Housing is the second most important human need after food and amounts for the larger part of the urban environment. It shapes cities, performing as the extended grain against which relevant buildings and public space play a leading role. It also reflects the structure and contradictions of any society. Because of that it has attracted the attention of revolutionary thinkers and leaders like Friederich Engels or Fidel Castro. Castro’s defense during the trial for the attack to the Moncada barracks in Santiago de Cuba, 1953, known as “History will absolve me” pointed housing as one of the six major issues of his political platform, together with land tenure, industrialization, unemployment, education and health care. Even if Cuba ranked higher than most other underdeveloped countries in Latin America due to a strong and widespread urban lower-middle class, housing condition was precarious in the rural areas and among the urban poor who lived in tenements at the inner city and shantytowns at the periphery.

Starting from the very early months after coming to power in January 1st, 1959 the revolutionary government started several social housing projects and enacted bills that created a legal frame to protect tenants. Evictions were stopped, land and housing speculation was ended, and tenants were allowed to become owners through their monthly rent. During the very first year evictions were suspended, rents were lowered by 50% and the price of vacant lots was fixed very low at $4 pesos per square meter. In October, 1960 the Urban Reform Law defined the housing policy. Sub-standard housing stopped paying rent and tenants were allowed to become owners in a period of 5-20 years through the monthly payment to the government of their rent, already cut by half in most cases. Landlords were compensated, except the biggest; and previous owners could keep one city house, as long as they lived in it, plus a vacation house, with no size limits. Tenants in newly built flats paid 10% of their income (Hamberg 1994). Nevertheless, few forced sales were done under those laws and individual houses continued to be built even without government support, roughly amounting two thirds of the total output throughout the country.

Since 1959 the revolutionary housing policy fixed its goal in providing each family with an adequate dwelling. This right is acknowledged in the 1976 Cuban Constitution and the 1984 Housing General Law. Several attempts have been made to meet that goal; but results always fell short even at a time when resources came steadily from the extinct Soviet Union. Many reasons can be found, the first being that no country has in fact been able to attain adequate, affordable housing for every citizen. There was a good-willed assumption considering housing as a social need and not a commodity, but the Government lacked the financial and material means to build affordable dwellings to everyone at every place. Early successful programs like INAV and Self-help / Mutual Aid were discarded either as too expensive or too technologically backward. Programs were consistently addressed to new dwellings by State building enterprises with centralized design and construction, relying on repetitive designs throughout the whole country. Industrialization of the construction sector was seen mostly through prefabication with heavy concrete panels where leaking was incorporated from the very beginning.

1 An abridged version was published in DESIGNER/builder, November 2000, Santa Fe NM
The quick migration to the US of the upper and upper-middle class in the early 60s left many empty dwellings, bringing a rare social mixture into the previous elegant neighborhoods. The dark side was an increase in neglect and abuse because the new occupants lacked the means to take care of the maintenance and as results of overcrowding, makeshift additions and other distortions. Migration from the countryside also brought rural patterns of life into the cities, something more evident in Havana because of the building and urban types, though the flow from the rural areas was quickly diverted into the intermediate cities instead of the capital. These cities doubled their population while growing three-fold in urbanized surface.

The Self-help and Mutual Aid program was started by the Ministry of Social Welfare in 1960, addressed to the urban population living in worst condition. Construction was managed by the Ministry of Public Works. The program was abandoned in 1961 after building 4,700 dwellings to eliminate 33 shantytowns (Segre 1989). Another short-lived but very successful program was carried out by the Instituto Nacional de Ahorro y Vivienda (INAV), using the National Lottery to finance social housing. INAV was led by a charismatic, rough-tempered woman, Pastorita Núñez, who had joined the mountain guerillas in 1958 with Fidel Castro. INAV built 10,000 good quality dwellings throughout Cuba from 1959-1961, with 6,000 done in Havana. This included the best Cuban social housing complex, the Unidad # 1 at Habana del Este (called afterwards Ciudad Camilo Cienfuegos), that was designated in 1991 as a National Landmark. A fully-equipped and landscaped neighborhood unit for 8,000 with 1306 apartments in four-story walk-ups and eleven-story slabs was designed by a group of young architects and self-taught urban planners (Mario González, Hugo D’Acosta-Calheiros, Mercedes Alvarez, Reynaldo Estévez and others) and built under the direction of Roberto Carrazana. Lottery was soon banned and INAV was phased out. Housing construction programs were centralized by the Ministry of Public Works, MinOP, later called of Construction, MiCons. The quality of design and building of Habana del Este was excellent and the cost seem ridiculously low by present-day standards. The dwellings have aged beautifully, well kept by tenants that know that they cannot find anything similar. Yet the project was considered too expensive at that time and the model was abandoned in favor of smaller flats in prefabricated box-like four or five-story high walk-ups, eventually reaching six floors without an elevator. This decision was widely criticized; and one of those prototype, SP-79, where the building stairs almost cancelled the only window of a bedroom in each floor, had the sad honor of being the only project ever to get banned.

Between 1959-70, 214 new rural villages with 41,755 dwellings were built in an attempt to settle down the labor force required for agricultural and cattle farms. The program started with one-story detached houses in small communities that were supposed to be self-sufficient. They were provided with utilities, streets and community services, including a convenience store (tienda del pueblo), elementary school, a medical office and a social club. But to the end of that period detached houses were substituted by the same four or five-story walk-ups found in the cities. 225 rural communities were made between 1971.81, with 38,806 dwellings—all in four or five-story walk-ups standing eerily in the middle of the countryside. Many peasants initially rejected this traumatic change in their traditional way of life and ended moving to the nearest city when they found themselves living with all the disadvantages of an apartment building, with no private plot to keep animals and plant what they wanted, and none of the advantages of city life. Between 1982 and 1990,, 160 new rural villages with 14,065 dwellings were built, but using mostly one-story houses made with local materials and labor force, including earth-cement blocks—the so called vivienda económica—and other soft technologies trying to save energy and achieve more self-sustainability. In total, 599 new rural communities were built between 1959 and 1990, with 94,626 dwellings. The 1990s were stamped by the terrible economic crisis and the construction of new dwellings decreased, but
the same pattern of *vivienda económica* was continued by some ministries like MINAGRI (Agriculture), MINAZ (Sugar) and MINFAR (Armed Forces).

The best example of a new rural community, blending perfectly with a glorious environment, is Las Terrazas. Inaugurated in 1971, it initially had 46 one-story detached houses with light-prefabricated walls and pitched clay-tile roofs. The village was meant for workers from a reforestation program in Sierra de los Organos, which has been designated as a Reserve of the Biosphere because of its very valuable landscape, flora and fauna. The cultural landscape was also impressive, with many ruins of coffee farms settled by French immigrants fleeing from the Haitian revolution in late 18th Century. Two-story apartment buildings were added later, finally amounting 220 dwellings with 1000 residents by the year 2000. A new handsome 26-room hotel, *Moka*, was built in mid-90s following the same conception and design approach that raised all buildings in short stilts so as to minimize disturbance of the natural rolling landscape. Designers, social and cultural workers moved there during the whole process of design and construction, and periodically monitored the place thereafter. Because of that, the village and the community were built at the same time. All this helps to explain the perfect aging of the project, compared to the neglect and distortion of most other new rural settlements.

Conversely, the attempt to “urbanize” the countryside had an unwanted counterpart in the partial *ruralization* of the urban image of Havana and other major cities through makeshift self-construction and additions. Many porches were closed to make an extra room, wooden platforms (*barbacoas*) were made for additional space using traditional high ceilings in the inner city; shacks were built in the rooftops, gardens planted with banana trees, and some people even started to raise chickens and pigs, or cook with leftover wood. The official party on the anniversary of the CDRs—an organization of citizens at block level-- was held around a communal soup cooked in the street. This soup, always known in Havana as *ajiaco*, had a rural origin; but because of the influence of migrants from eastern Cuba—the so-called *palestinos*—it was renamed as *caldosa*.

Centralization of social housing through the Ministry of Construction was extended nationwide after 1965 with repetitive standardized projects, in disregard of local differences. Emphasis was placed on technology, following an approach that identified the solution to the growing housing shortage with the mass production of prefabricated buildings, including high-rises up to 25 floors and huge slabs for more than 100 families in large tracts that often failed to be completed with services and even the basic infrastructure. Ironically, some well-thought housing projects that achieved good design following a fully-prefabricated approach remained as experimental, like Multiflex (1969) or LH (1972-1978), because of the strong investment already made in non-flexible heavy panel plants. A national program to build 100,000 dwellings per year proved more wishful thinking than real. The deadline of that program set for 1970 faced a formidable opponent in the *Gran Zafra* (Great Sugar Harvest), when Cuba attempted to produce a record of ten million tons of sugar. This goal nearly paralyzed the whole country and only 4,000 State-built dwellings were made. *Microbrigades*, which are discussed in other part of this paper, were started in early 1971 following a 1970 Fidel Castro’s suggestion as an alternative to the housing construction program by State brigades. In two years the movement reached 12,715 workers in 444 Microbrigades and by 1983 it had built 100 thousand dwellings nationwide (Hamberg 1986, 1994). The movement gradually faded out in the early 80s and was revived at the end of that same decade during the “rectification of mistakes” period only to stagnate again in the early 90s because of the severe economic condition brought in with the so-called Special Period, to be discussed later.

The Microbrigades provided an alternative to the construction of dwellings by State building enterprises that had the advantage of personal motivation, as workers and working centers were directly interested in getting the nicest possible dwellings; but it had the disadvantage of a permanent lack construction skills, as new workers constantly replaced
those who already started to learn by the time they had finished their own buildings. On the other hand, microbrigades benefited people who lived crowded with other relatives but had much lesser impact on the overall housing shortage since old flats were not left vacant. The rush to finish the dwellings altered the natural sequence of building first the technical infrastructure, giving rise to provisional solutions that became permanent; and the supply of social services always fell behind the population growth. These two problems were worsened by the fact that centralization demanded large open land for the construction of big housing projects, and that was only possible at the periphery where utilities, services and jobs did not exist, also increasing the demand for public transportation.

High-rise apartment buildings were considered in the 70s a sign of development: every provincial capital built at least one, inevitably with a restaurant on the upper floor. Sticking up like a raised pencil in the middle of a traditional low-rise urban fabric, these buildings stood symbolically detached from the surrounding built, social, social and ecological environment, and proved to be very vulnerable because of its unsustainable, provincial approach that whimsically identified progress with height. Maintenance and rehabilitation were neglected in the national policy, though many local governments and some major State work centers found ways to support self-made improvements. Time and again, resources allocated for the conservation of the existing housing stock were diverted for new construction, and housing programs were frequently affected by other often un-planned priorities focused in public health, education and even some grand non-productive projects like parks or fairs displaying Cuban achievements.

From 1959 to 1993 the Cuban population grew 57% while the housing stock grew 80%. During that period, 1.3 million dwellings were made by the State, cooperatives and the population. The proportion of dwellings considered in good or average condition changed from 53% to 83% (Informe... 1996), but in Havana bad and average dwellings roughly amounted half of the stock and new units barely covered for the annual losses. From 1959 to 1990, 1.770,000 dwellings were built nationwide, 28% by the State and 72% by self-help. In Havana the proportion of State-built was slightly higher, reaching 32%; and self-help a little less: 68% (Segre et al 1997). These figures were calculated by subtracting State production and estimated losses from the total amount of dwellings, also estimated through other indirect ways (Pérez 1995). Cuba became a rare case in Latin America, with the capital city growing at a slower pace than the rest of the country because of a policy to improve there employment and the living conditions. Havana has grown around 1%, other cities 2,3%, towns 3,1% and small towns 3,7% (Informe... 1996).

TOTAL AMOUNT OF FINISHED DWELLINGS (in thousands) / 1989-1999:

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<td></td>
<td>39.6</td>
<td>36.3</td>
<td>26.3</td>
<td>20.0</td>
<td>27.1</td>
<td>33.5</td>
<td>44.5</td>
<td>57.3</td>
<td>54.4</td>
<td>45.0</td>
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CHANGE IN THE CONDITION OF DWELLINGS (%) / 1958-1998:

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<th>URBAN</th>
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<tr>
<td></td>
<td>Good / Fair / Bad</td>
<td>Good / Fair / Bad</td>
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<td>1958</td>
<td>13 / 40 / 47</td>
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<td>1998</td>
<td>60 / 27 / 13</td>
<td>32 / 36 / 32</td>
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(Source: INV, leaflet presented at the International Seminar on Sustainable Habitat: Challenges for the New Millenium, GDIC, Havana, May 22-24, 2000)
Since the early 80s strong criticisms were made by some architects and planners to the conventional housing tract with repetitive blocks scattered in a shapeless, lifeless compound. This opposition was later confirmed by the economic and energy crisis of the 90s, as the model proved to be highly vulnerable because of its excessive consumption of energy, its dependence on heavy, specialized equipment, and the lack of flexibility regarding changes in the user needs. It also compared bad to the more traditional low-rise/high density pattern over a regular street grid in terms of density, image and as an adequate frame for popular ways of life consolidated through time.

Two projects in Havana: a reaction against the no-city

Villa Panamericana, built for the 1991 Pan-American Games in Havana, was a successful attempt to make a reinterpretation of some basic patterns of the traditional city, such as the central elevated pedestrian promenade performing as a green backspine, buildings 3-5 stories high facing the streets and grouped in rectangular city blocks, with small shops in the ground floor. The whole complex of 1471 apartments had a much more urban character and a higher population density (480-500 inhabitants per hectare) than the conventional model of scattered blocks and high-rises separated by barren, useless land. Flats were a little bigger and there was a positive response to the project in users and authorities, even if the architectural design was blemished by a faded, decorativist portmodenism. Nevertheless, this flaw underlines the soundness of the basic urban structure and design by Roberto Caballero.

Unfortunately, the economic crisis paralyzed another important project in Havana. Las Arboledas was started in 1984 by the Berkeley-based architect Huck Rorick with a Cuban team lead initially by Salvador Gomila and later on by Graciela González. The project was conceived for 16 thousand inhabitants but only some 200 flats were built and they are not visible from the nearby road, affecting its didactic role as an appropriate alternative to social housing and urban planning. There was a sensitive approach in setting the buildings with a minimum disturbance of the heavily wooded landscape, allowing cross-ventilation so as to ensure good bioclimatic conditions without consuming energy; and with aesthetics relying largely in the honest play of light and shadow on volumes and the natural texture and color of unplastered building materials. Yet, the interesting lineal center –whose basic pattern was devised in a design workshop with the West Coast planner Peter Calthorpe-- was never built, and neither the organic wastewater treatment system using a series of stabilizing ponds.

The Special Period: In search for other ways

The collapse of the Soviet Union and the eastern European socialist bloc caused a terrible economic crisis. Cuba suddenly lost its major trading partners (85%), oil imports (the country’s sole source of energy) were cut by more than half, access to privileged prices and soft credits were lost, as well as the supply of spare parts for Russian technology that during 30 years had been replacing the previously dominant American before 1959. GIP dropped 35% and the exchange rate between dollars and pesos reached 1:150 in 1994 (Castro 2000). The Special Period was declared, a sort of war condition in a time of peace; and sheer survival achieved the top priority while trying to keep the best social achievements like education, health and social security. Nevertheless, not a single school, day-care center, sports facilities or university was closed, as happened in other countries through shock-therapy adjustments (Ibid). Between 1993-1994 several very important changes happened. The Cuban government opened to foreign investments in tourism and real estate, and Cuban citizens were allowed to use dollars and also to work self-employed or in small family businesses, including the paladares (home restaurants sitting a maximum of 12 persons). A large amount of State agricultural land was given to cooperatives (UBPCs, Unidades Básicas de Producción Agropecuaria), and the Agricultural Markets were reopened, allowing private
farmers to sell at higher prices set freely by the market. A new level of government appeared, the Consejos Populares de Barrio, much closer to the population than the municipalities; and community work was encouraged, including collaboration projects with foreign NGOs.

The City Historian Office was allowed in 1993 to run their own businesses in dollars and reinvest the revenues into their own programs, thus becoming financially self-sufficient. The scope of preservation was expanded beyond restoration of isolated relevant buildings to include rehabilitation and the improvement of the living condition of the local population; and the work gradually extended beyond the old walled precinct that had been designated as World Heritage by UNESCO in 1982. The prestige attached to this preservation program and the recuperation of traditional skills also exerted a positive influence in the overall reappraisal of the values in traditional architecture and urban patterns, and in setting higher standards for building quality. But social housing as a whole was deeply affected by the crisis, and most microbrigades buildings that were started during the short, whimsical construction boom of the Rectificación de Errores period in the late 1980s remained paralyzed through the whole 1990s, as many critical resources became only available with dollars.

By late 1980s the condition of the housing stock was critical in Havana: around 375,000 persons lived in sub-standard dwellings --shanties, tenements and structurally unsound buildings (Castro 1987). A program called Low-consumption Houses began in early 1990s but was quickly abandoned because of its low quality and inappropriate setting that resulted in underusing valuable lots. Another program quickly followed in Havana, focused in supplying the albergados (people who have already lost their houses) with a minimal dwelling that would at least give them with some privacy compared to collective shelters. Even if these compounds are nor placed in relevant sites, the design and living conditions are too elemental and no provision has been made for a future expansion or improvement by the users themselves. One interesting housing program has been the Plan Turquino, hoping to stop the de-population of the Cuban mountains. Some of these projects have searched for a more sustainable and participatory approach to rural housing, focusing on bioclimatic issues (González 1997).

Oil and material scarcity brought with the Special Period reflected immediately in stopping most social housing projects, not only those requiring heavy panels and cranes but also the more conventional Microbrigades. A new variety, the Social Microbrigade, had started in 1987 with a focus on in-fill projects in the inner city and incorporating neighbors to the construction crews. Efforts were made in using local materials and labor force with traditional soft technologies, and many experiences were made with soil-cement blocks, micro-mortar tiles for roofs, light concrete beams and others. A new program promoted by the Cuban NGO Habitat-Cuba was started in 1994, the Arquitecto de la Comunidad (Community Architect), working in direct contact with the population with a method established by the Argentinian architect Rodolfo Livingston in Cirugía de Casas --Surgery of Houses (Livingston 1990). By the year 2000 this program already cover 136 of the country’s 169 municipalities, with more than 500 professionals; and it has benefited 28,000 dwellings (Gomila 2000).

Community development and planning has been the goal for the Talleres de Transformación Integral de Barrios, TTIB in Havana (Neighborhood Transformation Workshops), starting with the first three in 1988 and extended into 20 by mid-2001. This became a stimulating experience about the potentials of citizen participation in an alternative planning from bottom-up (Coyula et al 1995). One of these Workshops, La Güinera, was distinguished in 1995 as one of the 50 most successful community projects in the world, on the 50th anniversary of United Nations. The Workshops were promoted by the Grupo para el Desarrollo Integral de la Capital (Group for the Integral Development of Havana, GDIC), a small team of experts created in 1987 to advise the city government on urban policies. Both the GDIC and the TTIBs were presented in the exhibition of best practices at the Habitat II summit in Istambul, 1996. The Group has built a huge scale model of Havana that is being
used to build a public awareness on the values of the city and test the impact of new projects. It also coordinates a strategic plan for the economic and social development of Havana, now entering its second phase for the 2001-2003 period.

**Historic preservation clears the path**

There has been a very positive influence of the successful historic preservation projects promoted since the 1980s promoted in Havana by the influential City Historian, Eusebio Leal. That experience was extended to other historic cities like Trinidad and Santiago de Cuba. A broader conception of cultural heritage, incorporating more recent, extended and less individually significant landmarks also involving different social sectors and neighborhoods was started by some pioneers (Coyula 1984). The National Center for Conservation, Restoration and Museology (CNCRM), under Isabel Rigol and Luis Lápidus, called in 1986 for a seminal preservation meeting in Las Tunas, where Eclectic architecture from early 20th Century was acknowledged to contribute the main built fabric in Cuban cities. CNCRM also promoted in the Plaza Vieja project at Old Havana an approach to adapt late 18th Century mansions as social housing. Awareness gradually extended about the links between cultural interest for preservation, identity and expression in the built environment, coupling it with a wider approach to ecological, social and economic rationality. The on-going San Isidro project in the southern half of Old Havana is a good example of the improvement of the housing condition and quality of life for the local population, carried out by the City Historian Office with income generated by its own businesses.

**Facing banality**

For the first time in forty years, housing projects appeared in the mid-90s that were not restricted to social interest, and architects had to deal with new programs like condominiums for foreigners that included unprecedented luxuries in space and equipment. Despite this potential, many projects—both Cuban and imported—lacked good design, as also happened in some new hotels. Shopping malls with climatically unsound reflective glass facades appeared as novelties for the average Cuban citizen who has been spared from the frenzy of needless consumption, repeating the trick played by the Conquerors on the natives by trading gold nuggets for small mirrors (Coyula 1998).

The threat of this banal international architecture over a very valuable built heritage was strongly discussed in the 6th Congress of the Cuban Union of Writers and Artists, November 1998, calling attention from leading intellectuals and top decision-makers, including Fidel Castro. Real estate joint ventures selling new flats to foreigners were paralyzed in May, 2000. But the danger of bad new designs is still less important than the extended visual degradation of the built stock by makeshift fences and every sort of aggressive additions that ironically affect most the best neighborhoods. Even worst, this trend reflects the subtle rise of an urban sub-culture of poor nouveaux riches (Coyula 1998) whose ability to distort the city has grown after getting access to dollars. Again, awareness about this threat came mostly through the Union of Writers and Artists and cultural journals, finding more direct ways of reaching top decision-makers than through the construction-oriented architectural sector.

**Housing Policy in the 90s**

The Special Period pushed some very important issues, like community development and social work, the family role in society, political and administrative de-centralization, economic and environmental awareness and other critical aspects for a sustainable approach, including many ecologically sound alternatives like bicycling and organic agriculture; and a broader conception about the built heritage. The importance of information
was acknowledged, and computers became more widespread precisely when economy became tougher.

Since unsatisfied needs kept pressing, many persons turned to makeshift, illegal or half-legal solutions that included new detached houses, or additions and splitting existing ones. Materials were in some cases bought or granted free by the local governments. Others were recycled, with a very poor quality; or bought at the black market. Many of these dwellings were not reported or supervised, substantially lowering the official figures about the number of self-help new dwellings. The problem of finding trustful data is tougher because the last housing and population census was made in 1981. In 1983 a new census was carried out on self-help housing and in 1986 another was made, with little specialized information. Surprisingly, during a 1984 Housing Seminar a paper showed that roughly two-thirds of the housing stock since 1959 was self-built (Estévez 1984). Approximate figures were found deducting State-built units plus estimated losses by depreciation from the total amount of dwellings. Even if the quality of self-made housing was in many cases questionable --partly because of some official reluctance to admit it during a long time-- this fact demonstrated the enormous potential in the population only waiting for a proper attention.

In 1992 the Group for the Integral Development of Havana called for the First Workshop on Housing Policy. Suggestions from the proceedings included the need to decentralize decision-making and management, reinforcing the participation of local governments, grass-root community organizations and citizens directly involved in solving their problems. It also called to increase energy savings by using alternative technologies and local resources, substituting imported solutions with national and local, search for more healthy and ecologically sound dwellings; and give top priority to housing that would help stabilizing labor force in main economic programs, as well as for the most needed social cases, like people living in shelters. A housing construction program with low-consumption building techniques and materials, both in terms of energy and materials (Viviendas de Bajo Consumo) was a result of this workshop. It also called for a more thorough use of technical and human local resources. A nationwide network producing local alternative building materials and elements was created, and housing production reached 57,300 units in 1996, more than before the crisis. Yet several problems appeared in quality of design and construction, integration to the urban context, inadequate use of a non-renewable resource as urban land and poor ventilation resulting in an additional consumption of energy by occupants to achieve a better bioclimatic comfort. Quite quickly the program was stopped in the most valuable urban sites.

A second Housing Policy Workshop in 1996 tried to correct some of these flaws and traced guidelines for the 1996-2000 period: to improve quality, even at the expense of quantity; to rise population density, a higher priority to the conservation of the existing stock, and more technical advice and allocation of resources to self-help. That period closed with an average of 50,000 dwellings per year, and quality improved: units from the top layer rose from 24% in 1996 to 53% in 1999 while the bottom layer dropped from 33% to 1,6% in the same years. Meanwhile conservation actions on the existing stock, both through the State and by self-help, increased from 130,000 in 1996 to 300,000 in 1999; and rehabilitation jumped from 36,000 to 68,000.

The Third Workshop in 1999 identified some deficiencies: the growth in the production of building materials at a grass-root level and the number of emergency actions to slow down dilapidation were not enough; and there was a lack of economic approach to many construction issues. The pace in the technical infrastructure needed to support new housing was considered too slow; an the heavy concrete panels prefabrication plants had not been converted to produce smaller and more flexible building elements, especially those used for
structures in roofs and intermediate floors. A lack of design guidelines to ensure correct dimensions of rooms and bioclimatic comfort was also pointed out. The workshop stated
HOUSING IN CUBA PART II

conservation and rehabilitation of the existing housing stock as first priority; and in that sense also recommended to strength the Social Microbrigades, re-structure the I+D plans and include conservation and rehabilitation in the undergraduate curricula of architects and civil engineers.

The Housing Plan for 1996-2000 proposed to incorporate 400,000 dwellings to the existing stock (250,000 new and 150,000 by rehabilitation), combining the efforts of the State, cooperatives and self-help. The goal was to reach the year 2000 with 3.135,000 dwellings, including 2.732,000 considered useful –meaning adequate, with a somehow loose standard. From 1997-1999 141,400 dwellings were built: 47% by the State, 18% by cooperatives and 35% by self-help. Under the State-built were dwellings made by the Ministries of Construction, Agriculture, Sugar and Armed Forces, plus local governments. The quality of these units was considered good: 90% fell in the first three categories of quality within a scale of 5. Conservation was also strengthened: 295,000 actions of conservation and rehabilitation were done in 1999, 51% by the population. Yet the housing deficit persists, and quality is still a problem, especially in self-help and conservation.

Housing the 21st Century

Some changes in previous attitudes might contribute to improve Cuba’s housing problems, even though no real solution is foreseeable, at least until the economy achieves a sustainable an endurable recuperation that would reach beyond the macro level into the local and individual. There is now a more widespread awareness regarding housing as a very complex social problem that demand many different solutions through many ways, involving many different players. There has been a growing criticism over the old approach that considered housing as a sole State task and concentrated in new construction with little care about conservation of the existing stock. That approach reflected a very centralized model with little concern about technical infrastructure, urban design, environment, local and national cultural identity. But as the Cuban economy gradually recovers from the worst years of the Special Period, there is also a growing danger as some high-rank officials start to look back with nostalgia into the same conventional, rigidly centralized concepts, organizational structures and processes, working styles and design and building patterns. The menacing shadow of the heavy concrete panel hanging from a huge crane is very persistent and far-reaching, especially within the friendly terrain of big State construction enterprises.

After four decades of social housing projects, differences in housing standards for new dwellings arrived in the mid-90s with the beginning of real estate projects for foreigners made by joint ventures. By the year 2000, only one of those project had been fully finished and inhabited: Montecarlo Palace (1999) in the still up-scale Quinta Avenida in Miramar, with 29 dwellings; and others are under construction. As more new condominiums are built —now only for rent, after the May, 2000 regulation that stopped sales—, a sort of Inmobiliaria (real estate) architectural style is being shaped: a sweetened, larger version of the old Microbrigade blocks consisting of massive buildings crowded with small apartments to meet the elementary needs of their clients: a bed, a shower, an air conditioner and a parking space for a car, often a scarlet Hyundai. This style is also the result of the cheap taste imposed by the foreign counterpart, demanding an impossible blending of Mediterranean, Neoclassical and Cuban Colonial in a softened postmodernist design, repeated again and again. Even if the number of these buildings is still low, the problem is already posed; and the eventual end of the American embargo on Cuba will only make it worse as Hialeah’s patterns might be transferred to Havana.

But inequality is not restricted to differences in new housing between Cubans and foreigners: in spite of the efforts by the Government, it is also beginning to show its ugly face among Cubans themselves with the widespread changes, both improvements and distortions,
that some people are doing to their dwellings supported on a higher income, often from dubious sources. It therefore seems crucial to make sure that this trend that combines secluding and showing-off will not turn into segregation, both physical and social. A healthy diversity should be preserved while empowering the population so as many households as possible will become able to deal with their own housing problem. But this must comply strictly with the building codes and regulations. State-built dwellings will remain a need, especially in the inner city context where buildings request a higher complexity and quality of design and construction; but in the new social and economic context the State role in housing should be more to promote, support and control microbrigades, cooperatives and self-help. In other words: it seems that emphasis should be placed not so much in doing, but in having things done. For this task, Cuba has the most important resource: a well educated population whose ingenuity in finding solutions for seemingly terminal problems have been demonstrated over time •

| Property: | Any person living on a dwelling of his own by the time of the Urban reform Law (October 1960) was allowed to keep that property. Ownership was extended to a second vacation house. The rest was confiscated by the State and the previous owner could receive a life-time compensation (maximum $600 pesos a month) when not having other sources of income. Regarding State-built dwellings, the user can become owner after paying its price through a monthly rent. The price is set according to location, land value, building type and size. For an average 60 square meter apartment, the price ranges from $4,500-10,500 pesos. This implies a State subsidy of 43% in the case of a dwelling located in the best zone of Havana, and 49,7% in the best zone of a provincial capital. Microbrigades get a 10% discount. The owner and his or her family have the right to use the dwelling, swap it or transfer to heirs, but not use it for profit. Nevertheless, up to two rooms can be rented, paying a fixed monthly fee to the State. The fee is paid in pesos or dollars, according whether the guest is Cuban or foreigner. Buying or selling is allowed at State-fixed prices, which are much lower than the actual value non-official market; but the State keeps the right of first choice. An underground housing market exists, as swaps many times involve dwellings with different value and owners privately agree to pay a difference. Swaps can become very complicated, involving multiple swappers even from different cities. This gives room for underground swap brokers. A person without a dwelling can sometimes enter one of these swapping chains and end as an owner. |
| Land market: | There is no official land market, but the value of land related to location is implicit in swapping. The Law regulates the use of land in self-help construction. If the person does not own a lot, the State allows a perpetual right of use and fixed a price for the lot ranging from $6-33 pesos per square meter, according to the location. Land prices above $24 pesos are only set for Havana. |
Credits: The State grants bank credits for the acquisition of State-built dwellings, sell the building materials and supplies technical advice. The yearly interest rate is 3%, payable in 15 years in the case of detached houses or flats in walk-ups; and 20 years for high-rises. Rural cooperatives can finance dwellings with their own funds, or through bank credits paying a yearly 2% up to 25 years in the case of mountain regions, or 3% up to 30 years for the rest. For self-help dwellings a bank credit can be asked covering up to 90% of the investment, payable in up to 10 years at a 3% interest rate. No down payment is needed for credits, nor other properties required as a guarantee. Guarantee is issued through co-debtors. Recuperation of credits reaches 97-99%.

GLOSSARY OF TERMS REFERING TO SLUMS

Cuartería: A collective sub-standard housing type, usually involving a former abandoned mansion subdivided by rooms, one family per room. Residents initially shared common bathrooms, toilets and kitchens, but in time many brought these functions within their own domain, either by addition or subdivision. Generally, these interventions were makeshift and contributed to aggravate natural ventilation and lighting, and also distort the architectural and urban image.

Ciudadela: Another type of sub-standard collective speculative housing type, conceived like that from the very beginning. They usually appear in the inner city, adapting to its narrow, deep lots. A single or double line of rooms, one or two floors; one family per room, develop along a narrow court with collective bathrooms, toilets and kitchens at the bottom. As in cuarterías, most residents end by building their own facilities into their rooms, but worsening natural ventilation and lighting. Both types, cuarterías and ciudaelas, appear mainly in the central city and were the dominant type of housing for the urban poor, with a strong presence of Afro-Cuban religion and culture (especially dance and music), lack of privacy, noise but a strong sense of solidarity among neighbours. Sometimes the front rooms have direct access from the street (so they are called accesorias) and have slightly better living conditions.

Pasaje: An improved version of ciudadela, equivalent to an efficiency, where each family has a very small apartment (living-dining, bedroom, bathroom, kitchenette and a minimum laundry court. Units form a single or double row along a narrow central public court, that often opens into two streets. Access to the units is through that court, which in fact perform as an alley.

Barbacoa: A native Cuban word designating a makeshift loft, usually self-built with scraps of wood and metal. Barbacoas use the traditional high ceilings in old buildings at the central city to create extra livable space. They usually violate many building regulations, are hazardous, hot, uncomfortable and distort the facades and the streetscape. Many barbacoas end in time as a solid structure, thus eliminating some of its flaws at the expense of making others more permanent.
Casetas: Shacks usually built in the flat roofs (azoteas) at the central city. As barbacoas, they often start with leftover materials and improve gradually until some become regular dwellings. They have the advantage over the ciudadelas, cuarterías and barbacoas of good views and ventilation. But they often violate the codes and the rights of other neighbours, accelerate leaks from the roofs, and make illegal sewer connections to the rain water collection system.

Locales: As the housing deficit kept increasing and the former dense commercial network of the central city became void of functions, many vacant former shops, stores and even garages were given away free to citizens in sharp need of a dwelling. Often, the adaptations would not solve acute problems of privacy, adequate natural lighting and ventilation, or even major structural problems in the building. They also destroyed the image of the central city in its most conspicuous aspect, at street level and corners. To make things worst, kiosks were later planted in front of the former shops, and many residents tried to take profit of their centric location and started to sell homemade food and beverages. All this contributed to the visual and functional degradation of the inner city and its former commercial arteries.

Barrio insalubre: Shantytowns, formerly called in Cuba barrios marginales (marginal neighbourhoods) because its population was mainly marginal*. They are located mostly at the urban periphery or interstices, close to rivers and creeks, railroad tracks, cementeries and other non-attractive or dangerous locations. Sanitary conditions are very poor, most residents are migrants from rural areas, dwellings are predominantly makeshift and there are many social problems derived form promiscuity and bad habits. Against conventional wisdom, many residents do not arrive directly from the countryside, but “rebound” form other neighbourhoods and smaller cities. On the other hand, they usually have access to water and electricity supply, though no wastewater treatment; and also are covered by the State health and education network.

Foco insalubre: Cluster of precarious dwellings similar to barrios insalubres, but with less than 50 dwellings.

* The existence of marginality was officially discarded in Cuba for a long time, assuming that even if the urban slum population had sub-standard housing, they were not marginalized from society and instead had access to electricity, education, jobs and health care. Social changes introduced as a result of the special period in the 1990s increased inequality, and for the first time the marginal condition was publicly accepted at the turn of the century.

CHRONOLOGY

1959 / January: Law 26, stopping evictions
 / February: creation of INAV (National Housing and Saving Institute)
 / March: Law 135, cutting rents by half
 / May: First Agrarian Reform Law
 / December: Law 691, control on vacant lots
 / Rural housing and improving of bateyes (single-function villages around the sugar mills) by the Corps of Engineers from the Rebel Army
1960 / Creation of Viviendas Campesinas (Rural Housing) department at INRA
 (National Institute of the Agrarian Reform), building new rural small towns.
Esfuerzo Propio y Ayuda Mutua (Self-help and Mutual Aid) program at the Ministry of Social Welfare, eliminating shantytowns.

- July-October: American properties and private schools are nationalized. US imposes the trade embargo to Cuba
- October: Law 892: Urban Reform

1961 / April: Counter-revolutionary invasion at the Bay of Pigs
1962 / Creation of the Physical Planning department (later Institute, IPF)
- October: Missile Crisis
1963 / First Master Plan for Havana after the triumph of the Revolution. Nuevas Ordenanzas de Construcción para La Habana (new building codes and land use regulations for Havana)
1965 / Centralization of housing projects by the MiCons (Ministry of Construction)
1968 / Ofensiva Revolucionaria (Revolutionary Offensive), eliminating the rest of small private businesses. Cordón de La Habana (Havana Greenbelt), Puestos de Mando de la Agricultura (Agricultural Command Posts)
1969 / Multiflex, an open lightweight prefabricated housing system is experimentally built at Wajay, in the southern outskirts of Havana
1970 / Gran Zafra (Great Sugar Harvest). Housing construction reaches lowest point: 4,000 State-built units
1971 / Creation of the Microbrigadas, a massive housing program combining active participation of future residents as construction workers with strong State support in building materials and equipment, and technical advice
1972 / LH, an experimentally fully-prefabricated housing project with large hollow-core Spyroll concrete slabs, started in 1972, is finished in Vedado, Havana, 1978
1974 / Reanimación Urbanística (townscaping) program in Havana
1975 / First Congress of the Cuban Communist Party
1977 / August: Law 1, on Cultural Heritage; Law 2, on National and Local Landmarks. Reglamento de Ornato e Higiene (2nd version in 1989) updating regulations on sanitary and urban image for Havana
1981 / Housing and Population Census
1982 / February: Decree-Law 50 on foreign investment
1983 / Census on self-help housing
1984 / Ley General de la Vivienda (General Housing Law), creation of the INV (National Housing Institute). Las Arboledas, an environmentally-friendly housing project starts at Havana’s southern outskirts. March: the Executive Committee of the Council of Ministers approves through Agreement 1701 the Master Plan for Havana
1985 / The first version of the Regulaciones Urbanísticas para La Habana (Urban Codes for Havana) are approved for Havana’s 15 municipalities
1987 / Rectificación de Errores (Correction of Mistakes) process. Creation of the Social Microbrigade and of the Grupo para el Desarrollo Integral de la Capital (Group for the Integral development of Havana)
1988 / Review of the General Housing Law. The first three Talleres de Transformación Integral de Barrios (Neighborhood Transformation Workshops are created in Havana
1990 / Período Especial (Special Period in Time of Peace) is declared after the demise of the Soviet Union and the European Socialist bloc. Creation of the Consejos Populares de Barrio (Neighborhood popular Councils) in Havana,
after the 1988 experience in some rural settlements

1990-
1991 / Second version of the Regulaciones Urbanísticas para La Habana
1993 / Opening to self-employment in retail and services. Agricultural cooperatives (UBPCs) receive large amounts of State land. Possession of dollars made legal for Cuban citizens. Decree 143: the City Historian Office is allowed to run businesses and reinvest in their own preservation/rehabilitation programs
1994 / August: Habitat-Cuba is officially registered as a Cuban NGO
October: Reopening of the Free Agricultural Markets, now called Mercados Agropecuarios. Law 73: a system of taxes (flat taxes, tax rates and payments) is approved
1995 / September 5: Law 77 substitutes Decree-Law 50 from 1985, broadening the scope for foreign investment. La Güinera, one of the three initial Neighborhood Transformation Workshops (TTIB) promoted in 1988 by the Group for the Integral Development of Havana (GDIC) is selected as one of the 50 more successful community development projects in the world on the 50th anniversary of United Nations.
1996: The Group for the Integral Development of Havana (GDIC) and the Neighborhood Transformation Workshops are acknowledged as one of the world’s best practices at the Habitat II summit in Istambul.
1999 / Montecarlo Palace, the first real-estate condominium building for foreigners is finished at landmark Fifth Avenue, Miramar
2000 / May 5: Real estate joint ventures are no longer allowed to sell flats to foreigners – only rent. December: The Estrategia para el Desarrollo Económico y Social de la Ciudad de La Habana (Strategic Plan for Havana 2001-2003; and the Plan de Ordenamiento Territorial y Urbanismo (Territorial Plan and Urbanism) for Havana, were approved by the Provincial Assembly of Poder Popular.

Note: The sequence of Law numbers start in 1959 after the Revolution gets to power, and then again in 1976 after the new Constitution and the creation of the Poder Popular

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