

## RESEARCH ON TIMBER FRAME BUILDINGS IN PANAMA CITY

## Part 1 A tailored image of national heritage and its influence on conservation

パナマ市世界遺産地区における木造建造物に関する研究  
その1 作られた国家遺産イメージとそれが保存に与えた影響*Katti OSORIO*\*

カッティ オソリオ

From the very beginning of Panama's republican period Spanish heritage has been the "face" of Panamanian cultural heritage, at least for the country's elite. This image of Panamanian heritage was based on the remains of a greater colonial past in the face of foreign pressure. Indirectly this situation caused an imbalance in the perception of the heritage value of architecture, favoring rubble masonry buildings over timber construction with the subsequent neglect of the latter; a situation that today affects the integrity of Panama City's historic district as a world heritage site.

**Keywords :** *Timber frame, foreign pressure, nationalism, tenant house, Canal Zone, tailored cultural image.*

木造建造, 外圧, ナショナリズム, 借家, パナマ運河地帯, 作られた文化イメージ

**Introduction**

Timber frame houses in the historic district of Panama City, a world heritage site since 1997, are at a disadvantage in terms of image when compared with masonry houses of perceived Spanish and French heritage in the eyes of Panamanian people. Although timber was used abundantly in interiors and second-floor exteriors as well as exposed roof structures, timber construction is also associated with emergency construction and fast building during the periods of high economic activity in Panama City during the 19<sup>th</sup> and 20<sup>th</sup> centuries, including the Gold Rush, the Panama Railroad, the French Canal and the American Canal. In this light, timber frame construction lacks the glamour and nostalgia of masonry buildings with their legacy of Spanish Colonial splendor as a source of self-esteem for the Panamanian elite of European descent. Most conservation efforts in the historic center of Panama City in the 20<sup>th</sup> century focused on the large-scale and prominently visible Colonial legacy such as churches, masonry mansions, colonial ruins and open-air public spaces. Legislation has been expressly focused on the Spanish legacy without clear guidelines concerning timber-frame building conservation.

Conservation philosophy remains foreign in Panama. The concept of maintenance is still in an early stage, and no special credentials are required to work as a professional in the conservation field.

**The aim of this paper**

The aim of this paper is to identify the reasons why timber frame construction does not share the favorable image masonry construction has concerning Panamanian heritage by analyzing the historic background of the areas of Panama City rich in timber frame construction, specifically in the Old Quarter of Panama City which is inscribed in the world heritage list; to examine how this unfavorable image developed and how the consequences of such have affected conservation policies and views on timber frame heritage, ultimately concerning the integrity of the Old Quarter of Panama City; and to outline what is necessary to balance the situation to preserve timber frame heritage in Panama City. One of the highlights of the particular problem of timber frame architecture being slighted is that timber frame buildings in the historic district of Panama City constitute witness to historic development of the city and losing them may be equated to losing tangible evidence of Panamanian history in both architectural and sociological aspects.

\* Ph. D. Candidate, Graduate School of Comprehensive Human Studies, World Cultural Heritage Studies, University of Tsukuba, M. Conservation of Cultural Properties

筑波大学大学院人間総合科学研究科世界文化遺産専攻  
博士後期課程・文化財保存修士

The historic district of Panama City is a world heritage site and the responsibility of keeping the historic district as document truthful for future generations is of great importance

This paper is the first in a series of three papers under the title “Research on Timber Frame Buildings in Panama City” concerning tailored image of national heritage and its influence on conservation, specifically in Panama. The first paper addresses historic background and circumstances surrounding historic buildings in the Old Quarter of Panama City; the second paper, under the subtitle “Background of Conservation Laws in Panama” addresses conservation laws and the third paper, under the subtitle “Conservation in the Old Quarter of Panama City: A Case Study” presents a case study contemplating how historic background and law affect the conservation process in the Old Quarter of Panama City.

## **Colonial past and the Invisible Heritage**

### **Historic Background**

Panama emerged from the Colonial period as one of the last countries to declare independence from a weakened Spanish Empire in 1821. Panama voluntarily subscribed to the Gran Colombia, embarking in the Bolivarian dream of the former colonies of Spain in America as a federation of nations able to confront on equal footing the European powers. Today, Bolivar Hall in Panama City’s Old Quarter forms part of the world heritage. After the fall of the Gran Colombia, however, Panama – then a small, isolated and neglected department of Colombia – wished for better economic perspectives. Panama separated from Colombia and formed the Republic of Panama in 1903 in a rather controversial operation.

As a direct result of the Treaty of 1903 (Isthmian Canal Convention), the Canal Zone was created<sup>1)</sup> and Panama City fell under jurisdiction of the Sanitation Office of the Canal Zone affecting regulations on building construction. Panama was dollarized in 1904. Dollarization allowed the administration of the Canal Zone to pay workers in American dollars creating the Silver Roll and Gold Roll payroll system<sup>2)</sup>, which reflected on the type of housing available to each group.

The Canal Zone was ruled by an American governor under American law and in accordance with the apartheid practices of the American south at the time. This independently empowered presence on the other side of the fence right beside Panama City put tremendous pressure on the elite of Spanish descent. For the Panamanian elite, their own background (real or imaginary) was used as a source of pride in the face of the pressures brought about by the Americans, whose image as a nation was young, brash and diverse. Europeans were reportedly jealous of the American success in the Panama Canal and caricatures ridiculing Panama and the birth of the republic were noticeable in European newspapers of the time (Tejeira 2007). The need for a source of self-esteem was great and heavy. It was in this atmosphere that the first law concerning Panamanian heritage was enacted (Law No.61 of 1908) concerning the protection of the castle fortress San Lorenzo del Chagres (today, No.135 on the world heritage list). Taking into account that there was not an “official” history of Panama in writing, Juan B. Sosa and Enrique J. Arce were commissioned by a contract formalized by Law No.26 of 1908 to research and write an official account of Panamanian history in a term of four years. The result was the *Compendio de Historia de Panamá*, published in 1911 (Gasteazoro, Sosa, Arce 1999).

Subsequent legislation concerning Panama’s heritage takes care to identify and protect the Colonial past<sup>3)</sup>. It is interesting to note that designated national monuments were relatively close to the Canal Zone.

The Panamanian elite was not deterred by the segregationist politics of the Canal Zone and actively sought to mingle with the American rulers of the Canal Zone. In Panama as well since Colonial times, colored people did not have expedited access to commerce circles or elite social circles. The Panamanian elite lived in rubble masonry houses of mixed construction, generally with rubble masonry facades and timber interiors. Timber frame buildings, especially those built during the American period, were identified with laborers, colored people and poverty; hence this type of building was largely excluded from the image that the elite had of themselves and from the memory of educated people of high standing.

The Norms of Quito, formulated at a time when dictatorships were strong in Latin America declared cultural heritage a tool for economic development of developing nations; restoration plans devised at the time contemplated sites representative of the Nation in order to strengthen a sense of cultural identity, which could be equated to political support to the ruling parties, thus perceived as patriotic. This was clear to the Military and its related intellectuals in the case of Panama. Panama had entered a long dictatorship period with a military coup d’état in 1968. The State devised a number of important conservation and restoration programs and projects focusing on the large prominent monuments of the Colonial past; it was through this effort that modern concepts of Conservation and Restoration arrived in Panama after the Military Coup d’état in 1968 (Tejeira 2004). Panamanian Conservation programs had a strong nationalistic character, and Hispanic heritage was thereby put forward.

Tenant housing was a booming business during each period of high economic activity and the economy of Panama City relied heavily on tenant housing (Tejeira 2006). Traveler accounts recount that most of Panama City’s principal houses had been turned into hotels kept by Americans (Mack 1944).

In the early 1900’s, colonial architecture was seen as backwards and old-fashioned; European urban designs featuring dramatic avenues and scenic plazas and Gothic architecture were more likely to figure among the interests of educated people than Colonial buildings (Tejeira 2004). In Panama City after devastating fires through the 18<sup>th</sup> and 19<sup>th</sup> centuries, rubble masonry walls from old colonial buildings were recycled, remodeled and revitalized into a visually layered history that today is considered part of the importance of the Old Quarter as a world heritage site. This makes it even more

apparent that colonial architecture per se did not catch the interest of the Panamanian elite. Regardless, the large-scale and prominently visible monuments of the Colonial past became a source for self-esteem and reassurance usable to counteract the psychological effect of the American presence and the constantly increasing number of foreigners in Panama City, as is evidenced by the first laws concerning Panamanian heritage.

Concrete and Portland cement as a construction material arrived in Panama in the 1910's. In 1912 President Belisario Porras began construction of the Exposición borough to commemorate the 4<sup>th</sup> centennial of the discovery of the Pacific Ocean in Panama and to honor Hispanic brotherhood. It was completed in 1916. Slowly but surely, the Panamanian elite began acquiring modern residences in this area and moving out of the Old Quarter and into newly built residential areas in La Exposición neighborhood and Bella Vista. The old mansions and houses were eventually subdivided and turned into tenant houses. The Old Quarter decayed and became an economically depressed area. The rent costs soared for tenants in the 1920s and 1930's; the State froze registered property values by Law No.95 of 1973 and began a program of urban renewal. The current historic district area was not heavily impacted by urban renewal policies of demolishing old timber frame tenant houses and replacing them with concrete structures as a social solution, but the outer area of the historic district including part of Santa Ana and El Chorrillo boroughs were directly affected.

## Image of Timber Frame Houses

### The Tenancy Belt

The Tenancy Belt was an expansion of tenant houses for workers from the Panama Canal as well as laborers in Panama City built in the suburbs of Panama City and along the border of the Canal Zone using timber as its main construction material. Fig. 1 shows the Tenancy Belt as of 1915.

During the periods of high economic activity on the trans-isthmian route in the 19<sup>th</sup> and early 20<sup>th</sup> century (the Gold Rush, the French Canal, the American Canal) tenant housing was a key economic factor for Panama City. During the 18<sup>th</sup> and 19<sup>th</sup> centuries disastrous fires cleared large areas of Panama City; large areas of the walled precinct were vacant lands.

The narrow lots in the colonial precinct of Panama City are a result of the lack of space within the city walls, a scant usable area of 16 hectares (0.16 km<sup>2</sup>; present day San Felipe borough has 0.5 Km<sup>2</sup> with houses built on the old fosse, city walls and esplanade)<sup>40</sup>. Most of the Colonial period houses were lost in the fires; however citizens often reused the masonry walls, keeping the proportions of the facades when rebuilding the city and thus causing a multilayered effect. This multi-layer effect is clearly visible on the street façade as the house fronts were remodeled through time. Timber was abundantly used in interiors and upper floors. Existent buildings were extended and the patios were reduced in size or disappeared altogether as extra wings built in timber frame replaced them.

As the Gold Rush propitiated the construction of the Panama Railroad, transient workers and travelers poured into Panama City creating an opportunity for investment. The suburbs of Panama City between the Esplanade and Ancon Hill were built in timber and mixed construction tenant housing. In the decade of 1860 the Gold Rush came to an end, leaving Panama City's economy of services diminished until the arrival of the French and their level canal project in the decade of the 1880s. Several fires compounded the economic slump in 1864, 1870, 1874 and 1887. Tenant houses built during the French period were not serialized models and retained a certain beauty of design and decoration.

The areas of Guachapalí, Calidonia and El Chorrillo were built up with timber frame tenant houses to accommodate the workers of the French Canal, an important number of which were West Indians. After the collapse of the French effort came another period of economic uncertainty for landlords, followed by a new influx of transient workers brought about by the American Canal effort. The great influx of foreign workers stimulated rapid construction of tenant housing between the former suburb (Santa Ana) and Ancon Hill, and to the north effectively creating a vast suburban area of tenant houses of timber frame construction in what is today the boroughs of El Chorrillo, Santa Ana and Calidonia: This area is the Tenancy Belt (Pizzurno 2007; Teixeira 2006).

### Tenant houses built during the American Canal period

The Panama Canal Administration acquired the Panama Railroad Company after 1903, and with it the Panama Canal Administration acquired the land that the former Panama Railroad Company had bought in Panama City during the 1850s – 1870s. House 57-8 was built in early 20<sup>th</sup> century on former lands of the Panama

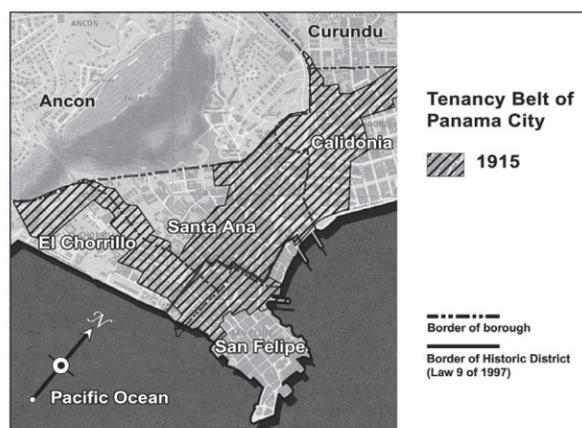


Fig.1 Tenancy Belt in 1915



Fig.2 House 57-8 on Block 57, San Felipe

Railroad Company (Fig.2).

This land included the former fosse (which was filled in and built upon), large sections of the city walls and the Esplanade; thus the Administration of the Panama Canal was able to control some areas within Panama City. In fact, for many years construction permits and regulations on sanitation for Panama City were issued by the Canal Zone Administration because jurisdiction was granted by the Isthmian Canal Convention clauses and due to the fact that the Canal Zone owned land in the outskirts of Panama City as well the lands next to the colonial precinct in the Esplanade. Mostly, timber frame buildings were built according to American standards of construction adopted by Decree No.14 of 1913, which covered details such as minimum floor space in a room, ventilation and number of windows per room, plus ventilation passageways between the houses, among other details. Mostly, tenant houses built in the American period were modular, apt to produce in series prefabricated houses, imported and assembled on site.

Due to a clause in the Treaty of 1903, Panama City and Colón City were to abide by the regulations of sanitation and construction emitted by the Sanitation Employee of the Canal Zone. Decree No.14 of 1913 is the text of such regulation integrally approved by Panama. Title "Regulations for Construction" under Article 1 has 32 articles referring to the minimum requirements for buildings. Given that all buildings from blueprint and construction permit to occupancy permit had to have approval of the Sanitation Employee of the Canal Zone, it appears that timber frame tenant houses were built adhering to the minimum requirements, making the regulations of construction a generic description of timber frame tenant housing. Regulations covered ground leveling to support a building, quality of construction materials, adequate use of concrete in first floors, basements, alleys, foundations and patios; it was required that all masonry walls were plastered to a smooth surface in concrete; minimum distance of tree feet between row houses. Timber walls should only have planks on one side unless a special permit for planks on both sides of walls and or partitions was obtained; no room should be smaller than 10 feet on all length, height and depth with at least one window and an exit door to a circulation area; at least one stair every 12 rooms in ever building of two or more stories; a minimum balcony depth of 2 feet 6 inches and 3 feet minimum width for all corridors; size for bathroom, toilet and kitchen areas, their number and communal accessibility; gutters, fences and in exceptional cases, latrines. Ventilation was strictly contemplated by use of fenestrations in carved wood (Fig.3), lattice or iron bars or forged iron above every door and window as well as on top of inner partitions. Fig.4 shows a typical shared kitchen at the right in the balcony of the inner patio of the house; the door ventilation and balcony railings follow the original members but these were replacements. The door, door frame ceiling and tongue and groove wall cladding are original. Please notice that the height if the balcony railing is about 1 meter tall. Fig. 5 shows the balcony over the street; these balcony railings are original and the inner balcony was similar. It's a simple railing of round iron bars with a wooden handrail and wooden bottom support raised over 10 cm above the floor. I surveyed this house in 1999 for the inventory project of the Old Quarter financed by UNDP.

In the second half of the 19<sup>th</sup> century it was already common to import industrial prefabricated construction elements such as forged ironworks, roof and floor tiles, wood planks, corrugated iron, glass and other ornamental materials. Panama City's exchange with New Orleans followed this context. Imports came from places such as New Orleans, Philadelphia, New York and even from England. Architecturally speaking, tenant house design was not particularly attractive. Common tenant housing was inherently commercial and temporary. Bathrooms were shared, located outside of the rooms as required by Decree No.14 of 1913; kitchens were also shared, generally located in balconies or patios.

Tenancy housing in wood was built; the empty plots of land in Panama City filled with timber buildings and mixed construction and the city densified quickly. The Canal Zone administration did not allow workers to remain in the Canal Zone once their contract was over; colored workers were the main target for tenancy business in Panama City. Tenant houses were overcrowded and overly expensive. *The "campsite cities" of wooden tenements also emerged because the great masses of dark-skinned immigrant workers never had adequate*



Fig.3 House 57-8 on Block 57, San Felipe; door ventilation



Fig.4 House 57-8 on Block 57, San Felipe; shared kitchen on balcony



Fig.5 House 57-8 on Block 57, San Felipe; flight of stairs

or sufficient housing in the Canal Zone where a rigid system of racial segregation prevailed (Spadafora, Tejeira 2001). Tenant housing became a flourishing business: investment in tenant housing allowed many people, both nationals and foreigners, to take a leap up into the higher social class by becoming the new rich. Streets in the Old Quarter and its suburbs (Extramuros), today Santa Ana and El Chorrillo boroughs, were narrow and constrained, ending at the Avenida de los Mártires (Martyrs Avenue) which was the limit of the Canal Zone to the west.

**Timber frame architecture in the Canal Zone**

There was a stark contrast with the urban planning deftly executed in the Canal Zone right next to Panama City; the Canal Zone settlements, towns and cities had organic layouts where roads followed the curves of hills and terrain, entwined with abundant vegetation, gardens and lawns. The heart of the Canal Zone, the site of the Administration building, was designed to impart a powerful image. The Administration building (Fig.6) sits atop a chiseled hill with broad steps leading to the top; El Prado, a mall of lawns lined with symmetrical buildings leads to the stairs while the Administration building itself dominates the landscape. The Canal Zone had various facilities for white workers, especially those of higher rank such as clubhouses, residential villages, hotels, gymnasiums, marinas and golf courses.

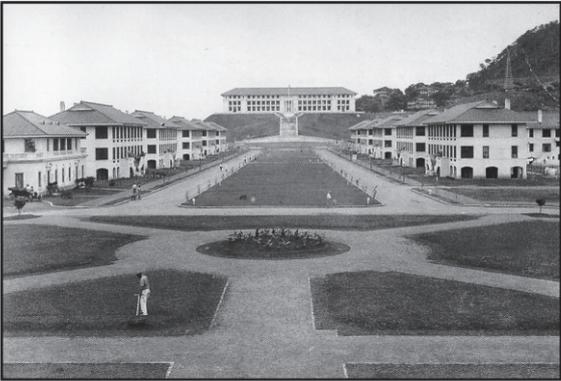


Fig.6 Administration Bldg. and El Prado

Initially in the Canal Zone, existing buildings from the French Canal period were adapted and reutilized. The American administration of the Canal Zone assimilated French architectural characteristics because they were proper for the tropical climate, but they also developed urban and building designs of their own.

One such area for white workers is Quarry Heights, a residential area where timber frame houses for officials were built during the first phase of the work on the Panama Canal. In the Canal Zone, the best housing areas were nearby Ancon Hill, which is next to Panama City. Quarry Heights as a residential area began in 1914 with new wooden houses as well as wooden houses moved from other sites such as Culebra and Emperador, dismantled and rebuilt in Quarry Heights, as early as 1906. These houses follow patterns characteristic of French timber construction in Panama from 1880: elevated from the ground on posts, they featured wide verandas and sheet-metal roofs. Regarding timber frame houses, the Architecture Office of the Canal Zone developed 24 different types of housing in a span of two years.

It is important to note that the timber frame houses for the Gold Roll were built to last, with attractive and functional designs. The timber itself endured the passing of time better than timber used in houses of the Tenancy Belt, and maintenance was done on the houses in the Canal Zone. The Canal Administrator’s House, the residence of the governors of the Canal Zone until 1979 and now the house of the Panama Canal Authority administrator is a timber frame house. It was built in Culebra in 1906; it was dismantled for transport and rebuilt in Balboa Heights in 1914, where it remains today as the house of the administrator of the Panama Canal Authority (Fig.7).



Fig.7 Canal’s Administrator House

As previously mentioned, there was a segregated system to pay the workers of the Panama Canal: the whites using the Gold Roll system and the colored workers using the Silver Roll system. The focus was on facilities for workers who were on the Gold Roll. Workers were not allowed to remain in the Canal Zone beyond the end of their contract, and colored workers lived in substandard conditions in marginal towns or in the Tenancy Belt of Panama City. This way, the “campsite cities” of timber frame tenant houses acquired a definite image of lower category housing for the colored people, associated with poverty and the lack of permanence, and they were relegated to the cultural backstage. Tenant houses in the Tenancy Belt of Panama City were not meant to be permanent while timber frame houses for whites in the Canal Zone have a different image and were better built, with better design and better materials.

**Tenant Rights Movements: 1925, 1935**

As it was previously mentioned, the Panama Canal’s construction work by the French, which began in 1882, fostered construction of tenant housing in both terminal cities of Panama and Colon. The majority of workers were foreigners from the West Indies and from Central America, as well as many others from various countries. Due to this boom in the construction of tenant houses, particularly timber houses, a new powerful and influential group arose: the owners of such houses. This group made their fortunes from the house-renting business thanks to exaggerated rent fees and very low construction costs. At the time, Panama didn’t have any laws for the protection of tenants against these practices.

In the early 1920s, the living conditions of the tenants, especially in the boroughs of Chorrillo, Marañón, San Miguel, Calidonia, el Granillo, Santa Ana

and Malambo in Panama City were reaching a breaking point. At the same time, in Colon City, the situation was grave. The government did not have laws to regulate apartment leases, the rent fees were heavy and the few measures dealing with apartment leasing in the Civil Code favored the owners of tenant houses.

In February 1925, the situation worsened for the tenants due to the promulgation of Law No.29, which inflated the tax on immovable properties, since the tenant-house owners simply raised the rents to comply with the new tax payments. This action unleashed a crisis in the tenant-house business, as the increase in the rent costs was from 25% to 50% higher than the previous levels. The tenants organized themselves under the “League of Tenants and Dependents” in the year 1924. This league persistently lobbied for lower rent fees and requested the authorities to put an end to evictions; however, there was no change in the situation. The leaders of this tenant rights movement declared a no-payment strike and public demonstrations with the aim of getting the State to intervene on behalf of the tenants. However, riots ensued, and on October 12th, 1925 then President Rodolfo Chiari invoked the Intervention clause in the Isthmian Canal Convention of 1903 (Article 136 in the Constitution of 1904) and requested the American army to repress the rebellion. Many were wounded and others died as the American Army came out of the Canal Zone and charged against the protesters. The army set up camps in Panama City for three days.

In 1932, the Tenant Crisis grew stronger, due to the repercussions of the Great Depression of 1929. Around the middle of 1932 another “no-payment” strike took place. The authorities repressed the protesters once more, and the government suspended Individual Rights and put the leaders of the Tenant Rights movement under arrest. However, this time the problem reached the National Assembly, where Deputy Demetrio A. Porras pushed for solutions to the plight of the tenants. After long debate sessions, the Lease Law of November 15th, 1932 was enacted, yet only temporarily — but it represented a triumph for the Tenant Rights Movement.

According to data from the census of 1940 when the tenancy business was at a peak, the ethnic structure of the population and its distribution by boroughs are shown in Table 1. La Exposición is part of Bella Vista borough (Lotería 1973).

Table 1 Demographics of Panama City in the 1940 (Rubio 1999)

Barrios	Whites	Blacks	Mestizo	Other Groups
Panama City	19.3%	26.3%	52.1%	2.2%
San Felipe	34.4%	4.0%	59.2%	2.4%
El Chorrillo	14.3%	23.1%	61.1%	1.5%
Santa Ana	22.5%	17.2%	56.5%	3.8%
Calidonia	6.9%	49.9%	42.1%	1.1%
Bella Vista	55.7%	6.9%	35.8%	1.6%

### The Brunner Report: 1941

The first urban plan study for Panama City was the Brunner Report or “Informe sobre el desarrollo urbano y el Plano Regulador de la Ciudad de Panamá” (Report on urban development and the Urban Plan of Panama City) of 1941 by Austrian urbanism technician Karl H. Brunner, for the purpose of developing urban planning policies, touched on several important points regarding the structure of Panama City’s road network and land use distribution on the urban layout including expansion areas, recreational zones and a national port with a duty free zone. The Tenancy Belt as an unsanitary area of timber frame houses is an integral part of the analysis. In summary, the report recommended disconnecting the economically depressed areas forming the Tenancy Belt from higher-class residential and commercial zones by reducing road connections between them.

Under the premise that popular housing is one of the most pressing social problems and as such cannot be ruled by principles of supply and demand, the basic suggestion was to buy and remove the old timber frame tenant houses, create new roads and build affordable housing for lower income public, perhaps using prefabricated timber-frame houses. The major such congested areas of Panama City were Calidonia and El Chorrillo. The creation of a governmental entity of urbanism and popular housing to control aspects regarding tenant housing, including demolition of the old tenant houses and creation of urbanization zones for workers were recommended in the Brunner Report.

### Conclusions of this paper:

Timber frame houses in the historic district of Panama City which includes part of the Tenancy Belt have a negative image associated with a lack of permanence, poverty, lower classes, and unsanitary conditions. During the American Canal period, prefabricated construction using imported materials became commonplace, where tenant houses were largely targeting transient workers and these materials being of inferior quality to that of timber used in housing in the Canal Zone, coupled with lack of regular maintenance, have deteriorated faster. The negative image is a result of various historical events as well as economic and social factors spanning from the middle of the 19<sup>th</sup> century into the first half of the 20<sup>th</sup> century. This negative image has relegated timber frame houses in the Old Quarter of Panama City to the backstage of Panama City’s cultural image, as the elite disregarded this legacy in favor of Colonial and French heritage as a source of national pride in the face of foreign pressures, especially the presence and urban design of the Canal Zone. The first urban plan for Panama City regarded the Tenancy Belt as an undesirable part of the urban landscape and recommended it demolished and replaced with new social housing tenant solutions, in timber frame. This reflects how the areas of part of the Tenancy Belt and its timber frame tenant houses were associated with unsanitary conditions, deficient public safety and poverty, yet timber as a construction material was still seen as feasible for low-income housing. As a result, timber frame construction in the Old Quarter of Panama City was largely removed from the

image of national heritage in order to present a image considered more favorable, more European and more cosmopolitan. Prejudice against timber frame buildings in the Old Quarter, especially its suburbs, endures to this day. Tenancy took on the characteristic image of lower classes, colored people and poverty, and along with this image timber frame housing acquired its stigma.

The next paper of this series is, "Research on Timber Frame Buildings in Panama City – Background of Conservation Laws in Panama."

## Endnotes

- 1) The Canal Zone was a strip of land ten miles wide (five miles wide on both sides of the Panama Canal) from the Caribbean Sea to the Pacific Ocean, and three maritime miles at each end, excluding Panama City and Colon City and the harbors adjacent to them, as established by the Isthmian Canal Convention. Panama City became a niche into the Canal Zone and was surrounded by it till 1915.
- 2) Convenio Monetario (Currency Convention) of 1904, Law No.84 and Decree No.74 of 1904 formalized equality of Panamanian and American currency based on gold pattern standard held by the United States of America and free course of exchange between the two currencies. Panama used silver and gold coins till 1930 when the USA abandoned gold standard (Chapman 1999). The payroll system of the Canal Zone paid white workers in gold coins and paid colored workers in silver coins; this payroll system was known as the Gold Roll and Silver Roll, respectively.
- 3) Among conservation laws, after Law No.61 protecting the fortresses in Portobelo on the Caribbean coast, Law No.12 of 1912 declared the ruins of Old Panama the first national monument (today the archeological site of Panama Viejo, featured in entry 790 of the world heritage list); Law No.69 of 1926 added dispositions towards the maintenance of the ruins of fortresses in Portobelo; Law 62 of 1934 created the Panamanian Academy of History; Law 68 of 1941 featured as national historic monuments the ruins of San Lorenzo in Portobelo, the ruins of Old Panama, a number of colonial churches in the Old Quarter of Panama City and other colonial churches in the central provinces.
- 4) Unlike other important cities such as Lima and Antigua Guatemala, streets in colonial Panama City were narrow and so were the plots of land. The lumbre in Panama had 5 varas (4.1 to 4.2 m) approximately, and houses typically had 3 lumbre of front width (12.3 to 12.4 m).

## References

- \*1) Araúz, Celestino A.; Gasteazoro, Carlos M.; Muñoz Pinzón, Armando. 1980. Historia de Panamá en sus Textos Tomo I: 1501 – 1903. Panamá. Editorial Universitaria.
- \*2) Araúz, Celestino A.; Gasteazoro, Carlos M.; Muñoz Pinzón, Armando. 1980. Historia de Panamá en sus Textos Tomo II: 1903 – 1968. Panamá. Editorial Universitaria.
- \*3) Chapman, Guillermo. 1996. The Historic and Legal Roots of the Dollar in Panama. In *Alternate Exchange Rates Regimes for the Region* (Conference), Inter-American Development Bank, Research Department. Internet. Language: Spanish. Available from [http://www.iadb.org/res/pub\\_desc.cfm?language=English&ID\\_SEC=3&PUB\\_ID=S-127](http://www.iadb.org/res/pub_desc.cfm?language=English&ID_SEC=3&PUB_ID=S-127) (accessed 2009-1-23).
- \*4) Gasteazoro R., Carlos M.; Sosa Juan B.; Arce Enrique J. 1999. *Introducción al Compendio de Historia de Panamá*. Colombia. Cargraphics S.A.
- \*5) Lotería Nacional de Beneficencia. 1973. Documento del problema inquilinario en Panamá y nueva ley de arriendos. In *Revista Cultural Lotería No.213 octubre – noviembre 1973*. Internet. Available from <http://bdigital.binal.ac.pa/loteria/index.php> (accessed 2009-8-30).
- \*6) Mack, Gerstle. 1944. *The Land Divided: A History of the Panama Canal and Other Isthmian Canal Projects*. 684. Plimpton Press, Norwood Massachusetts.
- \*7) Pizzurno, Patricia. Consideraciones Históricas, Patrimoniales y Turísticas sobre el Casco Antiguo de la Ciudad de Panamá. In: *Tareas, no. 127*. CELA, Centro de Estudios Latinoamericanos Justo Arosemena: Panamá. 2007. Internet. Available from <http://www.biblioteca.clasco.org.ar/aibros/panama/cela/tareas127.pdf> (accessed 2009-9-6).
- \*8) Rubio, Ángel. 1999. *La Ciudad de Panamá – Tomo XV Biblioteca de la Nacionalidad*. 310. Autoridad del Canal de Panamá. Edición Conmemorativa de la Transferencia del Canal a Panamá. 1999.
- \*9) Spadafora, Vanessa; Tejeira Davis, Eduardo. *Ciudad City*. 2001. El Casco Antiguo de la Ciudad de Panamá – Panama City's Old Quarter. 255. United Nations Development Programme (UNDP) and Office of the Old Quarter.
- \*10) Tejeira Davis, Eduardo. 2007. *Panamá – An Architectural and Landscape Guide*. 444. Sevilla: Consejería de Obras Públicas y Transportes; Panamá: Instituto Panameño de Turismo.
- \*11) Tejeira Davis, Eduardo. 2006. Arquitectura del Canal de Panamá: Colonialismo, Sincretismo y Adaptación al trópico. In *Instituto de Arquitectura Tropical*. Internet. Available from <http://www.arquitecturatropical.org/EDITORIAL/INDEXrespaldo.htm> (accessed 2009-6-11).
- \*12) Tejeira Davis, Eduardo. 2004. Restauración y Conservación en Panamá: Una Retrospectiva. In *Ensayos sobre Conservación y Restauración*, ed. Nunzia Guardiani and Eduardo Tejeira Davis: 95-115. Panamá: MG Impresiones.

Fig. 1: Map by the author based on historical maps of Panama City utilized in the inventory project of buildings in the historic district of Panama City and census information.

Fig. 2, 3, 4 and 5: Photos by the author as inspector for the inventory project of buildings in the historic district of Panama City, 1999

Fig. 6 and 7: Tejeira Davis, Eduardo. 2007. *Panamá – An Architectural and Landscape Guide*. 444. Sevilla: Consejería de Obras Públicas y Transportes; Panamá: Instituto Panameño de Turismo.

## 和文要約

パナマでは、1903年にコロンビアから分離独立し共和国時代に入った当初から、スペイン系の遺産がパナマ文化遺産の顔として認識されてきた。パナマ文化遺産のこのようなイメージは、かつて繁栄した植民地時代の建築遺産の蓄積をもとに、外圧に抗し、国家としての顔を築くために生み出されてきたものである。こうした状況

がパナマにおいて建築遺産に対する価値の理解の不均衡を生む間接的な要因となり、石造建築が木造建築よりも優位に位置づけられて後者が放置され、結果として世界遺産としてのパナマ市保存地区の保存状態、その完全性 (integrity) に影響を及ぼすこととなってきた。

(2009年9月10日原稿受理, 2010年1月8日採用決定)