaas’ (1994) idea of the “Generic City,” which is a city with no history that represents general urbanization. The field of urban planning has gone through many periods and has had many tribulations, but perhaps a new era is emerging as represented in Koolhaas’ ideas. City planners of the past did not appreciate the strong connection between physical spaces and the socio-cultural space in a city, and current planners are only now beginning to understand and acknowledge this complex relationship.

Modernism

The period of Modernism lasted in the United States from roughly the 1910s to the early 1960s. Modernism was characterized by a shift in cultural movements and a rejection of tradition, which resulted in changes in the arts, architecture, design, and many other cultural aspects. In terms of architecture and city planning, Modernism sought to create clean, simplified forms using innovative materials. In the early era of citywide planning in the 1950s, the majority of city planners were actually architects who knew little about urban planning on a large scale. The concept of city planning was a new one, and this prevailing perception of city planning lasted before and during World War II (Taylor, 1998). For hundreds of years up until that point there were hardly any significant changes to the theory of city planning. Urban planning was considered a physical exercise,

and no consideration was given to the social and cultural aspects of city life. Thus, city planning was viewed as an extension of architecture and engineering, and as such, an occupation that would be best undertaken by architects (Taylor, 1998).

Modernism Critique

In order to fully understand the problems with the Modernist way of thinking an explanation needs to be further elucidated. There are three main components of the post-war notion of planning: first of all, city planning was solely focused on physical space; second is the notion that design was central to city planning; and finally, there was the postulation that city planning involved the production of “master” plans, as architecture and engineering do, using the same measure of meticulousness to show urban forms and land uses (Taylor, 1998). In the post-war period, there was discussion of city-wide urban planning. The state was getting more involved in city planning and playing a more active role in “the managing and planning of social and economic affairs generally as part of the changed political environment” (Taylor, 1998, p. 5). The question of what distinguishes city planning from other types of planning arose. The answer at the time was that since city planning was connected with the physical realm, and not the economic and social realms, it was best described as physical planning (Taylor, 1998). There is a very real connection between tangible spaces and objects and the social and cultural aspects of a city. However, Modernist city planners did not realize this relationship and did not recognize the effects of physical space on the population occupying these places.

The main difference between urban design and urban planning is that urban design concentrates on the material environment and how to improve it, whereas urban planning essentially joins together land-use and transportation planning to effectively utilize space. Additionally, how a city “functioned” was an integral part of urban planning. In the age of “form follows function” and Modernist functional architecture, urban designers tried to design practical towns (Taylor, 1998). In order for cities to be successful, planners must take into account the design of cityscapes as a whole and not focus merely on single buildings. With the stress on design aspects of urban planning, emphasis on the aesthetic character of cities followed, which was intended to enhance the quality of environments (Taylor, 1998). Since city planning was seen as an application of planning a concrete location, the layout and form of buildings, land uses, and urban design played a key role in planning. Therefore, it is not surprising that urban planners at the time of the Modernism movement put a large emphasis on urban design. Modernists were interested in the design of groups of spaces and buildings, instead of the design of individual buildings (Taylor, 1998).

Given that urban planners practicing after World War II were mainly architects, it is reasonable that they viewed their job as creating blueprints for cities and regions. According to Peter Hall, “[t]he job of the planner was to make plans, to develop codes to enforce these plans, and then to enforce these codes; relevant planning knowledge was what was needed for that job [...]” (Hall, 2001, p. 343). Essentially, city planners made incredibly detailed plans and then wrote the necessary city codes to implement their plans. However, they did not consider how these plans would impinge on the population of the city. Additionally, these plans were incredibly meticulous to steer future development and to allocate sites for specific uses. In principle, these plans would show the size and form of a city at a certain date in the future when the plan would come to fruition, though only modest thought was given to the problems of executing the plans (Taylor, 1998). The “master” plan nature of cities is well exemplified by the many planned sub-division communities that were built in the 1940s and 1950s. Many of these plans have not been successful due to lack to access to public transportation, jobs, and social and commercial activities (Taylor, 1998). In effect, during this time there “was some theory in planning, but there was no theory of planning” (Hall, 2001, p. 343).

Le Corbusier’s “A Contemporary City of Three Million Inhabitants”

A prime example of a modernist city plan was Le Corbusier’s (1929) “A Contemporary City,” created in 1922. The plan for his city used a symmetrical grid pattern, with rows of identical, geometrical skyscrapers setting the stage for the modern-day office skyscraper set in park-like surroundings. This idea was Le Corbusier’s (1929) first complete plan for a city and it was dense, rational, and organized. This city was meant to usher in an era of social collectivism and order, rather than be a symbol of the past (Le Corbusier, 1929). The city was designed around function, efficiency, and production, while segregated based on class. The wealthy, elite class would live at the center of the city, with the wealthiest 400,000 – 600,000 people housed in twenty-four identical, 60-story skyscrapers constructed from glass and steel. This is a slight paradox: the idea that a city can be decongested by increasing density. The elite would be provided with services so that they would no longer have to cook, clean, or shop. Interestingly, the skyscrapers would occupy only 15 percent of the site, while 85 percent would be dedicated to open space. Le Corbusier (1929) considered the skyscraper as a vertical street. At the center of the city would be a large transportation center with multiple levels for buses and trains, a highway intersection, and an airport at the top. He set apart the pedestrian paths from the roadways and glorified the use of the automobile. Le Corbusier (1929) had less consideration for the working class,

as they would live in satellite cities away from the central city—similar to garden cities—and inhabit much more modest dwellings.

Le Corbusier's vision of a modern city was very innovative for its time. He intended to use new materials, such as glass curtain walls, concrete, and steel for the buildings skeletal support, which was a recent concept at the time. Additionally, his proposal for building high-rise residential towers to decongest city centers was quite visionary, as this is happening currently in many large urban centers. Le Corbusier also made mobility central to his design of the Radiant City, which is significant because residents and visitors must be able to move within city limits efficiently and effectively. He thought on a scale large enough for modern mega cities, such as Tokyo, New York, and London.

However, there are problems with his vision. His city plan left an abundance of dead space downtown and his building designs were inhumane and uninviting. Le Corbusier was very much opposed to spontaneity and wanted everything to be extremely ordered. He also did not leave much space for pedestrians; they essentially conceded their freedom of movement. In this type of city, one wonders what social interactions would be like with the lack of space for unpredictability, as well as the extreme geographical separation between the rich and the poor. Though Le Corbusier's ideas were radical at the time, they were also very out of touch with human behavior and exemplify how architect-planners were thinking during that period. Perhaps Le Corbusier's city plan is dehumanizing because it literally lacks the space for people to simply exist; surrounded by monolithic high-rises and freeways, people would feel trapped in the city.

Post-Modernism

In the 1960s, a new school of thought referred to as “Post-Modernism” emerged, lasting through the late 1990s. Post-Modernism was a reaction to the tenets of the previous Modernist movement. Post-Modernism was a cultural, intellectual, artistic, and architectural movement that sought a return to whimsy, irony, and humor, and specifically regarding architecture, a return to ornamentation. The Post-Modern city planning movement began with the idea of incorporating the “human component,” a notion that was largely ignored by Modernists. Post-Modernist architects sought a return to classical elements and added wit and satire to their designs. In terms of city planning, Post-Modernists acknowledged that the past must be revisited, but with some levels of irony (Dear, 2000). The Post-Modern city can be defined using three components. The first is historical eclecticism, meaning the invention of tradition by mimicking older forms. Secondly, the Post-Modern city is defined with the rise of multiculturalism. Finally, the city is defined by spectacle—the commercialization of the built environment.

In the 1960s, planners were still trying to cope with the demands of the increasing population as many soldiers had returned from World War II and consequently the “Baby Boom” ensued. The rapidity of urban development began to gather speed so quickly that the old methods of planning were becoming inefficient (Hall, 2001). As a result of this demand, the field of urban planning changed dramatically during this decade (Hall, 2001). “Systems” planning became popular with city planners, in which cities were viewed as intricate systems—undoubtedly encouraged by the advent of urban transportation planning and the computer (Hall, 2001). This type of plan was reminiscent of the “blueprint” plan of the Modernist period since it produced very inflexible proposals (Hall, 2001). Additionally during that period, there was a great deal of social unrest: the war in Vietnam, the civil-rights movement, and the campus free speech movement among others. As stated by Hall (2001), “[u]nderlying the general current of protest were three key themes, which proved fatal to the legitimacy of the systems planners” (p. 347). Firstly, the general public came to distrust “top-down” planning—no matter what the issue was (Hall, 2001). Furthermore, people became suspicious of the systems approach because it alluded to the military; they felt that planners used “pseudo-science and incomprehensible jargon” to hide their true intentions (Hall, 2001, p. 347). Lastly, the riots that raged through the country caused people to believe systems planning contributed to rising crime rates (Hall, 2001).

Post-Modernism Critique

Nan Ellin (1996) is an urban theorist who currently teaches at the School of Architecture and Landscape Architecture at Arizona State University. She defines “Post-Modern Urbanism” as relative to the previous Modernism movement. First, it seeks a return to historicism; second, a new emphasis on contextualism and regionalism; third, a renewed use of decoration and ornamentation; and fourth, an anti-utopian apoliticism that no longer seeks idyllic resolutions on a grand scale (Ellin, 1996). Ellin (1996) warns that Post-Modern Urbanism can easily devolve into kitsch and inauthenticity.

In her essay titled “Themes of Postmodern Urbanism,” Ellin (1996) presents a callous condemnation of the theories proposed by Post-Modernists. Post-Modernism was an attempt to connect architecture to the human through symbolism and contextualism. Ellin (1996) arranges her argument into six categories, four of which focus on significant forces of Post-Modern Urbanism and will be analyzed here: Form Follows Fiction, Form Follows Fear, Form Follows Finesse, and Form Follows Finance.

In the section Form Follows Fiction, Ellin (1996) writes about how Post-Modernists were captivated by the past. She states, “Although pre-modern

typologies and morphologies may appear quaint and may be fun to visit, they usually do not correspond to contemporary needs and tastes” (Ellin, 1996, p. 158). Post-Modernists used nostalgia, irony, and pretenses, and often idealized history, though this seldom correlated with present needs. People coveted effectiveness, expediency, and speed, all of which the Post-Modernists failed to provide. In their attempt to recreate the past and highlight aesthetics, Post-Modernists experimented with a multiplicity of styles, materials, and histories; however, this type of design did not address the contemporary needs of cities, nor did it acknowledge geography, context, or semiotics (Ellin, 1996). As a result, Post-Modernist design easily dissolved into sentimental, inauthentic tastelessness.

The segment *Form Follows Fear* discusses the decline of the public sphere and the escalation of privatization of public spaces; the proliferation of physical controls, such as policing and surveillance, is also emphasized (Ellin, 1996). The importance of owning a single family home became commonplace in the 1960s and 1970s; as a result, many single family homes were built along with private gated communities. These gated communities were generally comprised of a homogeneous social class, and this type of social segregation allowed for fear of “the other.” Also, public spaces were increasingly being monitored and controlled, effectively restricting who did not belong and who did; this monitoring also took place in corporate controlled spaces such as theme parks, malls, office parks, and new town developments (Ellin, 1996). While all this was happening, cities were in decline due to poor upkeep and neglect. The fear of the city and its subsequent deterioration stemmed from misconceptions of crime and fear of “the other.” Ellin (1996) states, “[c]ertainly gated communities, policing, and other surveillance systems, defensive architecture, and neo-traditional urbanism contribute to giving people a greater sense of security. But such settings no doubt also contribute to accentuating fear by increasing paranoia and distrust” (p. 177). Post-Modernism is seen as offering safety through the privatization of public spaces, but this can lead to a rise in suspicion of other people.

The account *Form Follows Finesse* contends with the notion of semiotics, aesthetics, and political impartiality (Ellin, 1996). Ellin (1996) argues the Post-Modern architects were elitist and narcissistic, engaging each other in “archi-speak” conversations. These architects created works for the sake of fame and to elevate their image, hence it is no wonder they have been commonly referred to as “starchitects.” She claims, “[...] postmodernism shifted to concerns that are less politically ambitious and more cosmetic and symbolic” (Ellin, 1996, p. 182). Instead of trying to solve urban problems, such as blight, crime, or poverty, they were more concerned with aesthetics. In fact, some of their projects actually made cities less affordable for the working class. While Modernism was not perfect by any means, Post-Modernism discarded arguments regarding social theory, politics, and political economy (Ellin, 1996).

Lastly, the section on Form Follows Finance implies that because of the apolitical position of many designers, Post-Modernism boosted corporate capitalist plans and exacerbated existing urban problems (Ellin, 1996). Post-Modernism may have also encouraged profit making and wasteful spending. This was evident in the increase in the abundance of urban redevelopments during the 1970s and 1980s in places such as the Western Addition in San Francisco. These redevelopments boasted malls, movie theaters, bookstores, museums, and various other forms of entertainment. Additionally, the salvation of older buildings and the prevalence of market places in urban redevelopments indicated a rise in the commercialization of urban spaces (Ellin, 1996).

New Urbanism: An Extension of Post-Modernism

New Urbanism is a theory and design practice that developed in the United States during the late 1970s and 1980s. The main goal of New Urbanism is to design human-scaled, mixed-use, and walkable towns with a range of housing types and jobs. New Urbanism mainly arose as a reaction against the suburban sprawl that became so prevalent during the Post-Modern period. It could be considered an extension of Post-Modernism, though it technically came after the Post-Modern period. In 1993, Peter Calthorpe, Andres Duany, and Elizabeth Plater-Zyberk established the Congress for the New Urbanism, a leading international organization endorsing New Urbanist ideals.

Among the key principles of public policy supported by the New Urbanists are the following: the promotion of neighborhoods that are diverse in terms of use—so called “mixed use”—and populations, including age, ethnicities, and incomes; designing communities with transportation alternatives, especially walking, cycling, and public transit, in order to reduce automobile dependence; and a strong emphasis on compactness and a preference for infill development (Gordon, 1998). New Urbanists give precedence to accessible public spaces such as parks and community institutions. They also prioritize the provision of affordable housing distributed throughout the metropolitan region as part of a jobs-housing balance strategy and stress the importance of farmland preservation and environmental conservation (Gordon, 1998). New Urbanists like to combine architectural and landscape design principles that pay attention to local history and cultural heritage and recognize the metropolitan region as the functional economic entity. While New Urbanism is a solid theory, in practice it has not worked as it is formulaic, poorly designed, and contributes to sprawl.

New Urbanism Critique

The main issue with New Urbanism is residential housing preferences in the United States. Regardless of income or race, 75-80 percent of households

would prefer to live in a single-family home with a private yard (Gordon, 1998). It may be possible through creative architectural and landscape design to produce high-density, single-family home developments in the suburbs that are compatible with these preferences. Yet, it is probably impossible at the tightly packed infill sites promoted by the New Urbanists (Gordon, 1998). If mixed-use, high-density developments were in demand by consumers then they would be built. There are many examples of community objections to high-density projects, usually on the basis that more traffic would be created.

New Urbanist communities are meant to be more than residential subdivisions. They plan to have shops, personal and consumer services, and workplace sites. Apart from the pedestrian opportunities objective, there is no particular reason why these communities need to create an employment base. The idea of “self containment” was one of the principles behind the creation of the British New Towns. In the British New Towns, employment centers did emerge, but they did not cater to the local population (Gordon, 1998). Thus, higher levels of commuting probably existed contrary to expectations of lower levels; this remains true today with the ascendance of automobile ownership. There is a stronger case for having retail and other consumer services provided locally, but even in this case facilities have developed gradually.

New Urbanists utilize old architectural traditions; the sense of nostalgia for the past prevails in their designs. Modernist urban planners and architects dislike New Urbanists because they aspire to recreate old styles of architecture, which modernists always staunchly avoided. New Urbanists believe that design affects social behavior; they argue that incorporating specific design elements, both in buildings as well as street layouts and neighborhood patterns, can generate a cooperative spirit as well as contribute to social interaction (Gordon, 1998). The environment that surrounds us does have a significant effect on our behavior. A major problem with New Urbanism is that from the street level New Urbanist communities hardly look different than standard suburban areas, with large, neo-traditional, single-family homes and winding streets. A more central problem is that the nostalgic longing for the archetypical small town of the past inspires many New Urbanist projects. They believe that by recreating its physical structure its social and civic behavior can be reconstructed as well (Gordon, 1998). New Urbanism believes that social problems can be corrected by architectural and design solutions rather than by economic development (Gordon, 1998). However, society, culture, and behavior have changed so much in recent decades that this idea will probably never be realized.

Post Post-Modernism

The notion of “Post Post-Modernism” is quite new and has not yet been

formally adopted by mainstream society. Nonetheless, since the late 1990s it has been acknowledged that we are no longer living in the Post-Modern period and it is safe to assume we are now living in the Post Post-Modern period. Due to the fact that this epoch is in such nascent stages, it is difficult to define and there is little consensus on what Post Post-Modern actually means. Post Post-Modernism, like Post-Modernism before it, will continue to build on critique and react to the perceived deficiencies of the movement which came before. Perhaps Post Post-Modernism will reject the irony and whimsy that was so predominant in the Post Modernism movement, or maybe it will take an entirely different turn; possibly the death of urban planning is imminent since planning will no longer change anything.

Rem Koolhaas and the “Generic City”

Rem Koolhaas, born in 1944 in Rotterdam, is a Post Post-Modernist architect and urban theorist. In 1995, Koolhaas and members from his architectural practice published the book *S, M, L, XL*. This book contains the essay “The Generic City” in which Koolhaas presents his views on the urban condition of the late 20th century and his visions for the future of cities. Koolhaas (1994) proposes that the contemporary city is “the generic city,” and that the urban is now so enveloping that historical ways of assessing cities are no longer relevant. Koolhaas encourages, to a certain extent, a reiteration of Modernism in his ideas. The “generic city” can be seen as an expression of general urbanization; it is modeled after the airport, which Koolhaas (1994) claims are all identical. Like airports, which are all modern in the same way, the “generic city” has no individuality, no past, no future, and no distinctions; this city is made up of roads, buildings, nature, and country (Koolhaas, 1994). Furthermore, the skyscraper is the ultimate sign of the city since towers can exist everywhere and anywhere and they are spaced so as to not interact. Once a building has served its purpose and is no longer useful it is torn down and new ones are constructed. Koolhaas’ (1994) “generic city” is a dislocation to the urban periphery, indistinct and stretched beyond recognition, big enough for everyone, and avoids urbanistic rules; the “generic city” is what remains after sizeable sections of urban life cross over into digital space. In the city of the future, density is on the decline (Koolhaas, 1994). The “generic city” has no layers, history, or identity, and is fractal and sporadic; it is also a city of many races and cultures (Koolhaas, 1994). The streets do not support activity and the public realm has been relinquished in favor of automobiles and highways. Thus, the condition of constantly being in-transit becomes widespread. In a scenario where there is no public realm one wonders what social and cultural interactions would be like. According to Koolhaas (1994),

in terms of culture within the “generic city,” “only the redundant counts” (p. 224). Within the “generic city,” urbanism does not exist; it is only a philosophy (Koolhaas, 1994). Perhaps such a philosophy has followed the shift in cultural space to the digital world, given its primacy over physical location and classical aesthetics.

Koolhaas (1994) asserts that people can reside in anything, anywhere, and that they can either be miserable or content, and architecture has nothing to do with this human state of mind. The “generic city”—the general urban condition—is happening everywhere, and since it is occurring in such large quantities, that it must indicate it is livable (Koolhaas, 1994). Also, Koolhaas (1994) states that people often complain about environments that are entirely similar; they say they want an environment that is singular, but maybe it is better to live somewhere with no character. The architecture of cities is given to the people and is often collective space, particularly at the large city scale; the people have to inhabit the space. Again, the social implications of architecture have to be taken into account. Koolhaas (1994) cites Singapore as an example of a “generic city”; over the past forty years, it has effectively removed any evidence of authenticity and is now a culture of the contemporary. Many Asian cities, Koolhaas (1994) claims, are now comprised of copies of Western architecture but must also deal with issues of density and layering.

Post Post-Modernism Critique

Overall, Koolhaas (1994) believes that the “generic city” means the end of urban planning, because at that point urban planning will no longer change anything. Ironically, he stresses that the practice of urban planning disappears at the moment of general urbanization; this happens because urbanism has been incapable of inventing and implementing at the scale demanded by urban growth and demographic change (Koolhaas, 1994). Thus, the “generic city” has architecture but not urbanism (Koolhaas, 1994).

Upon further analysis, it appears that Koolhaas does not fully understand the social aspects of city life, or maybe he just disregards it. Koolhaas does devote a portion of his essay to sociology; however, he puts forward a continual list of contradictions. Conceivably, he does this so he does not have to live up to detailed social burdens. He seems much more intrigued by large buildings and their interior complexity rather than other real world issues people may face while utilizing the spaces he has constructed. Since Koolhaas is not interested in the social aspect of urbanism, the correlation between the spatial and the social becomes ambiguous in his analysis.

Koolhaas appears more concerned with aesthetics than social aspects of urban life. He is not interested in the happenings between buildings, only the

buildings themselves. Also, he does not question the use of streets, sidewalks or public spaces. There is a general disregard of how people use and function in his architecture and proposed city plans. However, in order to create cities that are truly functional, the social and cultural aspects of life must be addressed. What makes urban centers fascinating is their complexity, but this cannot be achieved exclusively through architecture.

Conclusion

Urbanism is the integration of physical form and socio-cultural aspects, and with this definition, much of the “urbanism” that has existed in the last century ultimately has failed. The Modernist movement of the 1950s and 1960s centered on the tangible realm with architects characterized as not just building designers but also city planners. The Modernists neglected to acknowledge the effects the physical realm had on the people. With the advent of the Post-Modern movement of the 1960s and 1970s, city planners started to understand more clearly what they were doing wrong; yet, there were still many issues with Post-Modern city planning, including the privatization of public spaces and the commercialization of urban spaces. With the New Urbanists of the 1980s and 1990s, urban planning as well as urban design was becoming a better understood field, though the New Urbanists also failed to tie together the physical sphere and the socio-cultural aspects of urbanism.

Possibly, it is too difficult to distinguish between “urbanization,” defined as the growth of settlement collectives and the change of a society from agrarian to industrial, and “being urban,” meaning the social and cultural aspects of city life. An urban planner who does not understand what it is to “be urban” will not succeed at planning cities. Perhaps Koolhaas and other Post Post-Modern city planners will be successful in understanding these distinctions and can successfully incorporate both aspects of city planning into the cities of the future. Then again, because the field of urban planning is always changing and incorporating ideas of the past, then perhaps it will return full circle to the ideals of Modernist planning, or maybe the field of urban planning will disappear altogether.

References

- Dear, M. (2000). *The Post Modern Urban Condition*. Malden, MA: Blackwell Publishing.
- Ellin, N. (1996). Themes of Postmodern Urbanism. In M. Larice, E. Macdonald (Ed.), *The Urban Design Reader*. (pp. 204-214). New York, NY: Routledge.
- Gordon, P. (1998). A Critique of New Urbanism. Retrieved November 9, 2008, from <http://www-rcf.usc.edu/~pgordon/urbanism.html>
- Gronlund, B. (1999). Koolhaas' Generic City, Bo Gronlund. Retrieved November 9, 2008, from <http://hjem.get2net.dk/gronlund/Koolhaas.html>
- Hall, P. (2001). The City of Theory. In R. LeGates, F. Stout (Ed.), *The City Reader*. (pp. 342-353). New York, NY: Routledge.
- Heron, K. (1996). From Bauhaus to Koolhaas. *Wired*, 4.07. Retrieved November 29, 2008, from <http://www.wired.com/wired/archive/4.07/koolhaas.html>
- Koolhaas, R. (1994). The Generic City. In M. Larice, E. Macdonald (Ed.), *The Urban Design Reader*. (pp. 215-226). New York, NY: Routledge.
- Le Corbusier. (1929). A Contemporary City. In R. LeGates, F. Stout (Ed.), *The City Reader*. (pp. 317-324). New York, NY: Routledge.
- Taylor, N. (1998). *Urban Planning Theory Since 1945*. Thousand Oaks, CA: SAGE.



Housing Policy: Planning for Unintended Consequences

Jed Lane

Editors' Introduction

In our current economic state, planners face an ever-increasing challenge to make do with limited resources. It is their responsibility to combine sustainable urban goals for the future with the needs of the public, while tailoring them to the city's boundaries. With each land-use plan, conflict arises between the clashing interests of policy-makers and local citizens. In the context of San Francisco's turbulent planning history, author Jed Lane presents his opinion on the responsibilities of tomorrow's planners, whose capabilities are shaped by students and professors of today.

Throughout the 20th century, nice people with good intentions have involved themselves in housing issues and caused actions to be taken that had unintended and unfortunate consequences. In San Francisco, from the start of the San Francisco Housing Association in 1910, to the Redevelopment Agency's work of the 1960's and 70's, and right through to the present, good intentions have not eliminated unforeseen consequences (Metcalf, 1999). As we prepare ourselves for the 21st century we must ask, do urban planners need to wait to see what happens? Can't we be knowledgeable of our own self-interest and separate that from the community's interest? Can we recognize the uselessness of the application of dogma? Are we educated and trained sufficiently in fashion, philosophy, argumentation, logic, and communication so that we can prevent the unintended? Planners are mediators between the public and politicians; leaders of the public for livable, enjoyable environs; and teachers of how to achieve sustainable urban living.

Allen Hays, author of *The Federal Government and Urban Housing: Ideology and Public Policy*, speaks of the need to learn from mistakes. Hays (1995) posits that planners and policy makers will achieve the most benefit from taking action and waiting for the results. In 1910, Alice Griffith and Dr. Langley Porter took action: they formed the San Francisco Housing Association. Their motivation was the living conditions that they thought were unacceptable for any human being to live in. The hastily constructed housing built after the destruction of the fire of 1906 in San Francisco was deemed unsafe and unsanitary. They lobbied for laws to be enacted, and in 1911 the State of California passed the State Tenement Housing Act (Metcalf, 1999), which outlawed the construction of "inadequate" housing. Positively, this act increased the quality of housing and gave rise to building standards and codes; however, it significantly reduced the low cost housing options for the populace. This would not be the last time that affordable housing was destroyed because it was deemed "not good enough" by a group that didn't live there.

In the post WWII era, when St. Louis and many other locales, including San Francisco, built high-rise public housing projects in the modernist, industrial fashion of the time, planners were not ready to challenge designers and architects. Accepted dogma of modernist thought held that people wanted to live in new high-rise, stacked housing. Few frills or ornamentation were needed or desired. People, it was believed, wanted efficiency above all and to be surrounded by open space and greenswards. Unfortunately, efficiency and machine-like functionality missed the mark and soon equaled monotonous and inhuman. The residents felt isolated and lacked the opportunity to build community. The concentration of low-income residents intensified the problems often associated with poverty. Escapism through alcohol and drug use became rampant, and the Darwinian advantage went to the strong and ruthless while the aged and other more vulnerable tenants

were victimized. Gathering places became dangerous and the residents took on a siege mentality. Within an unusually short time as compared to accepted building obsolescence timelines, Pruitt–Igoe in St Louis, Cabrini Green in Chicago, and the Geneva Towers in San Francisco were all demolished. Could that waste of resources have been avoided?

When well intentioned people work on solutions to housing problems, urban planners become, by default, moderators. The creation of good public policy demands that the public and politicians work with policy analysts versed in the mistakes of the past, the best teachings of the present, and the open exchange of ideas and solutions for the future. The challenge for planners and their educators is to be knowledgeable of the past and aware of their own motivations. With that awareness, educators will produce planners that are able to draw out and distill the best into a plan. The challenge that planners face in the future lies in their ability to understand and speak to the dictates of current philosophical and architectural fashion while looking beyond the policy objectives and into the ramifications. When policy is enacted, its existence then creates a motivation to preserve the plan. In some cases amendment is possible, but other times it becomes so sacred that it cannot be touched. Examples of sacred policies in San Francisco include: Prop 13 tax limitations; rent control and tenants rights; as well as maintaining a low density, auto-centric lifestyle in the west-side neighborhoods. The unintended consequences of these policies have been learned, but changing them has been difficult to even discuss. In light of the “stickiness” of current policy it is imperative that planners do all that’s possible to get it right before the policy is enacted.

Our current environment of limited resources makes it imperative for policy makers to eliminate mistakes. Even in times of unlimited resources it is essential to plan for success. In our democratic society, where everyone is told they have the right to their own opinion, reasoned or not, any policy that addresses basic human social need has opponents. Any false step or failure can give weight to the opposition and strengthen the position of inaction due to past failures, such as in the case of the redevelopment of the Japantown and Fillmore Districts. Sections of society that believe the government should not provide basic human services catalogue each of the failures to “prove” that government has no ability and should not endeavor to meet those needs.

In the later part of the 20th century, cities across America worked with Federal funding in urban areas, and this history has shown that the results were often disastrous. People of color lost whole communities, African-Americans in the Fillmore and Japanese-Americans in Japantown lost their neighborhoods, while the City as a whole lost the most affordable housing available at the time. The same elitism that motivated Ms. Griffith and Dr. Porter was used as justification to clear the land for “better use.” San Francisco’s place in this history is unique.

The City was one of the last to create a planning entity, waiting until the 1940s to create a planning commission. San Francisco was also the first to halt—through citizen activism—the clearing of residential neighborhoods when the Western Addition Community Organization organized to stop the further destruction of their neighborhood. The lesson learned was that clearing land for better use works in some situations, such as in the Golden Gateway development that replaced the old produce mart on the Embarcadero at Jackson St., but not in residential neighborhoods. The lesson was learned, but the price was very high. One hopes that an outcome of that period would be the end of top down planning. The days of Le Corbusier and Justin Herman hopefully have evolved into an era of civic involvement in planning discussion. Right now, however, citizens are driving policy through long and sometimes acrimonious interaction.

An example of citizen direction is the Market / Octavia plan in San Francisco. After the damage to the Central Freeway in 1989, citizens demanded the freeway not be replaced. Quality of life issues were raised and neighborhood groups organized. After the redesign of the freeway, the community undertook the task of working with the City's Planning Department and Commission to establish a future vision. Zoning, density, and the myriad issues involved were hammered out over years of meetings. Throughout the process, planners worked with the residents and the elected or appointed governing bodies. Neighbors worked to keep valued elements of their neighborhood, while planners worked to create direction for future growth and align the neighborhood's vision with City-wide and regional expectations. Ultimately, the plan was finished and accepted by the neighborhoods and City government. Development is now taking place according to a plan created from the bottom up and negotiated through planners.

The Market / Octavia plan is still evolving. By having local residents central to the planning process, any unforeseen consequences will be organic and evolutionary. A neighborhood made up of humans—living, working, and enjoying life—is always organic and changing. The expectation is that bottom-up planning will allow for the early awareness of issues coupled with rapid corrections, as opposed to waiting for recognition of a mistake followed by having to convince the bureaucrats and going through inevitable resistance and accusations of fault. When the dictates of well-intentioned but dogmatic experts determine the living environs, consequences that were not intended—nor easily undone—can cause deep, rancorous citizen resentment.

To draw the conclusion that only through the failure and examination of historical actions can a lesson be learned denies the many ways that knowledge can be imparted. It's time to ask: can prior planning preclude poor performance? The answer is yes; through education in thought, logic, communication, argumentation, philosophy, sociology, history, fashion, recognition of the uselessness of dogma,

and a healthy self-knowledge, planners can facilitate good policy. By using these tools and working with communities instead of on projects planners can mediate and more effectively navigate the passionate path of housing as we build enjoyable living environs and better urban life for city dwellers.

References

- Hays, R. (1995). *The Federal Government and urban housing: Ideology and change in public policy*. (2nd edit.). Albany, NY: State University of New York Press.
- Metcalf, G. (1999, January). *The Urbanist*. SPUR (San Francisco Urban Planning & Research). Retrieved October 22, 2008 from http://www.spur.org/documents/990101_rtitle_01.shtm



Postcard from Lausanne

Abigail Shull

I arrived at night, wearied by travel, the grand scale and bustling activity of the train station nearly escaping me as I made my way out to the street. Despite my jetlagged, slow-motion state, I was immediately enraptured by the cool, brisk embrace of Lausanne in January. The quaint Swiss town stood before me, alive with Saturday night energy, its splendor dancing off the surface of Lake Geneva. I felt revived. With fresh strength, I made the vertical climb to the hotel, luggage in tow. When the morning sun finally peeked through my window, I woke off-kilter and anxious to start my day. I headed downstairs for what I thought would be a mediocre Continental experience, but was met with a breakfast of champions. After countless Nutella smothered croissants, fruit topped yogurts, and Milka hot chocolates I was ready to explore the town on foot.

Lausanne's charm was effortless and unassuming. The narrow cobblestone paths quietly recount centuries of foot traffic. Their dramatic slopes reminded me

of San Francisco. The tall buildings tiptoe gingerly up to the narrow streets, often from a furtive angle, and part obligingly for the intricately cobbled walkways. In the heart of the town, Notre Dame de Lausanne silently stood guard. Hoary and gaunt, the cathedral, the construction of which began in 1170, still towered over the roofs and chimneys. Every other edifice I passed seemed nearly as old, with sturdy stone façades, hand carved details, and grit in every crevice. From time to time, a momentary glimpse of Lake Geneva would pierce through the interstices of the architecture and glow strikingly against its ancient stones before my path abruptly thrust me amongst the buildings once more.

In search of a more intimate view, I eventually happened upon the Palais de Justice. The majestic edifice of white stone curiously sat at the very edge of Lausanne, facing outward at the natural beauty beyond, rather than the quaint old town. As I rounded to the front of the palace, Lake Geneva suddenly lay open before me. With its waves lapping the shore barely a hundred paces ahead, I could feel its breath sweep across my face. Beyond the mysterious, mirror-like waters stood the picturesque Alps. Dark and imposing, capped with fresh snow, the peaks thrust perilously into the slate clouds. They seemed to stand at the edge of the world, keeping the lake from spilling over into the void. Rousing from my reverie, I noticed for the first time the stately garden around me. Its lush greenery lay between the palace and the lake shore, brimming with life among the wintry tones of the surroundings.

As dusk kissed the surface of the lake, I reluctantly withdrew from that enchanted nook, with the calm majesty of the Alps and the quiet grace of Lake Geneva inhabiting my heart. The journey back to the hotel seemed longer and more strenuous than I had remembered. I left Lausanne as weary as when I had arrived, under the cloak of early morning darkness. A heavy snow—the first since my arrival—had begun during the night. As my plane de-iced on the runway in Geneva, my mind still lingered by the shores of the lake, watching snowflakes dancing over the water.





Postcard from Suzhou

Gene Waddell

Let's start with a brief quiz: What is the name of a 2500 year old Chinese city that is home to six million people and is sometimes referred to as the Venice of China? Most of us on the tour bus had no idea that the answer was Suzhou, a city of striking contrasts that range from "delicate" Chinese landscapes to rapidly developing hi-tech economic zones, both of which are interspersed with a gritty, urban overlay.

To this westerner's eye, it was very difficult to reconcile this contrast. While its ancient public gardens, replete with pagodas, statuary, and meticulously kept greenery, were an amazingly beautiful sight to behold, the bus ride from our newly-built government hotel to the gardens traveled through a concrete jungle of partially completed high rise condominiums that towered amongst the remnants of the city's old and worn down urban space. Pedestrians, bicyclists, cars, buses, and trucks were everywhere. The noise level was high and the air quality poor. Piles

of construction debris were sometimes heaped along the side of busy downtown streets and vacant lots. The scene was absolutely astounding.

It only took a few minutes for the questions to start flying towards David, our tour guide: What is going on here? Why have we never heard of this place? Who is going to live in all of these new buildings? David's answer to all of these questions was quite simple: the Chinese government decided that Suzhou was going to become China's new high-tech center and was building housing for all of the workers expected to flood the region. David also told us that if we looked out of our hotel window we would also see the special economic zone (SEZ) where all of the new high-tech facilities were being built.

After driving out of the downtown area and through a mile or two of light industrial sites, auto shops, and junkyards the bus finally arrived at our destination, Tiger Hill. This three acre park rambles through 2500 years of Suzhou's history, and is topped off by the Tiger Hill Pagoda, a 48 meter (157 feet) tall stone structure built about one-thousand years ago. Like its Italian counterpart in Pisa, the Tiger Hill Pagoda lists to one side and is sometimes called China's leaning tower. The surrounding gardens are beautiful with artfully placed plantings that are meticulously kept.

Back at the hotel, I decided to follow David's advice and looked out of my tenth floor window to see the great expanse of the SEZ. What I saw was a vast construction site hundreds of acres in size along with the beginnings of infrastructure and building installations for the new high-tech zone. When I opened my window to get a better view, I noticed a thick layer of air pollution that hung over Suzhou like a giant, grayish-brown cloud. It had the distinct smell of petrochemicals. After a few minutes, I observed several groups of people scavenging through the piles of construction debris for recyclables that they could sell.

That night, the tour took us to the Grand Canal in Suzhou, which has been in operation for nearly 2500 years. We learned that Suzhou is on the southern section of the canal that ultimately travels from its southern terminus, Hangzhou—about 125 kilometers or 80 miles from Suzhou—to Beijing, which is roughly 1700 kilometers or 1100 miles to the north. David told us that the canal was designed to transport grain from the fertile Yangtze River Delta to Beijing and was completed about 1500 years ago. He also told us that it took millions of conscripted laborers more than one-thousand years to hand dig the canal. My head was spinning again. One-thousand years? Digging an 1100 mile canal with hand labor? The canal still exists?

Before I knew it, I was on the canal traveling on a low-slung tour boat, just inches above the dark, murky, and narrow waterway as it wound its way through old Suzhou. Old homes, some more than one thousand years old, lined the canal perched on innumerable wooden piles sunk into the canal bottom. People were fishing, washing their clothes, and just sitting on porches overlooking the canal.

Ancient bridges, narrow streets, and other river craft all passed by me. We got out of the boat at the local street market and were immediately drawn in to an almost chaotic scene; hundreds of vendors on a narrow canal-front road were selling live chickens, eels, baked goods, clothes, shoes, CDs, and whatever else one could possibly think of. At the same time, people were everywhere—on foot, bicycles, and motor scooters, hastily going about their business on a very crowded byway. Again, I was amazed by the contrast. Just a few moments before, I was looking out at a huge 21st century high-tech development in the making though now found myself in the middle of a market scene that had not changed much from a thousand years ago. Suzhou, like most other places in China, merits much more time and study than the typical tour provides. Although we only had 36 hours in Suzhou, this interesting and complex city is etched into my consciousness and I look forward to my next visit when I can give it the time it deserves.





Where Two Streets Meet: A Postcard from Thailand

Erol Schaller

It was nine years ago when I first stepped foot in Thailand. Imagine: 100 degrees Fahrenheit with 10 million people humming in a chaotic blend of sweat, noise, and smog, combined with the excitement of an amazing vacation. Today, it seems like nothing has changed. Forget Vegas! Bangkok, the City of Angels, its wings spread over a modern Babylon, is a place where one's wildest dreams can come true. Though of course, like anywhere else, for a price. For nine years now I've loyally made my pilgrimage to this slice of heaven. Not for its presumed vices, but rather a sense of acceptance. A month into my three-month vacation, I'm still in Bangkok. I remember the first time I walked along its streets; I could literally feel the smog adding a layer to my skin.

Today, the Thai government has implemented a few changes in order to reduce emissions from its various transportation systems. One change is the sky train that opened to the public in 1999, elevated approximately 50 feet above the congested streets. It is a tiny blessing to the City and its quality of air, as an average of 400,000 riders are now whisked daily to various stops spread out over 55 square miles of Bangkok's business district and select suburban areas.

It must be around 8 a.m. I don't really know and it doesn't really matter. I stopped wearing a wristwatch a week after my arrival. It's hot and has been ever since I arrived at the beginning of June. It's around 98 degrees Fahrenheit, even though it's supposed to be the rainy season, which makes it very humid. Normally, temperatures drop into the eighties during this time of year—the equivalent to a

winter.

I've arrived at a street corner in an area of Bangkok south of downtown, far removed from the business district where modern high-rises cloud the streets. I stay in this neighborhood when I visit Bangkok because accommodation is inexpensive and food is plentiful. Buildings of mostly two to three stories in height define the urban setting. The first stories contain storefronts and other small businesses, the upper ones residences. Close by is the Chao Phraya River, a major water basin covering 30% of the city. Along it you find parks and restaurants, which add a wonderful escape to the busy city streets. Bangkok was once dubbed the Venice of Asia because of its extensive network of rivers that wind like veins through various parts of the city. Even today, people still use ferries and river-boats for commuting purposes.

For the last few weeks, I've begun my day by coming here to this street corner. There is a small shop right on the corner where these two streets meet. It is here where I ponder what to do with the day. There is another small shop behind me; I turn to the sound of a TV emanating from within. I look in and see the shop owner dozing in a lawn chair in front of a fan. Next to him on a small side table is a brown cat with black spots and no tail. Many Thai cats have only a small stump for a tail. Locals say they are born like this, but I'm still not convinced. The cat is lying close to the fan, lazily cooling itself.

The shop is small, akin to a kiosk, where one can purchase toothpaste and toothbrushes, some soap, batteries, alcoholic beverages and such. I haven't inspected the shop in great detail because my interest lies in the rectangular refrigeration box in front of me. It has a sliding glass top revealing canned and bottled beverages as well as bags of ice. The heat and humidity have made me very thirsty. I slide the glass top open and feel the cool air escape, wrapping my arm in a welcome blanket, almost giving me chills. I rummage around through the cans of sodas, colas, ice teas, and bottles of water until I find what I am looking for: a large, half-liter bottle of Leo. Leo, the Thai word for Tiger, is a local beer made by Carlsberg to Thai standards—dry, with an alcohol content of 5.5%.

The old man awakens from his morning slumber. He smiles and meanders over to me, handing me a plastic stool on which to sit. While it is still morning, he exhibits no judgment of my early indulgence. He is simply happy for the business. Fifteen meters to my right is an American 7-Eleven, one of many such eyesores in Thailand. Even Starbucks has made its mark, its franchises plaguing the population with overpriced “orange-mocha-chocolate chip-frappachinos,” yet another sign of big business and corporations taking over the world. The landscape wasn't like this when I first visited Thailand. In any event, I could buy the same beer at 7-Eleven for 38 baht, the Thai currency equivalent to \$1.20 American dollars, but here with the old man I prefer to pay 45 baht to

support the small business—and I get a chair to sit on as an added bonus! I hand the man a Thai bill and some change. He smiles and turns back. I don't speak much Thai, and he speaks less English, so neither of us says a word. What needs to be said? I sit on the stool, take a deep swallow, enjoy the refreshing brew as it slithers down my throat, and then light a cigarette. I close my eyes and feel a drop of sweat climbing down the side of my cheek. I don't swipe at it, but rather follow the sensation. I hear an orchestra of cars, buses, and motorbikes transporting the population to their workplaces. Traffic here is an adventure.

In this sort of “suburban” area of Bangkok, there are stands and stalls on either side of the street. I hear women chattering in their soft, tonal language. I imagine them to be gossiping. The words are soft, interrupted by a laugh or chuckle. The women have just begun setting up their wares. Some sell cloth, some jewelry, and others linen. There are also food stalls, their fragrance of spicy scents and fish sauce mingling with the smell of engine exhaust. The hint of sweet dishes being fried somewhere along the street is also heavy in the air. Breakfast and food in general consists of either soup or some sort of rice dish. Delicious, exotic food is always available no matter what time of day or night. You just have to know where to look. My beer is half gone. The sun has broken through the clouds and is now baking my feet, as my flip-flops offer little protection. I have no idea what time it is, but activity around me is increasing. More people are now outdoors, going to work or shopping at one of the many stalls in the area.

Having given myself over to the lazy weather, I plan to give my feet a rest today and find a quiet place to contemplate the mysteries of life while drinking Leo Beer. As I stand and put the plastic stool back in the shop, the old man lifts his head and nods. I turn right out of the shop and my senses are delighted by the sweet smell of chocolate and coconut dough being fried in huge woks into bite size cookies.

I walk on, placing my empty Leo bottle next to a planted pot where trash has already begun to accumulate. I don't consider this to be littering in the American sense, because I know some Thai individual whose livelihood depends on recycling glassware will pick it up. There are campaigns in Bangkok to privatize the waste industry. Slogans in Thai such as “Reduce, Reuse, & Recycle” are plastered around town. Formal recycling is overdue for a city that creates 8,500 tons of waste per day, according to the World Trade Organization.

I have the great privilege of being in no hurry today, here in my favorite city in Thailand. The day is young, and there are new sights to see, people to meet, events to attend, and a culture to absorb. I've been to Thailand nine times now, and it always amazes me how much I feel at home in this warm and exotic environment, despite being half-way around the world. While I've just gotten here, I know I'll be back again.



Community Based Slum Upgrading in Tanzania: An Introduction, Lesson, and a Model for Future Generations.

Albert Kochaphum

Editors' Introduction

In this eye opening look at slums in Tanzania, Albert Kochaphum illustrates just how dire the need for upgrading is for the growing number of slum dwellers. However, the author begins with a recap of what happens when outside forces begin simply handing down decisions to help slum communities—the sort of undertaking that has been precarious at best and outright devastating at worst. Not quick to write-off the opposite bottom-up approach of community based solutions as the cure all, the author underscores his piece with an unlikely criticism of the community involvement paradigm that is currently sweeping the world of international development. This article helps to reveal the multifaceted nature of our urbanizing world and what it means for slums in Tanzania, culminating in thoughtful strategies for future slum upgrading programs throughout the developing world.

Introduction

Current trends show the world becoming increasingly urbanized. Various economic and environmental push-pull factors related to urban agglomerations are causing this. These include more job opportunities and access to wage labor, among many others. But all is not well. For when urbanization outpaces residential provision in cities, living conditions tend to deteriorate. This is precisely the case in developing countries where inadequately serviced residential communities deemed as “slums” or informal settlements have cropped up just as quickly as people can migrate.

Such is the case in Tanzania, the country of focus in this paper, where over 50 percent of the total land is occupied by informal settlements. Though many projects focused on housing and urban poverty have been completed there, with many more currently planned or already in the works, slums are still increasing. By analyzing the previous implementation of Community Based Development programs in Tanzania, this paper will examine the merits and problems that community involvement has in upgrading informal settlement to address this massive challenge of slums. Nonetheless, before discussion of specific examples, a brief overview of the problem of slums must be introduced.

Our Growing Planet of Slums

More people in the world now live in urbanized areas than in rural areas (Wimberley, 2007). But what does this milestone really mean for the future of the planet and its inhabitants? With regards to the future, it is projected that the urban population of Asia and Africa alone will reach 3.4 billion by 2030 (Lee, 2007). Perhaps counter intuitively, these two most rural continents are the seat of this expanding urbanization and also the majority of the world’s slum population; Asia accounts for more than half, with an estimated 581 million people living in slums, while Africa has the second most with 199 million (Cities Alliance, 2008). The most striking projection, however, is that within those two continents, a billion of their newly urbanized population, roughly one-third, will be living in slums. Authors like Mike Davis (2006) have poignantly written about the similar plight of populations all around the world migrating into cities with little infrastructure and making due with whatever is available to make ends meet. Furthermore, as long as rapid urbanization outpaces infrastructure growth, such increases in informal housing developments appears to be inevitable. The United Nation’s Center for Human Settlements (UN-HABITAT) estimates that more than 75 percent of future population growth will be in developing nations—countries whereupon the vast majority of informal housing exists (Cities Alliance, 2008).

UN-HABITAT defines “slums” as areas with substandard housing, lack

of infrastructure, and little to no access to either formal employment or lasting tenure (Cities Alliance, 2008). Other terms that are sometimes used interchangeably along with slums are shantytowns, squatter settlements, and favelas, all of which are usually categorized together as referring to informal settlements. The formal difference between slums and the other types of informal housing is that slums were at one-point healthy parts of a city but have since undergone degradation in public services often caused by heavy demand from migration; however, shantytowns, for example, were initially built as low-income communities. For the purposes of simplicity, and to adhere to the lexicon of the United Nations, “slums” will be the primary term used here to refer to informal housing.

In addition to the designation used by the U.N., others have characterized slums in various ways, describing them as areas of squalor, vice, and dehumanization (Davis, 2006).¹ Nonetheless, consensus agrees that in these dense urban areas people lack one or more basic necessities of life. Chiefly, this translates to people living in places where there is not enough living space, no access to clean water, inadequate sanitation, weak shelter, and insecure land tenure (Lee, 2007). With such disparate criteria, it is no wonder that many places could be considered “slums”. But all across the board, slums from one continent to another appear in similar form: communities built upon riverbanks or contaminated soils, densely surrounded by other similar self-made structures, all of which united by the parallel stories of migration mentioned earlier (Cities Alliance, 2008).

Dwellings in slums often encroach on areas that had either been vacant, were former farmlands, or are of low land value, so infrastructure services are often non-existent or of low quality. The result of this is an increase in informal market sectors (McMichael, 2007, pp. 143-144). Black markets—economic transactions that are not taxed by the government—are commonplace. They provide a means for tapping into surrounding infrastructure for necessities like water and electricity, which is not only illegal, but dangerous as well; children have been known to be the early victims of such practices. At the same time, such practices deal a blow to the government because of the loss of revenue from the land and other transactions that are not being taxed. Slums and informal housing communities all over the world have different cultures and geographies, but it is these various physical and societal threads that make them identifiable.

¹ Not all slums carry the aforementioned characteristics. There is much debate over where to draw the line in order to arrive at a clear definition since contention in the international community exists regarding the nomenclature of “slums” and the effect it has on approaching informal settlements. However, for the purposes of understanding this paper, no further elaboration is necessary.

“Slum” Misconceptions

Lastly, before we disengage from the global issue of slums, some common misconceptions must be dispelled in order to fully illuminate the shades of grey under which the complex, multifaceted issue of urban agglomerations of poverty sits. First off, the notion that the renovation of dwellings will always lead to a better situation and a lifting of the cloud of poverty is not true. These approaches to slum upgrading, more accurately defined as “slum demolition,” were the common recommendations of international organizations such as the World Bank in the heydays of addressing the slum issue. Such a technocratic approach gravely ignores the concept that people living in slums tend use their home in a multi-purposeful way, including workshops and stores in addition to the primary function of shelter. Moreover, when slum residents are relocated to new apartment complexes or modern dwellings livelihoods and community networks are lost. Thus, to ignore issues like land tenure, livelihoods, and community fabric makes it impossible to increase the quality of life for informal neighborhoods and their residents.

Another misconception, one related to the generalization that better housing units mean better living standards, is that all slum dwellers are poor. Though this may sound counterintuitive, residents of slums have varying degrees of income and may choose to live in slums by choice. So when considering the fact that many slum development policies in the past had been focused on the mere façade of buildings, and not the residents that dwell within, millions of dollars worth of international aid may have been invested in tearing down buildings and re-housing residents without doing much to improve the overall levels of poverty in the area.

These misconceptions can be said to have been carried down from International Financial Institutions (IFIs), such as the World Bank and the Inter-American Development Bank, which helped to fund the first round of slum upgrading when the problem of rapid urbanization became apparent in the late 1960’s (NIDB, 2008). Considering the role these agencies have, these rapidly urbanizing areas were important because when these global problems were first confronted between the 1950’s to 1970’s the United Nations, together with the World Bank, funded and promoted campaigns to carry out slum upgrades by investing in massive home building or site and service programs for slum residents. These programs were largely unsuccessful (UNCHS, 2001). These types of approaches, focused solely on improving adequate housing stock, are referred to as “supply-side” approaches. In “demand-side” policies for housing, populations would be given flexibility in making choices on where to live instead of simply being given a house. Conversely, a demand-side policy would usually involve giving vouchers to people or subsidizing the housing market.² Acknowledging

their failures, the World Bank now only spends 5 percent of their funding on slum upgrading and 55 percent on housing finance and policy (Shea, 2008).

At the same time, this reflects the evolution of slum policies. At first, slum clearance policies that made way for valuable land were strongly recommended by the World Bank. However, as those showed no sign of improvement in the 1970's and 1980's, a lull of investment took place and countries' slum clearance policies all came to a standstill (World Bank, 2002). It was not until the problem mushroomed during the period of "doing nothing" that new strategies developed. And what were once top down approaches brokered by the World Bank have since become community driven development or community based schemes that began in the 1990's and continue today (World Bank, 2004). The case-study that is focused on within this paper represents both the turning point and the aftermath of the most recent round of slum upgrading.

All these combined factors reflect the complex, overarching problem of slums. Thus, the main question for the future is the following: in what ways can we address the needs of a growing population of slum dwellers? And, moreover, to what extent should international, bilateral institutions play a role? These questions serve as the backbone for this paper's critiques and analysis levied on the soon to be discussed Tanzanian slum upgrading projects. Now that we have established how the role of slum upgrading has been influenced by the aforementioned perspectives, a critique of the effectiveness for community based involvement in the following case studies can be sufficiently undertaken.

Slums in Tanzania

Tanzania lies in the South-eastern corner of Africa and is one of the world's most impoverished countries. According to the World Bank, in 2006 it ranked 188th out of 208 countries in having the lowest gross national income per capita (World Bank, 2006). After gaining independence from Britain in 1964, the country was renowned for being one of the few socialist states to rise within Africa (CIA, 2009). The early Tanzanian government was successful in minimizing slum growth, that is, until the country's economy was stymied by the oil shocks of the 1970's and a labor deal brokered with fellow leftist China that came with clauses allowing Chinese workers to take Tanzanian jobs (McMichael, 2008, p.143). Around this same time, farmers were losing their land because of a new

² While there is debate over whether supply-side or demand-side housing policies are better approaches, what should be understood, in the context of slum policy and decision-making, is that each approach has their benefits and tradeoffs. Focusing solely on the application of one or the other without understanding the community and environment is most problematic. But due to the brevity of this paper, greater detail cannot be further elaborated on.

government policy mandating collective management of farmland, which led to a lifting of colonial restrictions regarding native migrations in the 1970's. This created even greater influxes into Tanzanian cities as natives were no longer tied to their lands and their organization was out of the hands of traditional clans and communities (Lupala, 1997). Many attempts to address the issue of slums were undertaken by the Tanzanian government, and the evolution of ways in which the government dealt with slums are summarized in the following Table 1.

Table 1: Periods of Tanzania’s slum policies (World Bank, 2002).

<u>Time Period</u>	<u>Slum Policy Title</u>	<u>Lead Agencies</u>	<u>Approach</u>
1964 – 1969	Slum Clearance Program	Tanzanian National Government (TNG)	Physical demolition of unplanned settlements
1970 – 1980	Sites and Services and Squatter Upgrading Programme	TNG, World Bank, and International Development Agencies	Financing was directed to slums for infrastructure upgrades; did not generate profits and many were abandoned.
1980 – 1991	“The Lost Decade”	None	Minimal slum policies, lead to exponential growth of slums.
1991 – Present	Community Based Slum Upgrading and Policies	National Government and International Agencies	Investment in slums focused on community; undertaken by a multitude of institutions and organizations

But the most devastating blow to Tanzanians was when the country’s leaders turned to the International Monetary Fund (IMF) asking for loans. Attached to these loans were regulations that the government was forced to abide by, such as privatizing public services and removing subsidizes that were seen by the IMF as barriers to free trade. These policies of systematically reducing the government’s role in the country in order to aid economic development and receive loans were called Structural Adjustment Loans and were packaged as a part of Structural Adjustment Programs or SAPs (McMichael, 2008, pp. 132-133). As the acronym subtly suggests, countries which fully bought into the promise of economic recuperation at the cost of public services were indeed saps. After

institutionalization of structural adjustment policies and successive governmental failures, urbanization rates, poverty, and inequality in Tanzania have all been steadily rising (Muzzini, 2008).

Tanzania holds one of the world's highest rates of squatters and slum dwellers. More than 50 percent of the country's total land area is occupied by informal settlements (World Bank, 2002). Part of the reason for these high numbers is the mislabeling of people living on public land following government takeover of property in 1964 (Lupala, 1997). The estimated urban to rural migration was 22.6 percent in 2002, up from about 6 percent in 1962 (Muzzini, 2008). All in all, the SAPs for Tanzania coupled with opposition against the lending caused wages to fall by 83 percent between 1974 and 1988 (McMichael, 2008, p. 144).

Tanzania could have found itself in even more dire straits had the entire populace subscribed to the economic development paradigm of the IMF. Due to citizen opposition towards the SAPs throughout the country, the blow to social services and falling wages dealt by the IMF was softened by informal activities. Since these black market activities were un-taxed and not dependent on the government they made survival possible during such tumultuous times. Examples of such activities, many of which often took place in-between neighbors or as a part of communities, include after-school tutoring, clothes washing, and carpentry (McMichael, 2008, p. 144). During this time, over 90 percent of primary household incomes came from informal jobs (McMichael, 2008, p. 144). Unfortunately, it was not because these jobs were highly profitable, but rather due to the fact that children, the elderly, and women could all engage in said activities (Tripp, 1997).

Therefore, slum upgrading policies that did not incorporate the community as stakeholders, such as those that occurred in the 1970's when communities were torn down and residents relocated, undoubtedly disregarded and destroyed these informal livelihoods. As a result, policies focused only the physical aspects of slums remained ineffective, and places where dwellings had been removed would often pop back up overnight because the new housing supply was either developed too slowly or was too scarce (Davis, 2006). The main problem with this approach, in addition to the fact that supply was simply too expensive to build, was that economic livelihoods were not addressed and that the community was not given a voice. Delays, fragmentation of government agencies, and inefficient financial management were all compounded with the fact that new dwellings were not built in the same spot as before and lacked access to the informal jobs that made up most of the income for residents, leading to troublesome economic situations (World Bank, 2002).

Since the formation of the Ministry of Lands Housing and Urban Development (MLHUD) in 1970's, slum policy and administration had been under

their jurisdiction; however, they were ultimately unsuccessful due to a lack of funds (Lupala, 1997). It would not be until 1995 that a Tanzanian National Urban Development Policy was created to try and address these pressing issues (Kironde, 2008).

Community Based Upgrading in Hanna Nassif

One of the first successful attempts of the new wave of community based development began in the largest city and former capital, Dar es Salaam, where more than 70 percent of the total population lives in informal housing (Mussili, 2008). Recall that the staggeringly high percentage is partly the result of the government not recognizing a number of informal enclaves in addition to a massive rise in migration. The community of interest is called Hanna Nassif, and it sits within the Dar es Salaam's Directorial district of Kinondoni. Calculations show that on average there are four people per household in this community of 10,000 residents (Mussili, 2008). Hanna Nassif is one of the many areas of Dar es Salaam whereupon informal settlements are severely deficient in water and waste infrastructure.

Local government efforts through the World Bank sponsored "Programme of Sites and Services and Squatter Upgrading" were unable to reach Hanna Nassif because of lack of funds and institutional troubles (World Bank, 2002). Any possibility of upgrading Hanna Nassif faded away when the World Bank pulled out of the Programme in the early 1980's. Alas, after many attempts failed to improve living conditions due to a lack of finances, responsibility was handed over to other authorities.

However, true progress towards upgrading Hanna Nassif began once the Kinondoni's Director approached the International Labor Organization of the UN (ILO) after they had done a scouting mission in 1992 (Lupala, 1997). Starting in 1991, when foreign organizations returned to the stage, the UN selected Dar es Salaam as their first Sustainable Cities Program pilot city. The Sustainable Cities Program (SCP) is a joint venture between the United Nations Environment Programme (UNEP) and the United Nations Human Settlements Programme (UN-HABITAT) to address environmental and social problems related to poverty and shelter (UN-HABITAT, UNEP, 2001). The aim for the SCP was to come up with an upscaleable framework for improving slum and environmental conditions. Responding to international attention, technical support, and investment the Dar es Salaam city council created the Community Based Upgrading Program (CBUP) in 1992 (Lupala, 1997). After the Sustainable Dar es Salaam Program (SDP) began to take shape, working groups were created to focus on different environmental aspects of informal settlements. It was these working groups that helped lead to the formulation of the unique CBUP (UN-HABITAT, UNEP, 2005).

Notwithstanding the fact that the settlement itself is located near the center of the city, it was built on low-lying coastlands. Therefore, water sanitation problems, on top of the high population density, have further compromised the living situation of residents. Additionally, a lack of storm drainage systems and waste disposal meant that toilets and sewage overflowed out onto the streets during the rainy seasons (World Bank 2002). The community in Hanna Nassif clamored not for new housing but for better infrastructure (UN-HABITAT, UNEP 2005). Yet until the inception of the CBUP there was not a venue to prioritize the community's needs.

Phase 1 - Achievements in Hanna Nassif, Dar es Slaam

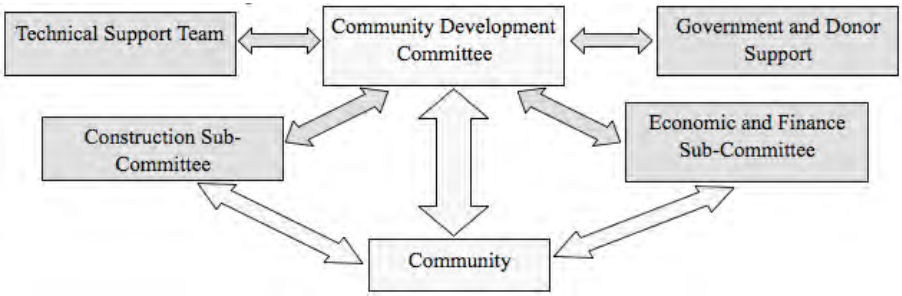
From the start, the main objective of the Hanna Nassif project was using community input and labor for the creation and maintenance of infrastructure to prevent waste water accumulation in the streets; technical support to train residents was mainly provided through the ILO and United Nations Volunteers. Physical upgrades began in 1994 and were finished in 1996—almost as initially planned—despite a six-month bureaucratic delay. Over half of the funding came from the local government and the rest was provided by the International Labor Organization, the Ford Foundation, and the UN via the DSP (UN-HABITAT, UNEP, 2005). The first phase of the project commenced after the funding sources were identified. With lessons imparted from the disenfranchisement of repeated government failures and from international organizations, the Community Development Committee (CDC) was formed in 1993 as a project of the CBUP, which was separate, but received help from the SDP since both the CDC and CBUP had to be locally chartered (Lupala, 1997). Both the CBUP and CDC would be incorporated in the future models of the Sustainable Cities Program (SCP) in years to come. Another main goal set forth from the beginning was that the community should be used to empower itself, and its workforce utilized to develop lacking infrastructure.

A primary goal for the CBUP was to have the community actively involved. Achievement towards this objective was planned for by being in direct contact with the pre-existing community leaders and ensuring that everyone had a chance to express their viewpoints (Lupala, 1997). Thus, the CDC decided to split the Hanna Nassif area into 6 zones, which allowed the communities to elect a member for each zone to the committee, effectively ensuring equal representation. The following diagram (Figure 1) reproduced from a report on the Hanna Nassif upgrading project, summarizes organization of the community based infrastructure upgrading project. Furthermore, the graphic illustrates just how integral the CDC was in moderating the flow between the various involved parties (Lupala, 1997). Most notable are the CDC's connections

with the community. However, at the beginning of the project, trust would only be built up from the community after a full year of persistence (Lupala, 1997).

Though the CDC was the administrative head of the project, there were many other smaller, supporting Community Based Organizations (CBOs) that helped to coordinate and mobilize the CDC (Lupala, 1997). By keeping the community leaders caught up with the project, through the CDC or CBOs, community members would invest time outside of the project to rally support. In turn, the project would easily gain involvement after being deemed beneficial and tangible. As such, decisions that were deemed highly unfavorable for residents, like temporary housing demolition, were avoided. For example, rather than building the storm drain channels according to natural slopes and water flows, which meant that houses in the way often had to be removed, irrigation ditches would instead waver between houses (Vestbro, 2000). Though this gave rise to an eccentric pattern of water flow channels, it averted other problems that a top-down approach would have ignored, such as displacing people that were living on areas where it would have been sensible to put the water channels. Yet, despite avoidance of these

Table 2: The Community Infrastructure Program Model (Lupala, 1997)



problems, community based involvement does not always lead to success, as we shall soon discover in Phase 2 of this project.

Phase 2 - Aims and Misses

Phase 2 of the Hanna Nassif CBUP began in 1997 after initial funding from the National Income Generation Program of the United Nations Development Program was secured. This second phase built upon the Community Infrastructure Program Model that was developed in Phase 1. And although some attention would be paid to infrastructure upgrades, the main objective for this phase was to make further slum upgrades from the Community Based Organizations more economically self-sustaining and self-perpetuating (Vestbro,

2000). Though some targets were placed on environmental and infrastructure upgrades, like solid waste management, attention was also paid to micro-crediting this time around (World Bank, 2002).

Despite how some foreign consultants were hired, adequate training was not received by those in the community who were expected to do most of the work. There were large differences in the local community's understanding of concepts, specifically the notion of "community contribution" and what the benefit of working with the CBUP entailed (World Bank, 2002). Although this phase had several key achievements, including increased capacity in the community's ability to start its own infrastructure upgrades, particularly surrounding water infrastructure and low-cost sanitation systems, there had been more problems in this phase than in the first (World Bank, 2002).

Overtime, due to lack of training, lax regulation, and not being taught why maintenance was necessary, achievements from Phase 1 and the new ones in Phase 2 fell into disrepair from their initial, revamped state. For example, the new drainage ditches in Phase 1 were used more often for dumping refuse than their initial purpose of controlling the flow of water during high tides and rainy seasons (Meyers, 2005).

In lieu of problems like these that were carried over from Phase 1 into Phase 2, serious criticisms of Phase 2 have been levied in reports as well. They are mainly regarding the inefficiencies surrounding implementation and planning (World Bank, 2002). In which case, despite the minor successes from slightly increased funds for CBOs and their capacities, Phase 2 did not generate acclaim. The lesson that both phases can teach us, however, is that although community involvement is necessary, sole reliance on it is not enough.

What Was Learning Regarding Sustainable Slum Management Throughout the World?

The physical achievements of the development included over three kilometers of drainages being created. To prevent storm water floods, roads and path culverts were built to facilitate movement of water through the project area. But in addition to that, many lessons, both positive and negative, were gleaned from this first attempt at a community based infrastructure improvement. For example, community input in financial transactions helped to increase the accountability for donor countries and a sense of community ownership over how and why scarce funds would be spent for the project (World Bank, 2002). Not understanding this lesson would have allowed financing for the projects to be viewed in a mysterious light by the community and made residents indifferent to what happened to the funds. Some negative lessons that were learned dealt with

the fabric of the community and how a heterogeneous population can run into problems, not just along cultural lines, but given their lack of technical background and formal training (Lupala, 1997). For projects like Phase 1 that required mostly manual labor, this was not too much of a problem. But in Phase 2, which warranted a labor force that had more administrative skills, this became a larger road block. Over 60 percent of funds went into training and materials processing for the second phase (World Bank, 2002).

These lessons have been acknowledged and utilized within the SCPT. They were also used to further the new policy recommendations by the World Bank regarding loan practices for upgrading low-income settlements in Tanzania (World Bank, 2002). Residents themselves gained hands-on experience on how to develop infrastructure from scratch, which created the momentum needed for the project to enter its second phase. But most importantly, as a result of this project the community became more empowered, had greater access to formal employment, and had taught the local authority of Dar es Salaam how to deal with CBOs and CDCs (World Bank, 2002).

During the 1990's, before the inception of the Hanna Nassif CBUP, not much attention was drawn towards the importance of the community in planning slum upgrading. Though as mentioned earlier there has been a rise in community based forms of slum upgrading and the concomitant need to understand its impacts for the future (Das, 2008). For this reason, despite the datedness of the project, it represents a critical turning point in how slum upgrading may take place for future generations in our ever increasing planet of slums. More recently, the lessons from the Hanna Nassif program are now integrated into each of the slum upgrading projects currently being replicated throughout Tanzania (UN-HABITAT, UNEP, 2005).

Reflecting on this experience, the Environmental Planning and Management (EPM) model of the Sustainable Cities Programme now requires that there is community involvement in all work involved with SCP in Tanzania (UN-HABITAT, UNEP, 2005). The Sustainable Cities Programme is utilizing a new type of planning technique called Environmental Planning and Management (EPM) and has integrated it with community involvement. A cutting edge usage of the EPM is that it utilizes Environmental Management Information Systems (EMIS), a streamlined Geographic Information System, to help guide land use decisions in slum upgrading. A unique part of the process is that community members are the ones who help to gather the information necessary to survey and build the EMIS databases, which require physical information such site elevation and location of watersheds (UN-HABITAT, UNEP, 2005).

The SCP in Tanzania (SCPT) takes from the SDP that “working groups” in the community are what works best to absolve the perception of on the ground

problems. Thusly, the concept of working groups is the foundation of the SCPT and serves as the place where all actions coalesce. Afterwards, instead of the professionals taking to the drawing boards behind closed doors, the community stakeholders were trained throughout the rebuilding process to be able to understand the changes that were needed in their neighborhoods.

Criticism of Hanna Nassif CBUP, SCPT: Another Perspective

Despite the fact that Phase 1 was well-received and that the CBO and CDC formats were adopted as principle frameworks for further upgrading throughout Tanzania, the SCPT's attempts to replicate their successes pose some concerns (Donge, 2005). The differences in results and achievements between Phase 1 and 2 of the Hanna Nassif Community Based Upgrading Program (CBUP) must be addressed because the Sustainable Cities in Tanzania Program (SCPT) partly builds upon this model. Currently, there are 13 cities that have pilot projects within the SCPT. Each of them is progressing at a different pace. Issues that need to be addressed in order to reproduce the Hanna Nassif CBUP on a larger scale include efficiency, speed, and of course, financing.

One of the general criticisms levied upon any democratic process is that it takes far too long for even the most minimal results to materialize (ILO, 2001). Moreover, to replicate a SCPT around the country would require a heavy amount of financial resources and large pool of technical labor. Knowing when and how much community involvement is adequate is reflected in Phase 1 of Hanna Nassif CBUP, whereas, again in Phase 2, an over-reliance on the community partially led to its demise. In the SCPT, where cities all over Tanzania are incorporating community based involvement, for deeper reasons than will be discussed below, success has varied. The following two points begin to pry at the reason behind these successes and failures.

Within Phase 1 of the Hanna Nassiff CBUP, the CDC had their own internal conflicts that generated fissures amongst the community members who rallied around different community leaders (World Bank, 2006). Moreover, the overall process in the Hanna Nassif CBUP was slowed down because of the government's inability to recognize the legal needs of the settlement (Lupala, 1997). These problems have shown up in other areas in Tanzania as well. In the Sustainable Arusha program, disenfranchised members have experienced "upgrade fatigue" as a result of its main donor, the Danish International Development Agency, abruptly cutting off funds and causing a massive delay of the project's timeline (Larice, 2007). In those situations, members of the community tend to rally around what progress they have seen, which is likely to have been none; thus, it becomes difficult to restart halted upgrading projects due to the lack of

local support needed to continue. In order to adequately address any form of community upgrading on a larger scale, more detail should be paid not just to the members of the current community that lives in the neighborhood, but to different historical threads that are present within the targeted area as well. Doing so would reduce the number of conflicts between various stakeholders that might have disparate values but similar goals.

Another key point is that the price, not just in terms of time, but also monetary value, was quite hefty, weighing in at around US\$530,000 over the course of eight years—most of which was provided by outside donors (UN-HABITAT, UNEP, 2005). The chief expenses of both phases of the Hanna Nassif project went to labor and material costs. Reducing financial impact was a main goal of Phase 2 in the project; however, it achieved poor results. This was mainly due to the lack of technical skills that were expected of community residents, including accounting and administrative oversight. This echoes research done on community upgrading in rural Pakistan that discusses how community based development may be ineffective for technical tasks, such as project design and grant writing (Khawaja, 2004). In consideration of upscaling slum upgrading projects, even a successful example developed within a country requires more attention than previously thought, which brings us to the last key point: varying levels of skill exist throughout slum community populations. Some groups may not have the technical capacity, as compared to outsiders, to move projects swiftly through. Such a case could be the reason behind the fact that the projects within the SCPT are all at different stages of progression as of 2008.

A possible solution to this problem would be to either provide enough technical assistance to the community, as seen in Phase 1 of the project, or to have people with the technical know-how be in charge, but with stronger oversight from the community members. An efficient slum upgrading policy should be able to address these three issues: knowing when to use community involvement, acknowledging settlement histories, and mitigating deficiencies in technical labor within slum communities throughout the world. Nonetheless, the main objective of this paper was not to propose a solution to problems related to community based development, but rather, through the use of the Hanna Nassif CBUP and SCPT, point out cases where community involvement may or may not be effective.

Conclusion: Best-Use Practices for the Future

Realistically, there can be no “one-size fits all” solution for trying to turn slums or informal settlements into healthy, livable places overnight. However, the preceding examples of Hanna Nassif and its attempt at upscaling through the SCPT and community involvement represents situations in which both slum residents and government players had sustained periods of success. Even though

the upgrading of these two case-studies were different, the fact that similar schemes were adopted and developed throughout Tanzania shows that adapting to the individual communities is a step in the right direction in terms of addressing the problems of slums and informal housing. However, at the inception of these ideas in the 1990's, these unique models and plan implementations were considered forward-thinking.

On the local level, Phase 1 of the Hanna Nassif CBUP provided a refreshing and adequate balance between providing the necessary technical know-how from outside of the community and fully utilizing those who live inside of it. Moreover, the SCPT is one of the first attempts to coordinate such community based efforts on a large scale. Still, critical sentiments about the above projects are important to consider, because for each type of policy decision made there are drawbacks and benefits. What needs to be stressed is that there is a balance between too little and too much community involvement—not a choice between one and the other. The main lesson behind this paper is for policy makers to be more prudent in their consideration of the latent potential challenges within the differing contexts of slum communities.

Slum communities throughout the world are not the same all over. In fact, evidence suggests that they will all be different in many respects. What is important to take into consideration are the three ideas put forth in the final section: what cases community involvement works well in, what the culture and history of a settlement's population is like, and potential problems between technical versus non-technical labor.

These three critical points comprise a fundamental perspective that we need to be aware of when applying any slum upgrading policy. With the current upswing in community based involvement, the questions poised in this piece will be left for future researchers to answer when enough information exists. For now, a debate that takes a deeper look into what options are on the table is not only beneficial, but necessary, amidst the impending ecological and social crises we face today.

References

- Cities Alliance. (2008). Cities and the Urban Environment. Liveable Cities: The Benefits of Urban Environmental Planning. Retrieved May 5, 2008, from <http://www.citiesalliance.org/doc/resources/cds/liveable/1.pdf>
- Das, A. (2008). Lofty deal, hefty deal: Empowerment through participatory slum upgrading in India and Indonesia. Ph.D. dissertation, University of California Los Angeles.
- Davis, M. (2006). Planet of Slums.
- Khwaja, A. (2004). Is Increasing Community Participation Always a Good Thing? Journal of the European Economic Association. 2 (2-3), 427-436, Cambridge MA: MIT Press
- International Labor Office. (2001). Community Contracts. In Urban Infrastructure Works: Practical lessons from experience. Jane Tournée and Wilma van Esch eds. ILO: Geneva, Switzerland
- Lee, K. (2007). An Urbanizing World. 2007 State of the World, pp. 3-21, New York, NY: Norton & Company, Inc.
- Larice, M. (2007). Arusha, Tanzania. University of Pennsylvania.
- Lupala, J., Malombe, J., Könye, A. (1997). Evaluation of Hanna Nassif Community Based Infrastructure Upgrading Project – Phase I. Dar es Salaam, Tanzania. Retrieved May 5, 2008, from <http://www-ilo-mirror.cornell.edu/public/english/employment/strat/poldev/papers/1998/tanzania/index.htm#contents>
- Gugler, J. (1997). Cities in the Developing World: Issues, Theory, and Policy. Oxford: Oxford University Press.
- Meyers, G. (2005). Disposable Cities: Garbage, Governance and Sustainable Development in Urban Africa. Farnham, United Kingdom: Ashgate
- Shea, M. (2008). Multilateral and Bilateral Funding of Housing and Slum Upgrading Development in Developing Countries. Washington D.C. : International Housing Coalition. Retrieved April 2, 2008, from www.intlhc.org/docs/shea.pdf.
- UN-HABITAT. (2001). Cities in a Globalizing World: Global Report on Human Settlements. London: Earthscan.
- UN-HABITAT, UNEP. (2001). Implementation and Replication of the Sustainable Cities Programme Process at the City and National Level: Case Study From Nine Cities. Sustainable Cities Programme. Nairobi, Kenya: UN-HABITAT
- UN-HABITAT, UNEP. (2005). The Sustainable Cities Programme in Tanzania, 1992-2003. SCP

Documentation Series, Vol. 1.

- Vestbro, D U. (2000). The role of design and planning professionals for solving the global housing problem: Report from a Workshop at the Conference Challenges for Science and Engineering in the 21st Century. Stockholm, Sweden: International Architects Designers Planners for Social Responsibility. Retrieved April 2, 2008, from [http://www.infra.kth.se/bba/PUBLICATIONS/Role of design.pdf](http://www.infra.kth.se/bba/PUBLICATIONS/Role%20of%20design.pdf)
- Wimberley, R., and Kulikowski, M. (2007). Mayday 23: World Population Becomes More Urban Than Rural. Retrieved March 1, 2009, from <http://news.ncsu.edu/releases/2007/may/104.html>.
- World Bank. (2002). Upgrading Low Income Urban Settlements – Country Assessment Report: Tanzania. World Bank. Retrieved May 8, 2008, from <http://www.worldbank.org/urban/upgrading/docs/afr-assess/tanzania.pdf>
- World Bank. (2004). Community-Driven Development in Urban Upgrading. Retrieved May 8, 2009, from <http://www.worldbank.org/urban/upgrading/docs/CDD/cdd-urban-upgrading.pdf>
- World Bank. (2006a). Kingdom of Morocco Poverty and Social Impact Analysis of the National Slum Upgrading Program – Final Report. Retrieved May 8, 2008, from World Bank http://siteresources.worldbank.org/INT/PSIA/Resources/490023-1120841262639/MOR_Housing06.pdf
- World Bank. (2006b). GINI Per Capita 2005, Atlas method and PPP. Retrieved from World Development Indicators database.



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A Tenderloin Housing Profile:

Richard Marin

Editors' Introduction

NEATLY TUCKED AWAY in close proximity to San Francisco's bustling downtown core, the Tenderloin District is a small enclave that has, in recent years, garnered an unfavorable reputation due to its most visible attributes: homelessness, drug use, and prostitution. Hidden beneath the gritty façade, however, is a Tenderloin District that very few people talk about. In this essay, Richard Marin discusses the district's problems, but also its redeeming qualities, such as affordable living spaces, availability of social services, and cultural diversity, and does so from the point of view of a current Tenderloin resident.

Introduction

San Francisco’s Tenderloin is often synonymous with crime, prostitution, and homelessness. The neighborhood has historically, and continues to have, one of the highest rates of homelessness, drug offenses, and crime in San Francisco. Before moving to San Francisco, I was warned by people to not seek housing in the Tenderloin, no matter how cheap it was. Many people warned me to avoid the neighborhood entirely. Growing up in suburban Phoenix, and unfamiliar with San Francisco, I imagined the Tenderloin as nothing but boarded-up, decrepit housing located in an incredibly unpleasant area of the City. Having never visiting the Tenderloin before, I was positive that I would not want to live there and that any available housing was surely not for me. After a long San Francisco apartment hunt, I was able to find housing in the Mission District.

I had lived in San Francisco for three months before I ever ventured into the Tenderloin. To my surprise, the Tenderloin was not what I expected. Sure, the neighborhood had visible crime and homelessness. However, the neighborhood seemed incredibly diverse and culturally active. Although these observations are completely my opinion, the Tenderloin seemed like a great neighborhood to live in and I moved there this past January. While searching for my current apartment, I was able to visit many different locations within the Tenderloin, which varied in quality. Recent observations as well as my current experience living in the Tenderloin form the basis for my housing profile. Additionally, via researching census and news article data I was able to better understand the demographics and housing picture within the Tenderloin district. I was also able to better recognize how the current housing profile shapes the neighborhood’s social demographics, and any effects it may have on the neighborhood’s future.



Roughly, the Tenderloin’s borders are west of 5th Street, east of Larkin, south of Geary, and north of Market Street; the neighborhood consists of short blocks approximately 500 feet apart. The Tenderloin makes up a triangular shape with each side roughly a half a mile in length. Compared to San Francisco’s other

districts it is considerably small. Yet, the neighborhood has a significantly large and dense population. The 2000 U.S. census states that the density of the Tenderloin's 94102 ZIP code was 44,408 persons per square mile, making it one of the densest neighborhoods in the western United States. Most of my research focused on Census Tracts 122 and 125. Census Tract 122 lies on the northeastern portion of the neighborhood and includes parts of recently gentrified Lower Nob Hill, while Census Tract 125 centers on the core of the Tenderloin, near Taylor and Ellis Streets.

History

In understanding the Tenderloin's current housing and population makeup, it is important to understand the neighborhood's history. The Tenderloin is one of the oldest areas in San Francisco. Over 75 percent of the buildings were built before 1939 (Census, 2000). It is a neighborhood rich in history. Due to its density, almost no detached buildings or housing exists within the neighborhood. Housing in the Tenderloin is almost all four- to seven-story apartment buildings with businesses intermixed at the street level. A large portion of the apartment buildings are Single Room Occupancy (SRO) efficiencies, many of which were originally built as hotels, and lack full kitchens or restroom facilities. SRO buildings and apartment housing has historically attracted single people, both young and old. In the 1970s, a large influx of immigration from Asia initiated a reshaping of the neighborhood's social make-up. With a large proportion of immigration from Vietnam, the Tenderloin began to have many immigrant families moving into the neighborhood, attracted by the low rents and a growing Vietnamese community.

SROs and Assisted Housing

Today, housing in the Tenderloin continues to be almost entirely four to seven-story apartment buildings and converted SRO hotels. Overall, 95 percent of Census Tracts 122 and 125 are renters. Eighty-one percent of residential buildings consist of 20 or more units (Census, 2000). In Census Tract 122, only 10 units were owner-occupied, whereas in Census Tract 125 no units were owner-occupied. By walking around the neighborhood, it is easy to understand how this is possible as "For Rent" signs are highly visible. Many of the old SRO hotels have been renovated and converted to public or non-profit assisted housing. It is also fairly easy to distinguish public and assisted housing from private apartment buildings. A large number of SRO's still have the original hotel marquee signs outside the building. It is also sometimes possible to distinguish assisted housing by entry lobbies with receptionists or community-posted rules on the outside door. Many different types of assisted housing and public housing programs are located

in the Tenderloin, each focusing on different needs of the community. With 57 percent of the population in 2000 making less than \$35,000 a year, the rent burden is exceptionally high; even with assisted housing programs, 44 percent of residents in Census Tract 122 were paying more than 30 percent of their monthly income towards rent in 2000 (Census, 2000). With San Francisco rents possibly increasing since then, the financial burden imposed by the cost of rent may be higher for many today. As of 2000, sixty percent of people in Census Tract 125 were unemployed (ibid.). This remarkably high number shows exactly how much assisted housing is concentrated in the inner Tenderloin.



In a January 31st, 2008, article from the San Francisco Chronicle, titled, “Services too focused in the Tenderloin,” writer C.W Nevius focused on the issue of a large amount of social services and housing concentrated in the Tenderloin. Nevius (2008) writes, “The question is: Do the homeless and low-income people flock to the Tenderloin because there are so many services, or have the charitable groups been drawn to the neighborhood because so many residents need help.” Although this is not directly a housing issue, the abundance of social services focused in the Tenderloin does have an effect of the population and housing stock in the neighborhood. Nevius goes on to argue that social services need to be spread out more equally across the city to reduce poverty-related issues and crime within the district. Regardless of a person’s opinion on the amount of social services in the Tenderloin, it remains very apparent that the neighborhood is primarily low-income and many different programs and non-profits organizations exist to help people with housing issues.

One such group is the Tenderloin Housing Clinic (THC), a non-profit organization founded in 1980. The THC’s stated goal follows:

Prevent tenant displacement, preserve and expand the City’s low-cost housing stock and to provide comprehensive legal assistance to low income tenants. The Clinic is successful in fulfilling this mission by providing free legal services, securing SRO units through the Master Lease program and offering comprehensive support services to our clients. (THC, 2009)

Throughout the Tenderloin, the THC runs eight assisted-housing buildings. I visited two of their buildings to better understand what type of housing the THC offers. The first was the Elk Hotel at 670 Eddy Street. The Elk is an older four-story SRO that has been converted to housing for the homeless; the building also consists of retail space on the street level. While the Elk Hotel appeared to be in decent condition from the outside, I was unfortunately unable to go inside for further investigation. My second visit was to the Boyd Hotel, a six-story building at 41 Jones Street. The Boyd has 82 units and some of the most spacious SRO rooms in the neighborhood (THC, 2009). The Boyd also appeared to be in good shape, though repairs and renovations are planned (ibid.).

Both the Boyd and Elk Hotels were acquired by the THC through a Master Lease SRO program in 2006. A master lease program is an arrangement in which a building is leased on a single lease to a person or organization. In this case, the organization is the non-profit Tenderloin Housing Clinic. In general with a master lease, the main tenant is responsible for subleasing the rest of the building's units to people based on their needs. Master Lease programs are often used for assisting homeless or elderly people with mental illness, but can be used for other types of assisted housing. The master tenant is usually responsible for the management of the building and choosing of sub-tenants.

The Tenderloin has many other programs and organizations besides the THC that focus on housing availability and affordability. Glide Economic Development Corporation recently built two housing projects, located at 125 and 149 Mason Street, which will provide over 147 housing units for economically disadvantaged people and families (California Construction, 2008). An article by California Construction (2008) states, "Step by step, we're realizing our vision of creating a healthy and vibrant neighborhood in the Tenderloin; more than just affordable homes, these new buildings will provide a safe community for our working families and our homeless neighbors." The development of both buildings is in partnership with the Tenderloin Neighborhood Development Corp (TNDC). The TNDC currently has 25 buildings in and around the Tenderloin that house more than 2,500 residents (TNDC, 2009). The TNDC is also currently assisting in the building of other housing projects within the Tenderloin district. One of the current projects is at 168 Eddy Street, where a vacant lot will be converted into 130 units for low income residents with an additional 26 units for homeless families, with completion expected in 2012 (TNDC, 2009). Another project is a building on 249 Eddy Street that will provide housing for low income seniors, which is expected to be completed in 2010 (TNDC, 2009).

New construction and renovations are often in cooperation with private developers as well. The lot at 149 Mason Street is being developed by Millennium Partners, a well known condominium developer. As part of the deal reached with

the City for the rights to develop the Millennium Tower at 301 Mission Street, Millennium Partners is required to contribute to affordable housing within San Francisco (California Construction, 2008). There are constant efforts to help the low-income portion of the population in the Tenderloin through the neighborhood non-profits as well as cooperation with other organizations. Non-profit and private developer collaboration will hopefully continue to contribute to the Tenderloin's future housing stock and neighborhood development.

Private Apartment Buildings and Citi Apartments

According to the 2000 Census, 44.6 percent of the Census Tract 122 residents lived in different housing in 1995. As stated before, 95 percent of the population in the Tenderloin consists of renters. Also, 39 percent of residents in Census Tracts 122 and 125 were between the ages of 20 and 34 as of the year 2000. There seems to be a large population of young, transient individuals present in the Tenderloin; I myself fall into this category. One of the reasons why I was attracted to the Tenderloin was its cheap rents and central location. Although San Francisco is expensive, the Tenderloin has some of the cheapest rents in the City. Forty-one percent of Census Tract 122 consists of buildings containing units with one or less bedrooms, and 33 percent is made up of buildings containing units with less than two bedrooms (Census, 2000). The abundance of private rental apartment buildings and cheap rents make it a very attractive neighborhood for young, single people or students. While walking around the neighborhood it is very easy to distinguish private apartment buildings because of the "For Rent" signs littering the entrances to buildings. Private apartments owned by San Francisco-based CitiApartments, Inc., are by far the most noticeable buildings. It almost seems that every building that is not project-housing is owned by CitiApartments. Of course this is not the case, but the high visibility of the CitiApartment signs would make one think otherwise. I surveyed a portion of Census Tract 122 and counted the amount of CitiApartment buildings. The area I surveyed was between Larkin and Leavenworth, south of Post and north of O'Farrell. I counted twenty-four CitiApartment buildings just in this small portion of Census Tract 122 (See: map.)

CitiApartments, according to its Web site, owns and manages more than 5,000 buildings throughout San Francisco. The company purchased older buildings and renovated the vacant units to justify raising the rents. I must add that I currently live in a renovated CitiApartments building. Within my building most of the renovated apartments are ones that have become vacant after CitiApartments purchased the building. When speaking with my neighbor, I was told that CitiApartments will not fully renovate his unit unless they raise the rent, or until after he moves. This sort of behavior creates varying conditions of units within

one building. Older residents may not live in renovated units as opposed to newer residents such as me. The dynamic produced as a result of CitiApartments owning a large number of buildings within the Tenderloin and generally renting at or above market rates has begun to change the social make-up of the neighborhood. Although the new census data is not available, it may be that the Tenderloin is becoming more gentrified as higher-income as middle-class residents move into the neighborhood, often into CitiApartment buildings.

Many more long term-residents continue to live in rent controlled units that are kept below market rates. Rent control applies to most buildings built before 1979. It allows for a landlord to raise rent only by a certain percentage each year. During the March, 2008 to February, 2009 timeframe, the rate was two percent, whereas the rate for the previous 12 months was 1.6 percent. Rent control is administrated and set by the San Francisco Rent Board, and generally applies to non-assisted housing (San Francisco Tenant Union, 2009). With the majority of the private apartment buildings in the Tenderloin falling under rent control, a person may be

paying twice as much rent as their neighbor in the same building. For instance, I am paying substantially more than my neighbor who has lived in the building for many years.

Many problems have arisen as a result of the relationship between CitiApartments and residents in rent controlled units, including allegations that CitiApartments tried to force out residents living in rent controlled units in order to maximize revenue from their buildings. Back in August of 2006, the city attorney



filed a lawsuit against CitiApartments alleging the following: CitiApartments employed frequently harrowing tactics to intimidate tenants into surrendering their rent controlled tenancies, including unannounced visits by armed paramilitary-like agents, unauthorized entry into rental units, shutting off utilities without notice and for extended periods, changing locks and depriving tenants of keys, and retaliating against tenants who refused to accept offered buy-outs. (quoted in “Herrera Sues Skyline...,” 2006)

The questionable legitimacy of CitiApartments’ business practices only adds to the complexity of the available housing stock in the Tenderloin. In my

experience, many people in my building have animosity towards the company for renovation issues as well as their increasingly unpopular reputation. Problems aside, companies such as CitiApartments who own a large proportion of buildings within the Tenderloin will continue to direct the neighborhood's future as much as the presence of assisted housing.

Conclusion: a culturally diverse neighborhood

Negative aspects aside, the Tenderloin is an incredibly vibrant and culturally diverse neighborhood. Forty-five percent of the Tenderloin's Census Tract 122 is foreign-born, while fifty-eight percent of the neighborhood population is foreign-born. Twenty-seven percent of this foreign-born population is from Latin America. The broad range of ethnicities present in the Tenderloin makes for a healthy diversity of businesses, as evidenced by the profusion of Thai and South Asian restaurants and other types of businesses. Many people are from Vietnam, and today the western part of the Tenderloin, along Larkin Street and between O'Farrell and Eddy, is known as "Little Saigon." Walking through the Tenderloin, a person may hear three or four different languages within blocks of each other. The presence of many students and San Francisco's nearby art schools are all noticeable within the district. Currently, an arts district is being planned along Taylor Street just north of Market, with the renovation of an old 4,000 square foot adult-movie theater leading the way (Knight, 2009). At night the neighborhood is incredibly active due to the number of bars. Even the newer businesses and cafes that cater to the higher income portion of the population contribute to the neighborhood's diversity and vitality.

In many ways, the Tenderloin embodies what a person may or may not expect in a world city like San Francisco. While in the Tenderloin, you really are in the middle of a booming, diverse city. However, with being in the middle of a city often comes the obvious divide between the social classes; it is difficult to focus on the neighborhood's housing profile when many people in the district have no form of housing at all. The Tenderloin has been especially plagued by poverty, crime, and homelessness. Whether or not this is due to the large amount of concentrated social services is entirely debatable. However, it seems that many programs and future assisted housing developments will contribute positively to the neighborhood as a whole and help to provide housing for those in need. Though, as large real estate companies concentrate ownership of buildings within the Tenderloin, many other issues will arise as older residents face the problems associated with redevelopment and gentrification. The purpose of this paper was to focus on the current housing profile in the district, but I feel that it is not entirely possible to focus on specific forms of housing without focusing on some

of the elements that make up a neighborhood and community. Understanding the Tenderloin's housing profile is in many ways akin to understanding the Tenderloin's future. Regardless of the sort of dualism that exists in the Tenderloin, if people were more aware of how vibrant the neighborhood is, and worked to avoid contributing to its unpopular reputation, more focus might be directed towards finding solutions to its complex problems. very excited to participate in the process, and look forward to experiencing the positive change in our city's neighborhoods in the coming years.

References

- Beyond Chron. (2006, August 17). *Herrera Sues Skyline Realty Citi Apartments for Egregious Pattern of Illegal Business Practices*. Retrieved February 18, 2009, from <http://www.beyondchron.org/news/index.php?itemid=3591>
- Nevius, C.W. (2009, January 31). Services Too Focused in the Tenderloin. *San Francisco Chronicle*. B-1.
- United States Census Bureau. (2000). *San Francisco Census tract 122/125*. Retrieved February 18, 2009, from <http://factfinder.census.gov/servlet/AGSGeoAddressServlet>
- San Francisco Tenants Union. (n.d.). *San Francisco Rent Control Rates*. Retrieved February 20, 2009, from <http://www.sftu.org/rentcontrol.html>
- California Construction. (2008, June 1). Swinerton, Willis Start work on Glide Development in San Francisco. *Contracts, Groundbreakings, Completions*, 7. Retrieved February 18, 2009, from LexisNexis Academic database.
- SFGate. (2009). *San Francisco: The Tenderloin*. Retrieved February 19, 2009, from <http://www.sfgate.com/neighborhoods/sf/tenderloin/>
- Tenderloin Housing Clinic. (2008). *Tenderloin housing clinic home*. Retrieved February 18, 2009, from <http://www.thclinic.org/index.php>
- Tenderloin Neighborhood Development Corporation. (2009). *Properties*. Retrieved February 19, 2009, from <http://www.tndc.org/properties/properties.html>
- Knight, H. (2009, February 21). Arts District to Transform Lower Taylor Street. *San Francisco Chronicle*, A-1. Retrieved February 22, 2009, from <http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2009/02/20/MNGE161Q3B.DTL>

Photos/Maps

- Map 1. United States Census Bureau. (2000). *Census Tract 125*. Retrieved February 18, 2009, from <http://factfinder.census.gov/servlet/AGSGeoAddressServlet>
- Map 2. United States Census Bureau. (2000). *Census Tract 122*. Retrieved February 18, 2009, from <http://factfinder.census.gov/servlet/AGSGeoAddressServlet>
- Map 3. Tenderloin Housing Clinic. (2008). *THC Property Location*. Retrieved February 18, 2009, from <http://www.thclinic.org/content/locations/locationmap.php> Francisco CA.



Treasure Island and the LEED Approach to Sustainable Neighborhood Development

Jana Boring

Editors' Introduction

At the current rate of growth, the human population is eating up ever-decreasing, finite resources at an unsustainable pace. To minimize society's impact on our natural environment, as well as to create better communities, a new way of building has become imperative. In an effort to curb sprawl, unsustainable building practices, and vehicular dependency, the application of Leadership in Energy and Environmental Design (LEED) building standards on new and existing developments has raised the bar for building standards all across the U.S. In light of these new trends and innovations, California has once again taken the lead in this pursuit of environmental sustainability. Author and LEED Accredited Professional Jana Boring brings our attention to the LEED Neighborhood Development model, which emphasizes sustainable communities and highlights its effectiveness in a case study of Treasure Island.

Introduction

Cities throughout the world are shaped and influenced by trends of the time. Each era has a paradigm for development, planning, and architecture. The emerging trends of today blend ideas from centuries past with the new and pressing needs of the present. In the 21st century a tipping point has been reached in human history; for the first time over 50 percent of the human population lives in cities. In addition to urbanization, the human species is growing exponentially. There are over 6 billion people in the world. At the current rate of growth, the human population, along with the demand for resources such as food, water, shelter, building materials, transportation, and infrastructure, will double by 2067 (Rosenberg, 2006). It is essential that building, planning, and development trends adapt to accommodate the growing needs of the 21st century.

Effective frameworks have been created to guide architects, engineers, and developers to construct resource efficient, high performance buildings. In particular, the adoption of the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system has proven to be a successful method for transforming the building industry towards the production of sustainable buildings. It is critical that the gains made in the building industry extend to the larger context of our built environment and include city planning. A rating system for neighborhood and city development can provide a framework for cities to benchmark sustainable development goals. San Francisco is taking the lead on sustainable city planning by utilizing such a system to create a model of sustainable development on Treasure Island.

Sustainability through Market Transformation

The founders of the U.S. Green Building Council agree that the best way to initiate change in the built environment is to work towards shifting the market. With this strategy in mind, they conceived the U.S. Green Building Council (USGBC). The USGBC is a non-profit corporation with a mission to “transform the way buildings and communities are designed, built and operated, enabling an environmentally and socially responsible, healthy, and prosperous environment that improves the quality of life” (U.S. Green Building Council [USGBC], n.d.). To help achieve their mission, in 1998 the USGBC launched a rating system to “benchmark the design, construction and operation of high performance buildings” (USGBC, n.d.). This third party rating system is called Leadership in Energy and Environmental Design or better known as LEED (50 Cities, n.d.). Using the LEED framework, the USGBC has created a standard in which high performance buildings can be certified. Depending upon the number of points achieved, a building is ranked as Certified, Silver, Gold, or Platinum.

The popularity of the LEED rating system has grown, in part, due to the mandates of local and state governments. In 1998, Arlington, Virginia, was the first U.S. city to mandate LEED for municipal projects. Over the next two years, Seattle, Austin, Portland, Chicago, Frisk, Kansas City, and San Diego followed suit. The first state to adopt LEED was Washington; on April 8th, 2005, the Governor of Washington mandated that all State-funded projects of 5000 square feet or larger, including renovations, achieve a LEED Silver rating (O'Brien & Company, 2006). In April of 2005, LEED was also mandated by the Federal Government; all new Federal buildings must now meet the LEED Gold standard (Creelman, 2006). As with most environmentally conservative and technically advanced movements, California has become a leader in high performance buildings and green building policies. In Alameda County alone, there are currently 12 cities that require LEED for State-funded projects. Three of those cities, Alameda, Albany, and Livermore, require that LEED be utilized for commercial buildings as well (Kho, 2008). The current trend mandating that municipal projects be built to the LEED standard is now expanding to the private sector. In November of 2008, San Francisco took center stage by passing a mandate that all commercial buildings of 5000 square feet or greater must meet the LEED Silver standard.

LEED for Neighborhood Development

The first LEED rating system was created for office buildings and was named LEED for New Construction (LEED-NC). However, as the LEED rating system became more prolific, it became evident that the LEED-NC framework was not applicable to all building types. The USGBC has since rolled out several rating systems including LEED for Homes, Core & Shell, Commercial Interiors, and Existing Buildings, while in 2007 the USGBC expanded the rating systems to include a broader context: the neighborhood.

The USGBC came together with the Congress of New Urbanism and the Natural Resource Defense Council to create a national set of standards for neighborhood location and design. The LEED for Neighborhood Development (LEED-ND) rating system is based on the tenets of New Urbanism, Smart Growth and Green Building. It is stated in the LEED-ND resource manual that the goal of the rating system is to “encourage developers to revitalize existing urban areas, reduce land consumption, reduce automobile dependence, promote pedestrian activity, improve air quality, decrease polluted storm water runoff, and build more livable, sustainable, communities for people of all income levels” (USGBC, 2008).

Fifty years ago, these goals would have seemed unnecessary. Twenty years ago they may have seemed idealistic. Today, many of these goals have become

critical for the survival of the human race. Humans have consumed and developed at such a rapid rate that not only is it imperative to slow down, but it has now become imperative to change course. Ironically, this new course is not entirely new; LEED-ND blends innovative technologies with trends of the past.

Before the automobile, people traveled by horse, train, boat, and foot. The simplest way to build a community was to keep amenities local: the store, job, home, school, and church were all located within walking distance. Mass transit stations for trains and boats were centrally located and easy to access. This efficient, common sense approach was the norm until the creation of the automobile. The automobile created a new sense of freedom that replaced localized communities with urban and suburban sprawl. Sprawl has led to long commutes and more traffic, which translates to less time at home, less walking, less neighborhood interaction, less farmland, and less climate stability.

As the quality of life drops, people begin to demand change. As a result, planners look for new and different ways to develop. In the case of transportation planning, the methods of the old have been given a new name; it's called Transportation Oriented Development (TOD). What was once a planning method based on necessity is now regarded as a model of choice. Urbanization and population growth have shifted the desired trend of sprawl to that of walkable cities, dense communities, and accessible rail lines. TOD is a common thread that ties LEED-ND with New Urbanism and Smart Growth. In addition to TOD, the LEED-ND system considers food security, energy needs, healthy buildings, lively communities, and natural habitat. The original goal of the USGBC was to shift the building industry towards high performance buildings. Through the LEED-ND rating system, their goal and vision for market transformation now extends to include sustainable development and vibrant communities.

The U.S. Green Building Council is working to develop and popularize the LEED-ND rating system in such a way that it can be adopted in cities throughout the world. There are already 230 LEED-ND registered pilot projects located throughout five countries. The majority of projects are in the U.S., while 45 are in California alone (USGBC, 2008). However, due to the unexpected volume of registered LEED-ND pilot projects, the U.S. Green Building Council is currently not accepting new applications. Registration will open again when version 2.0 is adopted later this year.

Case Study: Treasure Island

A San Francisco project not yet registered but slated for LEED-ND is the redevelopment of Treasure Island (ARUP, n.d.). Most LEED-ND projects work to adapt themselves into developed areas. Treasure Island is unique because

the project is a complete renovation, from the foundation of the structurally manufactured island itself, to the buildings, waste treatment, transportation hubs, power generation, and constructed wetlands.

Treasure Island is located in the San Francisco Bay, midpoint of the Bay Bridge, between San Francisco and Oakland. The island itself is man-made, constructed out of dredge material from the San Francisco Bay and the Sacramento Delta (Global Security, 2005). The Navy used Treasure Island as a military base from 1941 until the Department of Defense closed the base in 1993 (ibid.). The island is currently occupied by private residences. San Francisco's plan is to acquire the land from the Navy (Treasure Island Development Authority [TIDA], 2007) and build a model sustainable city (TIDA, 2006).

Before the Island can be redeveloped, it will first have to go through a major structural re-fit. When Treasure Island was built in 1937 it was 11 feet above sea level. Now the island is only nine feet above sea level (Global Security, 2005.). As the continental ice sheets melt and the ocean rises, Treasure Island will have to adapt. Furthermore, the 450 acre island is currently considered a brownfield, meaning it contains hazardous substances, pollutants, or contaminants (United States Environmental Protection Agency, n.d.). The LEED rating systems encourage development on brownfields because in order for these sites to become inhabitable they must first be remediated. Under the LEED-ND rating system a project can gain up to four points for developing on a brownfield (USGBC, 2007).

There are several methods for brownfield soil remediation. The technique chosen depends upon the hazardous materials present, along with the budget, time, and resources available for the remediation process. According to the McGill School of the Environment (n.d.), the two categories for soil remediation are physical and biological. They list four basic methods for remediation using physical techniques. The first option is to excavate the contaminated soil and deposit it into a land fill; this process requires heavy machinery and replacement of the contaminated soil with new soil. The second option listed by the McGill School (n.d.) is to use a geotextile, a synthetic material, to blanket the site after the contaminated soil has been removed, creating a barrier between the remains of the hazardous materials and the new soil; however, they note that the downfall of using a geotextile is that it may potentially tear, allowing the contaminated soil to mix with the new soil. The third option noted is to wash or treat the soil off site and bring it back to the site to reuse it once it has been treated (ibid.). The final technique for physical soil remediation is through vapor extraction, in which case pipes and wells are installed in the ground to allow contaminants to vaporize (ibid.).

The biological methods for brownfield remediation are relatively new to the industry. The biological processes of soil remediation often take much longer than the physical methods and are utilized only for specific contaminants

(McGill School, n.d.). The first option for bioremediation is microbial remediation; this process uses microbes to break down toxins such as hydrocarbons, PAH's, pesticides, and PCB's (ibid.). The McGill School (n.d.) lists another option as being phytoremediation, whereby plants pull the toxins from their roots into their above ground portions. The plant then becomes toxic itself and must be disposed of properly. And finally, if the ground is contaminated with hydrocarbons, various mushrooms can be used to remediate the soil (ibid).

The financial costs of the Treasure Island project will be very high because of the extensive scope involved with demolition, structural enhancements, and bioremediation. Before any buildings are constructed, development of the land itself will be a very expensive endeavor. Once the plan and budget for the structural enhancement and the soil remediation have been determined, the Island's infrastructure and layout will need to be addressed.

Transportation is also a critical point of consideration for the redevelopment project. Currently, the island is accessible by car, bus, and private boat. Cars and buses travel over the Bay Bridge to enter Treasure Island's southern most point via Yerba Buena Island; the docking for private boats is also located in this area. The redevelopment plan will focus on TOD; the planners intend to increase boat access by expanding the private docking along the southern end of the Island and by building a ferry docking station along the southwest edge (Ward, 2008). Easy and direct public transportation is essential because Treasure Island will be inhabited by residences, businesses, and tourists.

The entry point along the southern part of Treasure Island is where the majority of mixed use and residential buildings will be located. In addition to the LEED for Neighborhood Development strategic plan for the island, all buildings will be individually constructed to the meet LEED-NC Silver standard. This was the intent of the project before the City of San Francisco adopted its 2008 mandate (San Francisco Department of the Environment, n.d). These new development plans also include affordable housing. In the LEED-ND rating system up to four points can be earned for providing affordable housing: two points for affordable rental housing and two for affordable for-sale housing (USGBC, 2007). Criteria for affordable housing are based on the average median income level for the area. The options for achieving the points for rental housing require that 15 to 30 percent of all units be allocated for people making no more than 50 to 80 percent of the average median income (USGBC, n.d). The for-sale housing standards require that 10 to 20 percent of all for-sale units be allocated for people making no more than 80 to 120 percent of the standard median income. Although the criteria upon which "affordable" standards are established may be argued, the incorporation of low income households into sustainable communities is critical for social equity. Gentrification is often a by-product of

new development projects. Consideration of affordable housing and low income families demonstrates a way in which the social component of sustainability can be implemented into a rating system such as LEED.

New housing and mixed-use buildings on Treasure Island will help to transform the sprawl of houses that are currently on the island and increase the existing density from eight units per acre to 75 units per acre. The increased density will allow for more residents on the island while leaving room for 200 acres of green space that can be used for farming and natural wetlands. Another LEED criterion that is uniquely planned for Treasure Island is constructed wetlands that will serve as a natural water treatment system. These areas will filter the majority of storm water run-off and reclaim up to a quarter of household water for reuse on vegetation and for non-potable uses in commercial buildings (Ward, 2008). Three points in the LEED-ND rating system can be gained for the constructed wetlands: one for site design, one for restoration, and one for conservation management of habitat or wetlands (USGBC, 2007).

Another aspect of LEED-ND that the Treasure Island development can address is food production. In the current plans, the northern part of Treasure Island is slated for agricultural use. Local food production is an ideal strategy towards food security. It is estimated that most food travels 1,500 miles before it reaches the kitchen table (Halweil, 2002). Local food production on Treasure Island will provide sustenance for residents less than a mile from their house (Ward, 2008). One point is gained in the LEED-ND system for local food production (USGBC, 2007). However, the possibility of food production on Treasure Island will be dependent upon the level of soil remediation achieved. If the proximity to the ebb and flow of the bay restricts the level of remediation possible, the ground may need to be capped with a geotextile, raised beds installed, and new soil imported for planting purposes. Raised beds will help to buffer the roots of the plants from the hazardous materials.

Energy is the most weighted portion of all LEED rating systems, earning up to six points in the LEED-ND system (USGBC, 2007). A project must achieve significant gains in energy reduction in order to achieve certification. The Treasure Island project plans to have fifty percent of its energy needs produced on-site (Ward, 2008). Wind turbines will utilize the high winds that enter the site from the northwest, while tidal turbines underwater on the southeastern part of the island will harvest power from the flow through the Golden Gate Channel; planners estimate that the tidal turbine could produce ten mega watts of energy, enough to power 8000 single-family homes (ibid.). Additionally, shifting the orientation of the buildings 35 degrees south will allow energy to be saved by maximizing solar access and blocking prevailing winds (ibid.).

Conclusion

Both the plan for redeveloping Treasure Island and the U.S. Green Building Council are taking pioneering steps in the direction towards a more sustainable future. The USGBC is leading the change from what is considered traditional construction and development towards more sustainable practices. Their advocacy efforts are shifting the market while providing a framework for city planners, architects, and builders. As seen through the Treasure Island case study, the groundwork that the USGBC has laid is creating healthier communities that incorporate thriving businesses, habitat restoration, resource efficient technologies, and social equity.

These strategies are crucial because the world cannot afford the building trends of the late 20th century. The issues facing the human race today, such as the energy crisis, global climate change, and food security, all require a change in behavior. Simply put, the human footprint must shrink. The planning and development of cities must be more resource efficient, both in terms of intake and output. As trends toward urbanization and population growth increase, urban planning must include strategies for sustainability that allow cities to become healthy, vital places where people and our environment can thrive.

References

ARUP. (n.d.). *Environment: Treasure Island Sustainability Planning*. Retrieved November 12, 2008, from “<http://www.arup.com/environment/projectcfm?pageid=10331>”

Creelman, B. (2006). Federal Government Backs Away From Green Building Incentives. *Capital News On Line. Vol. 19*. Retrieved November 7, 2008, from “<http://www.carleton.ca/jmc/cnews/03112006/n2.shtml>”

Global Security. (2005). *Military: Naval Air Station and Treasure Island*. Retrieved November 17, 2008, from “<http://www.globalsecurity.org/military/facility/treasure-island.htm>”

Kazan, C. (2008). Super Green City of the Future? *The Daily Galaxy*. Retrieved November 29, 2008, from “http://www.dailygalaxy.com/my_weblog/environment/”

Kho, K. (2008). *Green Building Programs (Powerpoint Presentation)*. Sustainable Building Advisor Program, San Francisco.

- LEED_50 Cities. (n.d). Retrieved Nov. 7, 2008, from chapters.usgbc.org/alaska/documents/LEED-50Cities.ppt
- McGill School of the Environment. (2002). *Introduction*. Retrieved November 29, 2008, from "http://mse-research.mcgill.ca/envr401_2002/brownfields/intro.html"
- O'Brien & Company. (2006). *Green Building Initiatives for Schools Implementation*. Retrieved Nov. 7, 2008, from nmbea.org/images/Links/53-SchoolPolicies9.26.06.doc
- Popular Mechanics. (n.d.). *Interactive Graphic*. Retrieved November 12, 2008, from "http://avmedia.popularmechanics.com/video/supercity/supercity.html"
- Rosenberg, M. (2006). *Population Growth: Population Growth and Double Time*. Retrieved November 8, 2008, from "http://geography.about.com/od/populationgeography/a/populationgrow.htm"
- San Francisco Department of the Environment. (n.d). *Our Cities Programs: Green Building*. Retrieved November 12, 2008, from http://www.sfenvironment.org/our_programs/topics.html?ssi=8&ti=19#LegislationInitiatives
- U.S. Environmental Protection Agency. (n.d). *Brownfields and Land Revitalization*. Retrieved November 15, 2008, from "http://epa.gov/brownfields/"
- U.S. Green Building Council. (n.d). About USGBC. Retrieved November 7, 2008, from <http://www.usgbc.org/DisplayPage.aspx?CMSPageID=124>
- U.S. Green Building Council. (n.d.). *LEED for Neighborhood Development*. Retrieved November 12, 2008, from <http://www.usgbc.org/DisplayPage.aspx?CMSPageID=148>
- U.S. Green Building Council. (2008). *LEED for Neighborhood Development Pilot Project List*. Retrieved November 12, 2008, from <http://www.usgbc.org/ShowFile.aspx?DocumentID=3546>
- U.S. Green Building Council. (2008). *LEED Rating System*. Retrieved November 12, 2008, from <http://www.usgbc.org/DisplayPage.aspx?CategoryID=19>
- U.S. Green Building Council. (2007). *Pilot Version LEED for Neighborhood Development*. Retrieved November 12, 2008, from <http://www.usgbc.org/ShowFile.aspx?DocumentID=2845>
- Wolberger, O. (2008). Why Treasure Island is the Super Green City of the Future. *Popular Mechanics*. Retrieved November 12, 2008, from <http://www.popularmechanics.com/science/earth/4239381.html?page=2>
- World Green Building Council. (2008). Retrieved November 12, 2008, from <http://www.worldgbc.org/>



Urban Ecopoiesis:
The Emergent Urban Form at the Dawn of the Ecozoic Era

Nathan Rogers

Editors' Introduction

Urban Studies major Nathan Rogers provides an in-depth analysis and a novel way of thinking about the current plight of the environment in “Urban Ecopoiesis: The Emergent Urban Form at the Dawn of the Ecozoic Era.” The author assesses how humans have increasingly damaged the environment to a point where an argument for mass extinction is now plausible. He concludes the piece by offering the prospect of hope through “Urban Ecopoiesis,” a multidisciplinary-based model in which our cities become the focal point of ecological regeneration, both in both the physical dimension as well as the realm of physical experience.

***Now is the time that the gods emerge from
the things by which we dwell.***

-Rilke

Introduction

As the ancient Chinese saying goes, we are blessed—or cursed, depending on your perspective—to be living in interesting times. Beyond such an innocuous description, we are living in the *ultimate of interesting times* as the human species is finally awaking to the fact that it is ourselves who are solely responsible for the rapacious environmental destruction that has brought whole ecosystems—and perhaps the planet itself—to the brink of collapse. However, we are still largely unsure of how or why we arrived at this juncture, and continue to struggle in finding solutions beyond grand technological panaceas. Of perhaps equal danger is that fact that we risk being fooled into thinking that we can simply consume our way out of this imminent disaster by purchasing “green” products such as incandescent light bulbs, organic cotton bed-sheets, and hybrid cars. The word “sustainable” is now tossed around so prolifically and carelessly that it risks suffering from collective semantic satiation—repeated with such frequency that it loses all meaning. Should we wish to seize this precious moment of nascent global-human consciousness and begin the epic task of actively repairing our planet, we must understand that it is our human patterns of settlement—our cities and suburbs, the resources they consume, and waste they produce—that are the primary causes of planetary distress. While such a notion gives cause for great despair—how does one redesign a civilization?—ultimately the goal of this paper is to inspire hope that a new urban form is emerging from the devastation of industrial civilization. It is a model that fuses ecology, design, and genuine human experience of the Sacred, elemental world. It is the work of countless designers, thinkers, writers, builders, permaculturists, planners, environmentalists, and everyday people. Their time has come.

One such individual—who falls into pretty much all of the above categories—is the venerable urban theorist and founder of Ecocity Builders, Richard Register. His visionary book, *Ecocities: Rebuilding Cities in Balance with Nature*, introduced me to two of the central figures in this paper—Thomas Berry and Paolo Soleri—whose work helped to bridge the intellectual gap between my disparate courses of research into environmental urbanism. I am profoundly grateful for his knowledge and influence.

The Ecozoic Era

No better words could one compose when attempting to communicate

the immense—truly evolutionary—proportions of this moment in history than those of the venerable cosmologist, cultural historian, and geologist, Thomas Berry:

The changes presently taking place in human and earthly affairs are beyond any parallel with historical change or cultural modification as these have occurred in the past. This is not like the transition from the classical period to the medieval period or from the medieval to the modern period. These changes reach far beyond the civilizational process, beyond even the human process, into the biosystems and even the geological structures of the Earth itself. (quoted in Register, 2006, p. 25)

The transition Berry is referring to is nothing less than the terminus of 65 million years of planetary history and the dawn of an entirely new biological era, the “Ecozoic” era (Berry and Swimme, 1992). As a rightful successor to the three previous classical eras, the Paleozoic, Mesozoic, and most recently, Cenozoic, the Ecozoic era represents a fundamental shift in the evolutionary processes the Earth has undergone during its roughly 4.5 billion years of existence. According to the theory first propounded by Berry and Swimme (1992), the overriding objective of the Ecozoic era, is “to assist in establishing a mutually enhancing human presence upon the Earth” (p. 250). It is the era in which humans alone assume sole responsibility for the survival of every living organism and biological system on the planet (Berry and Swimme, 1992). Perhaps the most fascinating feature of this emergent era is that it represents an entirely novel moment in human, and thus, universal evolution; it is the moment when all of life, with deep interconnections wrought of billions of years of evolution, becomes essentially a singular organism capable of reflective self-awareness, and thus assumes active control over its own evolutionary trajectory through human actions (Register, 2006, p. 26).

While the term “Ecozoic” is a neologism—it has not yet cemented itself in common vernacular—it bears a close resemblance in meaning to Nobel Prize winning scientist Paul Crutzen’s conception of the “Anthropocene” epoch. The etymology of the word speaks clearly to its profound implications: in Greek, “anthropo” means “human,” and “cene” is the standard suffix denoting an epoch in geological time (Ellis, 2008). Literally translated as, “the Human Epoch,” Crutzen’s basis for this new definition was founded on the premise that during the previous epoch, the Holocene, which began approximately 10,000 years ago, Earth was inhabited by small human populations with relatively rudimentary forms of energy production and tools for manipulation of the natural world; thus, the definition of Holocene is insufficient in scope to account for the massive, human-caused sedimentary, atmospheric, biotic, and oceanic changes seen in the emergent Anthropocene epoch (Ellis, 2008). In the beginning of 2008, the groundswell for official adoption of the Anthropocene epoch by the scientific community reached

critical mass with two seminal publications: first, Steffen, Crutzen, and McNeil (2007) published, “The Anthropocene: Are Humans now Overwhelming the Great Forces of Nature?” in *Ambio: A Journal of the Human Environment*; meanwhile, Zalasiewicz et al. (2008) furthered the Anthropocene debate with, “Are we now living in the Anthropocene?” published in *Geological Society of America Today*. In the words of the former report:

The Great Acceleration is reaching criticality. Enormous, immediate challenges confront humanity over the next few decades as it attempts to pass through a bottleneck of continued population growth, excessive resources use, and environmental deterioration. In most parts of the world the demand for fossil fuels overwhelms the desire to significantly reduce greenhouse gas emissions. About 60 percent of ecosystem services are already degraded and will continue to degrade further unless significant social changes in values and management occur. [...] Whatever unfolds, the next few decades will surely be a tipping point in the evolution of the Anthropocene. (Steffen, Crutzen, and McNeil, 2007, p. 621)

Whether one believes that this moment in planetary history is an organic extension of the Universe’s own process of cosmogenesis (Berry and Swimme, 1992) or simply the outcome of an egregious lack of foresight and monumental amounts of human hubris, it seems that the jury is in; the human species is now living under an entirely new evolutionary paradigm in which the outcome will be solely decided by man himself. His success or failure will not be attributed to the capricious whims of fate, nor for lack of endowment of resources or creativity. We have entered unwittingly into a pact with the planet—with the biosphere itself; the goal of maintaining its survival—and thus, our own, for the two are inextricably linked—is within our reach, but the task rests squarely at our feet. For those who may be uncomfortable with such a monumental imperative, it is helpful to once again return to the words of Berry and Swimme (1992) for guidance:

By entering in to the control of the planet through our sciences and our technologies in these past two centuries, we have assumed responsibilities beyond anything that we are capable of carrying out with any assured success. But now that we have inserted ourselves so extensively into the functioning of the ecosystems of the Earth, we cannot simply withdraw and leave the planet and all its life systems to themselves in coping with the poisoning and other devastation that we have wrought. (p.252)

Indeed, many of us alive today will get to see how this great planetary drama ultimately concludes. Will the human species accept its evolutionary role not only as guardians of the Earth’s resources, but active progenitors of entirely novel city ecosystems, ecological economies, and a forthcoming psycho-spiritual

mindset that puts nature—The Sacred—and its imperative for survival clearly at the forefront of all human actions? Or, will we shirk our responsibilities, afraid, or worse, apathetic, perhaps believing that someone else down the road or some grand new technological achievement will clean up our mess for us so that we can thus continue in our fossil fueled frenzy, drunk on the fumes of our own hubris, blithely consuming the Earth’s remaining treasures in a negative feedback loop of perpetual resource degradation?

How We Live and How It Got Us Here

As I mentioned in the introduction, central to the understanding of our ecological predicament is the question of how we got to this point; the simple answer to that question is that it is how we live that got us here. Girardet (1992) provides a detailed explanation of this notion:

Because of the demands cities make on the environment, they are center-stage in the global environmental drama. The concentration of intense economic activity and high levels of consumption among dense city populations both increase demands on natural resources by city-based activities. Built on two per cent of the world’s land surface, they use over three-quarters of the world’s resources and discharge similar amounts of waste. Urban wastes have local impacts but are also a problem of global dimension. So let us think of our cities as being part of the world’s major environmental agenda and look to reorganizing them as part of the global problem-solving process. (1992, p. v)

Such a statement has myriad profound and even daunting implications for the scope of work ahead, but is also inspiring because it offers us a contextual framework for designing solutions. The problem is that very few people have made this connection. Most individuals tend to think that environmental problems are not interrelated, occur in a vacuum, and are problems “over there”. Unfortunately, none of these ideas could be farther from the truth. Clear-cutting of rainforest is seen as a problem of greedy farmers and insouciant governments. What is forgotten is that the industrialized world’s demands for exotic hardwoods to install in our homes and abundant land for cattle grazing so that we may eat cheap hamburgers provide the economic incentives for such destructive practices. We are vaguely aware of the 150 oceanic “dead zones” around the world, but have yet to make the connection that our industrial agricultural processes pump massive amounts of nitrogen into the soil beyond what it can readily use, which eventually runs off into streams and rivers, ultimately meeting at the coast where it mixes with urban sewage effluvia containing even more nitrogen-rich human waste. Such a process, as explained by Newman and Jenkins (2008), “will lead to a high oxygen demand that, in turn, creates eutrophication of waters and consequent death of organisms” (p.119).

Girardet (1992) states that what we have inherited from a legacy of industrial-urban development out of sync with natural processes are “biocidal cities,” which, “have taken food without returning fertility to the soil [...] forest products without contributing to reforestation [...] water without ensuring sustainable supplies” (p.22). Another way to conceptualize this phenomenon draws from the natural sciences, in viewing cities as having metabolisms in the way a living organism would, a concept that allows us to “asses their regular demands for food, water, raw materials, and fuels” (Girardet, 1992, p. 20). Biocidal cities are ones with “linear” metabolisms, in which the resource throughput is one-way, where raw resources are consumed from the city’s hinterlands—soils, forests, watersheds, etc.—without any replenishment being returned (Girardet, 1992). Girardet (1992) goes on to note the dramatic consequences of such neglect, as evidenced by the ruins of Ur and Babylon; these ancient cities starved their once abundant hinterlands, fed by the great Tigris and Euphrates rivers, and left in their wake little more than a barren wasteland.

The modern cities of today’s globalized economy represent a distinct break with the cities of the past in their capacities to afflict harm upon their resource base. This is seen in two ways: first, whereas the cities of the past were relatively limited in their physical reach and thus could by and large only degrade their local ecosystems, the modern city has the ability to draw upon resources from the most remote areas of the globe. In essence, the world’s major cities now have global hinterlands, and as such, are capable of inflicting environmental damage commensurate to their economic might. Secondly, until the mid-1800s the waste cities produced was mainly organic in nature—meaning that it could ultimately be absorbed by the planet’s ecosystems with little long term damage. Now, in addition to the hundreds of millions of tons of CO₂ pumped into the atmosphere annually, we are releasing an industrial stream of highly toxic, synthetic chemical compounds for which the Earth has no evolutionary adaptive abilities to process. Rather than returning essential nutrients back to the soils, waters, and forests, we are instead feeding them industrial effluence, in turn dramatically degrading the long-term viability of the very systems we depend on for life! Such a system attests to a deep cultural pathology resulting from a complete divorcement of ourselves from natural systems, and it must be remedied if we are to successfully accomplish the prime directive of the Ecozoic era.

Compounding the ecological problems posed by traditional cities, we now face the concomitant issue of the inordinate resource demands of suburban “sprawl,” which has been the *sine quo non* of American development for nearly three-quarters of a century. The historical irony of this situation, as noted by Register (2006), is that the creation of the American suburb was actually an attempt to build the ecological city envisioned by Ebenezer Howard and his dream of

Garden Cities:

Very few of them knew anything about the Garden City movement, but in their own way they were striving for a similar ideal. Everyone was to be humanized by grass, trees, roses, robins, butterflies, clean skies, and starry nights. The vast majority thought it was a good idea. Linking semi-rural suburbs to the city with roads, cars, and television seemed harmless enough. [...] If everybody could have a car and a house at a reasonable price, they would just solve the next problem as it appeared. (106)

Frighteningly, in a rush to emulate the “rich world” lifestyles of Americans, replete with oversized single family homes and dual car ownership, the burgeoning ranks of the developing world nouveau riche are now adopting this development paradigm as their own, particularly in rapidly urbanizing China. Ruggeri (2007) explains that buyers of these new suburban developments “are interpellated [sic] as East-meets-West pastiche subjects; they respond to an ideology that mixes Orientalist clichés [...] with Hollywood narratives of the American Dream” (p.105).

So, here we find ourselves, perched not only at the outer limits of history, but at the precipice of an environmental abyss—a veritable black hole—from which, if we enter, no life will escape. At the center of this great drama sits our cities and suburbs, the very settlement patterns that define our sense of place and self in the 21st century. What is to be done about them? More precisely, what can we do about them? With a planetary human population of roughly six billion—half of which is now living in urban agglomerations—and a doubling of the population with corresponding 70 percent urbanization projected a mere two decades into the future, simply abandoning our cities and returning to village-based subsistence farming villages is clearly an untenable proposition. Perhaps if the most dire predictions of climatologist James Lovelock—creator of the “Gaia Theory” of Earth as a singular organism—prove correct, which include the total desertification of the European continent and a human population culled to roughly half a billion by 2100 (Jeffries, 2007), then for the remaining few survivors clustered in groups at the poles a return to quasi-Neolithic farming villages will be in order.

Urban Ecopoiesis

We have come to the point in this paper where it is time to reflect upon the future of human civilization in its urban incarnation and offer a bit of hope that we are entering into a new and better day. Throughout the course of my research for this paper, I came upon literally hundreds of examples of individuals and groups across the globe actively working to shift the way in which we view the

urban environment and its relationship to the natural world. It is a movement that recognizes the often missed yet inextricable connection between the way in which we build our cities, suburbs, and towns, and our physical, mental, and spiritual health.

It dawned on me that what we are witnessing as we move into the second decade of the 21st century is a confluence of thought that represents the emergence of an entirely novel urban form. Scouring the depths of language to find a word that would accurately summarize such a profound new paradigm, I happened upon the word “ecopoiesis”. Another neologism, virtually synonymous with the notion of terraforming, it was conceptualized by Canadian geneticist and biophysicist, Robert Haynes, in reference to the “fabrication of a sustainable ecosystem on a currently lifeless, sterile planet” (NationMaster, 2008). (Readers may be familiar with the concept of terraforming in relation to the possibility of transforming Mars into a planet with a biosphere conducive to human inhabitation: truly an example of humans directing the Universe’s evolution!) While Planet Earth is by no means lifeless and sterile, it could be said that the current physical environments that humans inhabit certainly are. Thus, “Urban Ecopoiesis” is the process of creating a novel urban ecology—terraforming the urban environment from “an overlay of mechanistic patterns” (Swimme and Berry, 1992, p. 13) into a symbiotic fusion of design, architecture, and natural ecology representative of the great evolutionary shift into the Ecozoic era.

I propose that Urban Ecopoiesis exists in three distinct dimensions: spatial, which includes the geographic layout of the city as well as its buildings and other physical structures; the metabolism of the urban environment, including its resource throughputs or patterns of consumption and waste production; and finally, the unseen, emerging noosphere. There is a great deal of cross over between these dimensions, inasmuch as they are all intrinsically related, mutually reinforcing, and reciprocal. The final sections of this paper I shall devote to exploring these dimensions in less abstract terms and offer possible implications for how they can support continued human inhabitation of Planet Earth.

Spatial Dimension: Geographic/Temporal Component

The fundamental goal in redesigning the geographic component of the spatial dimension can be summarized by what Paolo Soleri (1969) calls “miniaturization,” which is “the process that miniaturizes the prime handicap of the physical world: the time-space straight jacket” (p. 2). Little in our current vernacular for discussing urban-geographic rearrangement instills the truly axiomatic nature of the need to miniaturize should we wish to avert ecological calamities of a magnitude the aforementioned James Lovelock fears. Soleri (1969) helps to crystallize this notion:

Society is still an awkward animal suffering from a kind of “flat gigantism” that nails it to the surface of the earth. It is sclerotic, asphyxiated. It is poisoned by the wastes it profusely produces and cannot expel. [...] It is to a very dangerous degree unfit to live. But society may well be the only road open to man. Its miniaturization will make the difference between his confirmation or his death. (p. 5)

Thankfully, history has endowed us with myriad examples of this extant form in our great cities around the world, particularly in Europe. Representative of a more coherent narrative of the proper functioning of cities than the one that has produced modern suburban development ad nauseam, cities such as Paris, London, Copenhagen, and Amsterdam, with their high-density, mixed use features served by abundant transit and supportive of low-energy human lifestyles, are held as archetypes for future urban design. Other lesser-known, yet equally dense, cohesive cities dot the landscape throughout much of Europe, including Germany, Denmark, and the Netherlands; Beatley (2000) provides an excellent overview of the dynamics of many of these cities. These smaller cities can serve as templates for the adaptation of low-density American suburbs in which the geographic/temporal component is both the most challenging and compelling of our attention and redesign.

In the suburban badlands known as home to the majority of Americans, one encounters the most problematic and resource intensive development pattern ever created: sprawl. The most pressing need when contemplating the reconfiguration and miniaturization of sprawl is to minimize the need for travel. As Register (2006) states, “the best transportation is the least: access by proximity should be the objective” (p. 139). Decreased need for vehicles equates to less land covered in pavement, fewer raw resources extracted to produce vehicles with a corresponding decline in industrial-waste byproducts; and a massive decrease in the energy requirements from that of a vehicle based city form (Register, 2006).

Since we are discussing the rearranging of existing settlements, rather the creation of new settlements, it is much harder to imagine the act of literal miniaturization; existing suburbs already inhabit a given amount of space, thus, in absence of being able to reduce the volume of a given settlement, we must instead focus on increasing the density of it. Soleri’s (1969) corollary to miniaturization, “complexification,” inherently alludes to the fundamental nature of this process. “Complexification is metaphysical side of Minaturization [...] a measure of how many interactions are being added to a process [...]” (Arcosanti, n.d., “Paolo Soleri’s glossary of terms”). Both nature (evolution) and technology teach us this basic principal. The human brain is much smaller than our primate ancestors’, yet it has become infinitely more complex. Thousands of times more computing power than what was once housed in an entire room can now fit in your pocket.

Both nature and technology understand that the greater the distance between two points in a common organism, the greater amount of precious energy will be required to transport resources across that distance. The same applies to cities. Whereas density is often conceptualized only in terms of increasing the number of individuals inhabiting a given space, we must instead increase the amount of everything inhabiting a given space, thereby decreasing the amount of energy it takes to move resources between two given points. Register (2006) explains this process as creating “urban fractals,” which are “portions of the city that embody the essential functions of the whole city on a smaller scale [...]” (p. 128). Van der Ryn and Cowand (1996) also have adapted nature’s fractal forms—what they call “self similarity”—to design techniques, noting that “Self-similarity is a direct consequence of identical processes shaping form across many scales” (p. 56). Such a process places all people within easy access—preferably walking distance—to everything else and comes much closer to approximating the idea of access by proximity. However, while we miniaturize and complexify the spatial and economic conditions that necessitate vehicular access (or travel at all), we must not neglect to commensurately increase the availability and practicality of non-vehicular alternatives—such as bicycling and public transportation—for occasions when traversing greater spatial distances is necessary.

Of course, while such directives are axiomatic, they will not be achieved over-night. For nearly three-quarters of a century, the U.S. Federal Government has incentivized and subsidized classic suburban development. This decision has massively contributed to the iconic notion of the American Dream and the sacrosanct status of private space, manifested in the single family home and personal vehicle, which has resulted in development patterns that require a maximum amount of resources to move people and goods from place to place. The perceived cultural cachet and supposed advantages to this lifestyle are so strong that it continues in spite of the growing amount of resources—time, money, and energy—it takes to maintain these habits and to increasingly deleterious effects on mental, physical, and spiritual health. Therefore, we must create new types of spatial arrangements, including car free housing; infill development; mixed use, transit-rich corridors; and urban fractals, forms that provide an equal or greater standard of living at a far less economic, temporal, and environmental cost. Successful implementation of such arrangements will result in a self-perpetuating cycle in which developers, financiers, and residents—current and future—see that such developments are financially successful and highly habitable, eventually leading to the widespread adoption of such lifestyles necessary to push the vehicle-as-primacy paradigm to the fringe and see vehicle-free lifestyles become standard.

Spatial Dimension: Built Environment

The second component of the spatial dimension is the built structures that comprise the urban form. This is the area that has seen the greatest advancement towards sustainability in recent years. While the current energy usage of buildings in North America accounts for 2,200 megatons of CO₂—35 percent of the nation's total—released into the atmosphere each year (Commission for Environmental Cooperation, 2008), the United States Green Building Council's Leadership in Environmental Efficiency and Design (LEED) standards have given builders and developers the tools to design buildings that are increasingly environmentally benign or even symbiotic. A growing market for energy-saving building technologies has the promise of reducing the carbon output of buildings in the U.S. by over 1700 megatons by 2030 (*ibid.*). The broad implementation of LEED guidelines in residential, commercial, and governmental construction has delivered quantifiable data showing that “green” buildings outperform their non-green counterparts by no small measure, reducing energy demands by 30 percent, water use by 30-50 percent, and energy savings of anywhere from an astounding 50-90 percent (*ibid.*). New technologies such as web-based “dashboards” being developed by Lucid Technologies in Oakland, California, will allow for real-time control of building resource consumption (“Home, green home,” 2008). It seems that green building technologies continue to push the bleeding edge of the possible a little more each day; San Francisco based HOK architecture firm is partnering with the Helena, Montana, based Biomimicry Guild in learning to design buildings that mimic patterns of the natural environment (Riddell, 2008). Much hope for the environmental viability of future development is derived from this beautiful symbiosis of architecture, design, and market forces. There is also much hope to be found in the return to “indigenous” building techniques of utilizing materials and designing structures uniquely suited to the local environment in order to heat and cool buildings without mechanical means.

Ecological Dimension

The second dimension of Urban Ecopoiesis—the ecological dimension—deals with the metabolism of cities: how they acquire their energy, water, and food resources as well as how the corresponding “waste” is either recycled or transformed into fuel for other systems. The prime directive of this dimension is to create what Girardet (1992) calls “biogenic” cities, or cities that feature closed-loop, circular metabolisms (p. 22). To expand upon this concept:

Nature's own ecosystems have an essentially circular metabolism in which every output which is discharged by an organism also becomes an input which renews and sustains the continuity of the whole living environment of

which it is a part. [...]

The metabolism of most modern cities, in contrast, is essentially linear, with resources being ‘pumped’ through the urban system without much concern about their origin or about the destination of wastes, resulting in the discharge of vast amounts of waste products incompatible with natural systems. [...]

On a predominantly urban planet, cities will need to adopt circular metabolic systems to assure their own long-term viability and that of the rural environments on whose sustained productivity they depend. (Girardet, 2004, pp. 126-127)

Thankfully, we are beginning to see a nascent shift in this direction. Simple recycling is a great start, though even more progressive, and certainly indicative of the Urban Ecopoiesis mindset, are municipal-scale composting programs such as the one pioneered by San Francisco. “Green bins,” in which users can discard all of their food and yard waste, are distributed free to city residents and businesses. The bins are collected and transported to composting facilities in Vacaville and Gilroy by way of trucks running on a diesel/soy oil blend; the resulting product—rich in naturally occurring nitrogen, phosphorous, as well as valuable microorganisms—is then sold back to local farmers (Peirce, 2007). Through this system, these valuable organic nutrients are returned to the soil where they belong rather than ending up in the City’s sewage stream, landing in the ocean, and ultimately contributing to eutrophication. It is a perfect example of a closed loop system! It is also a system that makes economic sense as what was once a “waste” to be disposed of is now viewed as a valuable commodity.

Sewage treatment and water reclamation is a more complicated issue, particularly in light of the way most of us in the “civilized” world of indoor plumbing have come to view our own waste: as something inherently “dirty” and to be ridden of as quickly as possible. Even relatively benign bath and sink water is looked upon with trepidation when it comes to potential reuse; these fears are codified and reflected in building codes, making it incredibly difficult to acquire permits to collect and reuse gray water for purposes other than landscaping. However, uncertainty regarding future precipitation patterns amidst climate change, particularly here in the drought-prone western U.S., is quickly forcing us to rethink our decadent habits of water consumption. According to the San Francisco Public Utilities Commission (SFPUC), already more than 1600 municipalities in 11 states are using reclaimed water, including 160 cities in California; in March of 2008, San Francisco released plans for the Westside Recycled Water Project, which when completed will deliver two million gallons per day of recycled water to customers for non-potable uses (SFPUC, 2008).

Biological waste-water treatment systems, such as those employed by the

northern California town of Arcata, are representative of the bleeding-edge fusion between ecology and technology. These “eco machines” are designed to employ natural processes in treating human waste rather than the intense amounts energy and chemicals used by their mechanical counterparts. Van der Ryn and Cowand (1996) explain the principles at work in the Arcata Marsh and Wildlife Sanctuary Wastewater Treatment Facility:

The marsh, constructed on derelict land, has been treating sewage from the town's conventional primary treatment plant since 1986. As the water meanders through the marsh over a two-month period, it is purified by plants like duckweed, cattails, pennywort, and bulrushes; aerobic and anaerobic bacteria; mollusks; and fish. [...] The Arcata marsh carefully matches a human waste with an ecosystem for which the waste becomes a resource. (p. 140)

No discussion of cities and resource flows is complete without a serious discussion of energy. Our urban and suburban landscapes consume an inordinate share of the world's energy resources, most of which is derived from fossil fuels. Energy is a highly contentious issue as it is a source of billions of dollars in profit for major coal and oil companies; yet the process of acquiring the raw resources for such systems exacts an extreme toll on the natural environment and contributes to political instability and human rights abuses in resource rich—yet poorly governed—countries. There are a number of technologies available that allow cities, neighborhoods, and even individual buildings to produce localized power at far greater levels of efficiency than large-scale, centralized systems in which the power produced must be transmitted over great distances to eventual consumers. An example of such a system is combined heat and power stations, which typically use the cleanest burning fossil fuel—natural gas—to power a turbine that produces electricity, heat, and hot water. In large scale power plants, the heat is completely lost as a “waste”. However, due to the localized nature of CHP systems, all three elements can be pumped into buildings in the surrounding area. Such systems achieve “90-per cent efficiency, compared with about 35 per cent for conventional power plants [...]” (Girardet, 1992, p. 142). These plans can also be adapted to run on locally available waste products, including biosolids collected from the wastewater treatment process. Ironically, such technology is not new; Europe has been utilizing it since the early 1950's (Beatley, 2001).

The ultimate goal of designing ecological systems to perform previously industrial functions is to adapt principals from, and integrate them into, natural processes (Van der Ryn and Cowand, 1996). In terms of energy, what this means is adapting and integrating nature's greatest energy source: the sun. In July of 2008, researchers at MIT developed a revolutionary method of harnessing and storing the energy of the sun based on the photosynthesis process of plants. Their

conclusion rocked the scientific world: in a single hour enough sunlight strikes the Earth to power the entire planet's energy needs for a year (Trafton, 2008). Such a monumental discovery has profound implications for the future of cities. Redesigning our patterns of settlement under the Urban Ecopoiesis paradigm will require massive amounts of energy; let us hope that such a technology is not impeded by the vainglorious pursuit of perpetual profits at the expense of the planet, and ultimately, the human experiment itself.

I shall conclude this discussion of the second dimension of Urban Ecopoiesis with a subject that is extremely important, yet until very recently has often been overlooked in conversations of sustainability: food. Since the end of WWII and the emergence of the industrial food model, Americans and the rest of us in the Western world have become lulled into a false sense of abundance. For over half a century, we have known neither famine, starvation, nor any real sense of the periodic scarcity endemic to the human condition since the emergence of early man. However, this abundance has come at a great price. Exclusive reliance on fossil-fuel based, monoculture industrial farming has eroded thousands of years of priceless top soil in less than a century. Waterways have suffered egregious pollution due to runoff of synthetic fertilizers, toxic pesticides and herbicides, and massive amounts of waste from animals concentrated in feed lots. Precious genetic biodiversity has been lost forever at the behest of international markets, which demand of farmers produce varieties selected for uniformity of appearance and ability to travel. Meanwhile, obesity and diabetes are epidemics of the industrialized world while heart disease takes the lives of over 650,000 Americans annually (Centers for Disease Control, 2008).

Thankfully, there is a growing movement of eaters, farmers, chefs, restaurateurs, and educators devoted to a return to food grown in accordance with ecological principles. Increased interest in local food systems, backyard and schoolyard gardens, and the growth of Farmer's Markets across the nation—from roughly 1700 in 1994 to over 4600 in 2008 (United States Department of Agriculture, 2008)—attest to this fact. Cities are an integral part of a healthy, sustainable food system, and they must act to protect and strengthen it. However, the small farms that form the base of this movement are the ones most at risk of being targeted by suburban land developers. American Farmland Trust (AFT), a national non-profit that works to preserve our nation's farmland, states that 86 percent of all agricultural land is adjacent to urban areas; they estimate that for every minute of every day two acres of land are lost to development (2002). Cities can help preserve this precious resource by implementing smart growth policies, utilization of urban growth boundaries, actively creating municipally owned farms and gardens, and setting aside tax revenue for the purchase of conservation easements that protect farmland from development in perpetuity.

The notion of food, farms, and farmland is a particularly poignant example of the synergy that takes place between the three dimensions of Urban Ecopoiesis. Farmland obviously has a spatial quality; it is also intrinsic to the ecology and resource stream of the city and its human inhabitants, yet the notion of protecting it is only derived from a deep reverence for the land and its abundant gifts that is uniquely characteristic of the third dimension of Urban Ecopoiesis: the emerging noosphere.

Noosphere

The concept of the “noosphere” can be attributed primarily to the writings of French philosopher, Jesuit priest, and scientist, Father Pierre Teilhard de Chardin. According to Pinchbeck (2006):

Chardin theorized the possible existence of a mental envelope, a layer of thought, encompassing the Earth. [...] the noosphere would eventually develop into ‘a harmonized collectivity of consciousness equivalent to a sort of super-consciousness. The activation of the noosphere would be predicated on humanity’s realization of itself and the Earth as constituting a single organism, followed by the ‘unanimous construction of a spirit of the Earth. (pp. 60-61)

Register (2006) notes that Chardin believed cities were the loci for the concentration of human thought necessary for the emergence of the noosphere (p. 31). The realization of the noosphere is paramount for human survival; the eminent Soviet-era, Russian geochemist and biologist, Vladimir Vernadsky, presciently observed the importance of the eminent transition from the “technosphere” (the extractive-industrial model) to the noosphere “before its parasitical slurps consumed the life-support systems of the planet” (Pinchbeck, 2006, p. 197). In the emergence of the noosphere, we come full circle back to Berry and the dawn of the Ecozoic Era.

I propose that the noosphere has indeed begun to emerge; it may be in its very incipient stages, but it exists. The main issue lies in whether or not it can fully emerge in time to salvage humanity and civilization from the wreckage of the industrial/technospheric paradigm. However, the emerging noosphere will be prematurely thwarted without an immediate, dramatic increase in the amount of direct contact that human beings have with nature. And this is perhaps the most tragic consequence of our current urban forms: the fact that we have rendered ourselves almost completely asunder from the flows of the natural world and thus slowly but surely excavated a massive void in the realm of human consciousness necessary for this transition to take place. Farr (2008) explains that “conventional urbanism obliterates virtually all the systems of nature it comes into contact with.

[...] Automobile-dependent suburbs do the same, but without the benefits of urbanism” (p. 48). In many dense, truly urban environments, the only contact people may have with “nature” comes in the form of sporadic visits to well manicured parks. Many children now grow up without ever having the profoundly spiritual experience of splashing in a rippling creek, or hiking through a forest shrouded in mist.

It should come as no great shock that out of this great spiritual and mental malaise was born an economic system that values temporary financial gain at the expense of planetary destruction, thus diminishing the chances for survival of our own progeny. We can expect neither the urban nor suburban denizen so disconnected from nature to have the strength of mind or heart necessary for the noosphere to emerge. Farr (2008) inquires, “With the resource flows that support our lifestyles hidden from view, should we be surprised if our lifestyle is unsustainable?” (p. 49). However, as we have already established, humankind is a uniquely urban species; returning “back to the land” is not an option but for an infinitesimal portion of the population equipped with the finances and desire to do so. And if the distorted Garden City cum suburban goal of bringing the city to the country only resulted in an interminable paving over of nature (Register, 2006), then the only solution is to bring nature to the city. Through this process, we will “awaken a consciousness of the sacred dimension of the Earth” (Berry and Swimme, 1992, p. 250).

The task reconnecting humanity to nature—what Farr (2008) refers to as “biophilia” (p. 48)—can be as simple as creating curb cuts to install “greenstreets” that utilize native species plants to collect storm water runoff and recharge underground aquifers. (These techniques also make for a pleasant visual juxtaposition of nature rising out of pavement.) It can be as complex as returning wetlands in urban areas to their natural state, or cities choosing to allow creeks once-buried by asphalt to follow their natural trajectory, or installing “living” roofs and walls. It is also the process of entire cities choosing to adhere to urban growth boundaries, giving “nature large zones of freedom right up to the urban edge [...]” (Register, 2006, p.19). The goal of each of these techniques is urban terraforming: propagating novel ecosystems in currently sterile (urban) environments. There are countless other means by which to accomplish this, and both the greatest and smallest are of equal importance. Only once we sufficiently remedy this latent deficiency in the human-elemental experience through integration of the built environment with natural forms will we create the saturation of ecological consciousness necessary to allow the transition from the life-taking technosphere to life-giving noosphere to transpire.

Conclusion

In truth, the emerging noosphere involves the confluence of all three dimensions of Urban Ecopoiesis: creating complex, miniaturized urban forms devoid of vehicular necessity; closing our resource loops, creating awareness of where our food, water, and energy come from and how our “waste” is utilized; and overlaying the natural world onto our urban forms to rekindle the passion for the elemental in the hearts and minds of urban dwellers. It is truly the act of choice: choosing to give ecological priorities equal or greater precedence than that of human or economic demands. The task of transforming the mental landscape from one of myopic self-centeredness to one of mutual planetary beneficence with all of Creation, both present and future, is deeply paradoxical in nature. The part contains the whole and the whole the part. Without an ecological/ noospheric dimension, neither the physical manifestations of Urban Ecopoiesis nor completion of the directive of the Ecozoic era will ultimately be possible. However, it is only because of this nascent consciousness that extant, tangible phenomenon of the physical dimensions of Urban Ecopoiesis came into fruition. Such reconciliation is the essence of the task at hand at the dawn of the Ecozoic era!

References

- American Farmland Trust. (2002). *Farming on the edge report*. Retrieved November 7, 2008, from the American Farmland Trust Website: <http://www.farmland.org/resources/fote/default.asp>
- Arcosanti. (2008). *Paolo Soleri's glossary of terms: Complexification, C*. Retrieved November 7, 2008 from <http://www.arcosanti.org/theory/glossary/complex.html>
- Beatley, T. (2000). *Green urbanism: Learning from European cities*. Washington, DC: Island Press
- Berry, T. & Swimme, B. (1992). *THE UNIVERSE STORY. From the Primordial Flaring Forth to the Ecozoic Era—A Celebration of the Unfolding of the Cosmos*. New York: HarperCollins Publishers
- Centers for Disease Control, National Center for Health Statistics. (2008, April). *Deaths-Leading Causes*. Retrieved October 25, 2008, from the Centers for Disease Control Website: <http://www.cdc.gov/nchs/FASTATS/lcod.htm>
- Commission for Environmental Cooperation. (2008, October). *Green Building in North America. Opportunities and Challenges. Secretariat Report to Council Under Article 13 of the North American Agreement on Environmental Cooperation*. Retrieved November 16, 2008, from the Commission for Environmental Cooperation Website: http://www.cec.org/files/PDF//GB_Report_EN.pdf
- Ellis, E. (n.d.). *Anthropocene*. The Encyclopedia of Earth. Retrieved November 2, 2008, from The Encyclopedia of the Earth Website: <http://www.eoearth.org/article/Anthropocene>
- Farr, D. (2008). *Sustainable Urbanism: Urban design with nature*. Hoboken, NJ: John Wiley & Sons, Inc
- Girardet, H. (1992). *The Gaia Atlas of Cities: New directions for sustainable urban living*. London, United Kingdom: Gaia Books Limited
- Girardet, H. (1999). The Metabolism of Cities. In S.M. Wheeler & T. Beatley (Eds.), *The Sustainable Urban Development Reader* (pp. 125-132). New York, NY: Routledge.
- Jeffries, S. (2007, March 15). We should be scared stiff. *The Guardian*. pp. 20. Retrieved November 1, 2008, from <http://www.guardian.co.uk/environment/2007/mar/15/desertification.ethicalliving>
- NationMaster Encyclopedia. (2008). Ecopoiesis. *NationMaster.com Encyclopedia*. Retrieved November 2, 2008, from <http://www.nationmaster.com/encyclopedia/Ecopoiesis>
- Newman, P., & Jennings, I. (2008). *Cities as Sustainable Ecosystems: Principles and practices*. Washington, DC: Island Press.

- Peirce, P. (2007, July 11). Ditch the garbage disposal, use a green bin. Farmers will thank you *San Francisco Chronicle*. Retrieved November 7, 2008 from <http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2007/07/11/HOGRDQRICU1.DTL>
- Pinchbeck, D. (2006). 2012: *The return of Quetzalcoatl*. New York, NY: Penguin Press
- Register, R. (2006). *Ecocities: Rebuilding cities in balance with nature*. (Revised ed.). Gabriola Island, BC Canada: New Society Publishers.
- Riddell, L. (2008, November 7). Design from nature: Structures that mimic the natural world can save energy by using what might otherwise be thrown away. *San Francisco Business Times*.35.
- Ruggeri, L. (2007). Palm Springs: Imagineering California in Hong Kong. In Monk, D.B. & Davis, M. (Eds.), *Evil Paradises: Dreamworlds of neoliberalism*. (pp. 102-113). New York, NY: The New Press
- Soleri, P. (1969). *Arcology*. Cambridge, MA: The MIT Press
- Steffen, W., Crutzen, P.J., McNeil, J.R. (2007). The Anthropocene: Are humans now overwhelming the great forces of nature? *AMBIO: A journal of the human environment*. Vol. 36, No. 8, 614-621. Retrieved November 2, 2008, from the AMBIO database.
- The Economist Technology Quarterly. Home, green home. (2008, September 6). *The Economist*, 36-38, September 6-12 2008.
- Trafton, A. (2008, July 31). 'Major discovery' from MIT primed to unleash solar revolution: Scientists mimic essence of plants' energy storage system. *MIT News*. Retrieved November 7, 2008, from <http://web.mit.edu/newsoffice/2008/oxygen-0731.html>
- United States Department of Agriculture: Agriculture Marketing Service. (2008, September). *Wholesale and farmer's markets: Farmer's markets growth: 1994-2008*. Retrieved November 7, 2008, from United States Department of Agriculture: Agriculture Marketing Service website: <http://www.ams.usda.gov/AMSv1.0/ams.fetchTemplateData.do?template=TemplateS&navID=WholesaleandFarmersMarkets&leftNav=WholesaleandFarmersMarkets&page=WFMFarmersMarketGrowth&description=Farmers%20Market%20Growth&acct=frmrdirmtk>
- Van Der Ryn, S., & Cowand, S. (1996). *Ecological Design*. Washington, DC: Island Press
- Zalasiewicz, J., Williams, M., Smith, A. et al. (2008). Are we now living in the anthropocene. *Geological Society of America*. Retrieved on November 2, 2008, from Geological Society of America database.

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