URBAN SUSTAINABILITY, BUILT HERITAGE, AND GLOBALIZATION IN THE CUBAN CAPITAL

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Summary

Urban development and improvements in the quality of life rarely derive solely from indefinite economic expansion. Myriad factors other than economic growth account for ensuring the welfare of city dwellers. Globalization further complicates urban development and improvements. Neo-liberalism has hurled many developing countries into the global market as tariffs, protectionist policies, and labor pacts are scaled back. Some critics argue that this political economy threatens to mortgage the future of nation states and their citizens, while others contend it brings about efficiency and justice determined by the marketplace. Such criticism, it would seem, has been ignored at the close of the twentieth century, an era when capitalism has seemingly triumphed over socialism. If globalization portends a reduction in the importance of geographic space in transferring information and technology, it also carries an implicit understanding that the power of the state has yielded to certain international forces.

In explaining the condition of world cities in this context, many practitioners in contemporary planning circles around the globe indiscriminately use the terms sustainable development and community participation. Despite the distinct definition of these terms, there is one striking similarity. Both these terms address how local
communities manage the forces of globalization and try to control change that is instigated by forces beyond their borders, including the impact of policies and plans that start at all levels of government. This study examines these issues through the case study of Havana, Cuba’s primate and capital city, which is coping in a world where Eastern European and Soviet trading partners no longer provide favorable terms of trade.

1. Introduction

Urban development and improvements in the quality of life rarely derive solely from indefinite economic expansion. On the contrary, there is no such a thing as unlimited economic growth. Myriad factors other than economic growth account for ensuring the welfare of city dwellers. In explaining the condition of world cities, many practitioners in contemporary planning circles around the globe indiscriminately use the terms sustainable development and community participation. These terms address how local communities manage the forces of globalization and try to control change that is instigated by forces beyond their borders, including the impact of policies and plans that start at all levels of government. For a variety of reasons, the pace of change has hastened as a new world order conditioned by informatics now drives the global economy.

Neo-liberalism has hurled many developing countries into the global market as tariffs, protectionist policies, and labor pacts are scaled back. Some critics argue that this political economy threatens to mortgage the future of nation states and their citizens. Such criticism, it would seem, has been ignored at the close of the twentieth century, an era when capitalism has seemingly triumphed over socialism. If globalization portends a reduction in the importance of geographic space in transferring information and technology, it also carries an implicit understanding that the power of the state has yielded to certain international forces. To what extent are those events in force in Cuba?

Figure 1. Havana City Province Municipalities
In this brief chapter we explore these and related questions in the context of Havana, Cuba's prime and capital city. We begin with an overview of the Cuban economy in the post-Soviet Union era and identify selected ways that globalization is transforming the socialist state. The Havana case study is divided into two main sections. First, we present specific examples of urban sustainability: urban ecology, transportation, and community participation. Second, we rethink Havana's built heritage in Old Havana (Habana Vieja, Figure 1) and its attendant international tourism components. We aim to link this discussion of historic preservation and global tourism back to notions of urban sustainability. We begin with a brief review of Cuba's economy after its economic ties to the USSR were severed after 1989.

2. Cuba in the New Millennium

Cuba's economic difficulties bottomed out in the mid-1990s after several years of economic free-fall. Since 1994, Cuba's gross domestic product has been in the plus column, thanks to belt-tightening (downsizing public works, tighter allocation of food and fuels) and opening the economy to foreign investment. The Cuban Central Bank reported that the economy grew by 6.2% in 1999, and there was a 5.6% growth in the year 2000. While impressive, that growth amounted only to 85% of the performance in 1989, which was the last "good" year before the onset of the "Special Period in a Time of Peace." This term refers to a wide array of structural adjustments Cuba faces after its traditional trading partners in the Soviet-bloc disappeared, thus forcing Cuba to enter into more international market transactions with new goods and services, and new partners. By the late 1990s, modest economic growth had virtually eliminated the blackouts that had been commonplace in the capital city earlier in the decade.

To be sure, long gone are the halcyon days of Soviet-Cuban relations when sugar and petroleum were exchanged in equal amounts of one ton. This was also a time when Soviet indirect subsidies to Cuba reached nearly $5 million daily. Subsidies were critical, especially in light of the U.S. trade embargo that has been in place since 1962. When Russian President Vladimir Putin visited Havana in December 2000 -- the first Russian leader to visit the island in decades -- he offered only a mere $50 million in low-interest loans to the Cuban government. Like Cuba, Russia faces pressures from the U.S. Congress to implement certain changes. One U.S. demand is that Russia withdraws its listening facility that it allegedly operates in Lourdes, Cuba, just outside Havana. The dawn of the new millennium makes it clear, then, that the Cuban economy is squarely in the current of the world economy, and that vestiges of the Cold War linger.

By the year 2001, the pervasive weight of the dollar in the Cuban economy was more striking than ever. In a short eight-year period since the dollar became decriminalized, the circulation of hard currency has left an indelible mark on the streets of the capital, not the least because thousands of workers are now self-employed. The state dollar stores, once the exclusive domain of foreigners and diplomats, are now packed with Cubans purchasing general goods. These Cubans’ dollars come from a legalized dollar economy, as well as hard currency earned in tourism and remittances sent by expatriates from abroad. Estimates are that between $800 million and $1 billion dollars reach the island annually in the form of remittances. Such a figure rivals the revenues generated from tourism but without the “leakage” of those tourist dollars that are used to pay for
imported goods. Indeed, Havana today reveals two economies: one confined to the ration book (libreta) and the peso economy, and another bolstered by dollars.

Reverting to a comparative advantage model of Caribbean tourism, but with an architectural focus, tourism in the old quarters of Havana became an important tool for economic development. Although UNESCO declared Old Havana a World Heritage Site in 1982, it was not until the 1990s that this rich heritage became a major economic development tool. How this strategy of heritage tourism contributes to sustainable development is a topic we address in the next section.

3. Sustainable Development in Havana

At the close of the twentieth century, the literature on planning and sustainability theory for local benefit had grown tremendously in theoretical scope and was enriched by detailed case studies. Planning theory had shifted from what might be labeled a modernist or Newtonian social context to a more interactive view of human behavior and nature. This thinking is premised on the notion that, increasingly, advances in biophysical sciences are grounded in nonlinear, complex conceptualizations of development, and less compartmentalized and predictable than conventional approaches in planning.

This thinking is part of what may loosely be referred to as a basic tenet of the sustainability and development literature. Accordingly, conceptualizing growth-oriented approaches as the only definite outcome of modern society is no longer the only paradigm in the economic development game. Other alternative approaches include the Human Development Index used by the United Nations Development Program, which includes quality of life measures beyond conventional economic data. Such thinking is especially germane in the Cuban context. On the one hand, it strives to ensure a modicum of shelter, health, education, and welfare benefits. On the other hand, the socialist leadership has confronted the harsh reality of an erosion in material well-being since the outset of the “Special Period in a Time of Peace” (1990 onwards).

Does the application of this new way of thinking, as some argue, serve only as a smokescreen to obfuscate the economic problems of Cuba since 1990? At one level, at least, Havana’s generous allocation of green and sports area space per inhabitant (10.4 square meters per inhabitant) lends itself to what some analysts call “green social theory,” where a low population density (under 300 persons per hectare) enables local government to plan and “design with nature.” Indeed, thinking about a “new ecology” has not been lost on the Cuban socialist leadership as evidenced by numerous international conferences held in Havana on sustainability, environmental management, and globalization. Regrettably, though, the surge in linking a critical theory into public policy and planning practice occurred precisely during Cuba’s abrupt launch into the world economy in the 1990s.

Elsewhere in Latin America, nongovernmental organizations (NGOs) have appeared as intermediary agents to link civil society with state power, or they provide goods and services where the state cannot or will not venture. In Cuba, however, NGOs have trodden a narrower path, partly because the leadership has concerns that counter-
revolutionary ideas will permeate civil society. As well, the leadership is convinced that limited market reforms are not a transition to capitalism. Instead, the opening up to the market will perfect Cuban socialism in a post-Soviet Union trading bloc era. While discussions about “discursive democracy” have received a good deal of attention outside Cuba, civil society in Cuba is largely tethered to the state through mass organizations. These include the Committees for the Defense of the Revolution, the Cuban Federation of Women, and the Cuban Communist Party Change. Nevertheless, some notable NGOs that exercise relative autonomy include Habitat-Cuba, Fundación Fernando Ortiz, Centro Martin Luther King, and the Catholic Church’s Caritas.

Cuba’s changing political economy has rekindled discussions about the responsibilities and privileges of individuals compared to the broader collective good. In the workplace, the trade-off between material and moral incentives is paramount. Until the 1980s, the state allocation of basic social services (housing, subsidized food, education, career choices, and health care) offered a widely accepted high quality of life. By 2001, however, that scenario had changed because of a lack of public resources. The opening up of limited free enterprise in the 1990s meant that working a few days as a tourist guide can be potentially more remunerative than working as a highly trained specialist in the engineering or biomedical fields. In 1999, police officers around the country received a hefty pay rise (approximately 700 pesos monthly compared to an average worker’s income of about 250 pesos). Therefore, the police earn more than physicians, college professors, and most other state employees. Still, such a substantial rise may mean little improvement in the real purchasing power of the police. Across the board salary increases might also trigger inflation.

The allure of working in Havana is well represented by the undocumented migration of unemployed workers from the eastern provinces to the nation’s capital. Periodically, the authorities round up Cubans from Santiago, Holguín, Granma, and Guantánamo provinces (referred to popularly as palestinos because of their “near eastern” and/or “homeless” origin) and are sent back. Migration pressures such as these exacerbate crowding, especially in Habana Vieja where the 85 000 resident population should be close to half that amount, according to physical planners. The population density and poor living conditions are even more critical in Centro Habana. Thus, political economy, work, migration, and quality of life issues are interconnected in complex but striking ways.

4. Urban Ecology

Until the Special Period, migration to the capital city was relatively low. For the first three decades of the revolution, the rate of population growth in Havana was lower than the rest of the nation. That situation has reversed. Havana is now the preferred migration destination for many Cubans across the island. A law was passed in 1997 to prevent internal migration to Havana, and the exacerbation of Havana’s position as Cuba’s primate city. Accordingly, the implications for environmental quality in the nation’s capital are important. In several ways, Havana seems relatively unscathed by population pressures. Since 1959, its population has doubled from 1.1 million to 2.2 million in 2001. Few Latin American capital cities can boast such a low rate of growth. However, such low growth derived from a conscious effort to build up new or improved rural
villages, sugar towns, and provincial capitals after the Triumph of the Revolution in 1959. Much of this development came at the “expense” of Havana, which was perceived by the socialist leadership as the principal culprit during centuries of exploitation and parasitic growth. Both the national government headquartered there and elites siphoned off wealth and public resources at the expense of the rest of the nation. When development efforts again focused on the capital in the 1990s, the strains of an aging infrastructure were all too apparent.

Water is the principal ecological challenge in Havana. Despite low rates of population growth, drilling and pumping have increased in the Cuenca Sur aquifer south of the city. Truck farming south of Havana has also placed greater demands for irrigation. Because the aquifer opens to the southern coast, this increased demand for water has led to saltwater intrusion into the subterranean strata of permeable rocks. The situation portends major civil engineering problems. Another aquifer in the metropolitan area is the Vento aquifer which, unlike the Cuenca Sur, is a closed aquifer (e.g. does not open to the sea). The Vento Aquifer is underground and feeds the old Albear Aqueduct (1858-1893). Together, they are part of the Almendares Basin. In the colonial era, water from the Almendares River was raised by the Husillo Dam and then traveled through a canal that approximates Zanja (Canal) Street. That was the first water supply system (1566-1592) made by Europeans in America. Residential, commercial, and industrial development over the Vento reduces water filtering down into the substrata. Accordingly, urbanization and development to the south of Havana should be restricted in order to continue nurturing this aquifer.

There is also concern about fresh-water leakage through the city’s distribution network, a geologically risky event in a limestone (karst) area whose bedrock can be dissolved by fresh water. The Albear water system, heralded in 1878 for its state-of-the-art design, was built for a city with a projected population of half a million residents. Today, four times as many habaneros rely on the original system and subsequent additions to it. Old water mains and secondary lines leak, which saps about 45% of the water flow and poses a pollution threat. Additionally, the distribution of the water is energy inefficient. Low pressure in the main water lines means that many buildings require separate electric pumps for getting water into rooftop tanks from basement cisterns, and affects the quality of the delivery system.

Water purification and waste treatment are related maladies. Engineers inaugurated a sewer system in 1913 for 600 000 inhabitants, which was twice as large as the city’s population at that time. Today, that same system must service 2.1 million residents. Raw sewage is pumped through a tunnel under the bay and emptied into the Florida Straits, barely a kilometer off the beautiful seaside promenade, the Malecón. The other half of the population depends on septic tanks or discharges wastewater into open-air ditches, creeks, and rivers. Perhaps no body of water has borne the malaise of this environmental impact more than the city’s harbor. Illegal connections to the storm water system send sewage into the bay. Two rivers that flow into the bay --Luyanó and Martín Pérez-- collect residential and industrial wastewater from the southern municipalities. The back-bay refineries and plants of Regla aggravate water quality because of petrochemical wastes. Although the narrow entrance to the bag-shaped bay offers protection from hurricanes and once allowed El Morro and La Punta fortresses to guard
the city and ships, the bay’s geomorphology is not friendly to environmental clean up. Because of the convoluted shape of the bay, it takes about six days for ocean water to circulate once through the bay. Consequently, the ability naturally to rid Havana Bay of dirty effluent is a slow process. Ironically, this may help maintain a reasonably clean stretch of fine beaches in eastern Havana.

Approaching Havana by water reveals causes for both joy and concern. On the one hand, the city skyline is strikingly beautiful. Its low-lying beige fabric (currently distorted by inappropriate and poor paint jobs) reveals centuries of uniform building codes. Only a cluster of skyscrapers from the 1950s disrupts the skyline. One can appreciate what tourists during the first half of the twentieth century felt when they approached the city by steamship from the ports of Spain, New Orleans, Tampa, Miami, Jacksonville, Baltimore, New York, and Boston. On the other hand, today one cannot miss the plumes of smoke that streak across the sky from the smokestacks of the oil refineries and the antiquated electrical plant, Tallapiedra. Although the Trade Winds quickly disperse the smoke, the levels of high-sulfur petroleum exhaust and the lack of modern air filters and scrubbers are at once evident. An ongoing study by the UNDP and several Cuban agencies (State Group for the Preservation and Development of the Bay, Institute for Transport Research, Ministry of Science, Technology and Environment) aims to clean the bay and has brought some modest improvements in water quality. In fact, recently the long-forgotten presence of fish within the bay has reappeared. Discussions about the eventual phasing-out of the refineries are also starting, helped by the fact that there is a more modern and energy-efficient refinery at the port of Cienfuegos on the island’s south-central coast. Nonetheless, the removal implies a large investment that is unlikely in the short term. A more realistic possibility entails the phasing out of the old Tallapiedra and Regla thermoelectric plants. In 2004, authorities began dismantling the Regla plant and Tallapiedra was used only when other facilities failed. In that same year, several oil-burning plants fell into disrepair and diminished the nation’s electrical output. Blackouts once again beleaguered Havana and the rest of the nation in late 2004, and several hotels and industries closed to ensure supply to the population.

Bibliography


CEPAL (Comisión Económica para América Latina y el Caribe). La Economía Cubana. Reformas Estructurales y Desempeño en los 90. Santiago, Chile: CEPAL. [An in-depth analysis of the island’s economy as assessed by the Latin American economic branch of the United Nations].

©Encyclopedia of Life Support Systems (EOLSS)


Leal, E. (1996). Viaje en la Memoria. Havana, Cuba: Oficina del Historiador de la Ciudad. [This is a richly illustrated analysis of the architecture and urban renewal projects that Habaguanex has proposed for Old Havana].


Scarpaci, J., Segre, R., and Coyula, M. (2002). Havana: Two Faces of the Antillean Metropolis. Chapel Hill, NC: University of North Carolina Press. [This is a comprehensive analysis of nearly five hundred years of Havana’s urban geography, planning, urban design, and architecture, with special emphasis on the contemporary period].

Biographical Sketches

Joseph L. Scarpaci is Professor of Geography at Virginia Tech, Blacksburg, Virginia, United States. He has conducted eighty-four months of field research in Latin America in which forty-three visits to Cuba have been made since 1990. Along with Mario Coyula and Roberto Segre, he is the co-author of Havana: Two Faces of the Antillean Metropolis (2002), recipient of a Choice Academic Book Award. He has authored seven books and over sixty articles and book chapters on Latin American urbanization, social policy, and historic preservation. His recent book, Barrios and Plazas: Globalization and Heritage Tourism in the Latin American Centro Histórico (2005, University of Arizona Press) assesses how globalization is transforming heritage tourism in Spanish American historic neighborhoods. His research has been funded by the National Science Foundation, National Institutes of Health, Fulbright, and the Social Science Research Council. In 2004 the Conference of Latinamericanist Geographers awarded him the Carl O. Sauer Distinguished Scholarship Award. That same year Virginia Tech named him the recipient of the Almuni Award for Excellence in International Programs.

Dr. Coyula-Cowley is an architect, urban designer, and author. He is Professor Emeritus in the Faculty of Architecture, José A. Echeverría University Center (CUJAE) and also a consultant and former director of the Group for the Integral Development of Havana. Along with these positions he was also the former director of the School of Architecture, CUJAE; of the Architecture and Urbanism department of Havana City; and first president of Havana’s Landmarks Commission. In 2001 he received the National Prize of Architecture and the National Habitat Prize in 2004. He was the co-author of two contest-winning monuments, both receiving in 1990 the SIARIN prize, “30 Years of Cuban Revolutionary Architecture.” He co-authored the book Havana: Two Faces of the Antillean Metropolis that received the American Library Association’s Choice prize for Outstanding Academic Books, and authored and co-authored five...
others books, along with more than 175 essays, articles, and reviews in 16 Cuban and 23 foreign journals. He is a member of the editorial boards of *Arquitectura y Urbanismo* and *Revista Bimestre Cubana* (both published in Havana) and *Topos* (Belo Horizonte). Dr. Coyula has also lectured and taught workshops and short courses in Latin America, Europe and the US. He is a Fellow of the Special Interests Group on the Urban Settlements Program at Massachusetts Institute of Technology, and a member of an international research group on architecture and infrastructures (GRAI) based in Paris-Versailles. He has been working since 2000 in urban design studios with the Harvard Graduate School of Design and in 2002 he was the Robert F. Kennedy Visiting Professor there. He is a member of the National Council of the Cuban Union of Writers and Artists, the head of the jury for docent categories at the Faculty of Architecture, and a member of other academic, scientific and artistic committees and commissions, including the Cuban Academy of Sciences.