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WASHINGTON UNIVERSITY IN ST. LOUIS

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MIDCENTURY PLANNING IN SAN JUAN, PUERTO RICO:

REXFORD GUY TUGWELL, HENRY KLUMB, AND DESIGN FOR “MODERNIZATION”

By

Linda C. Levin

A Master’s Thesis presented to the  
Graduate School of Design and Visual Arts  
Of Washington University in St. Louis  
In partial fulfillment of the  
Requirements for the degree of  
Master of Science in Architectural Studies  
(Concentration: the History and Culture of Architecture)

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IN

ARCHITECTURAL STUDIES

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Rexford Guy Tugwell, Henry Klumb, and Design for “Modernization”

AUTHOR: Linda C. Levin

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“This small tropical island, strategically located between the two hemispheres, is regarded as the Latin American guinea pig in the hands of the North American experimenter. What happens in Puerto Rico may answer the question of all Latin American countries surrounding the Caribbean as well as the British and Dutch colonies in the hemisphere. Their attitude is: What shall we look forward to if the gringos or ‘Yankis’ have their way?”

- “Puerto Rico,” *Architectural Forum* 82, March 1945, pp. 119-20

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### I. Contextualizing a Caribbean City: San Juan through the 1960s

Since Don Juan Ponce de Leon's first colonization of the island in 1508, Western political agendas have held formal and spatial implications for Puerto Rico. This fact held both during the early Spanish formal colonial rule and continued with the 20<sup>th</sup> century United States' quasi-colonial presence on the island. The urban development and design of San Juan, the island's capital city, functions as a lens to view the tension between Western precedent and local specificity during the mid-20<sup>th</sup> century. The literal and figurative construction of a precedent notion of 'order' in San Juan, is a current that runs through the colonial actions of the past, as well as characterizes the role of the U.S. in the city during the New Deal era. It is only through understanding the narrative and evolution of San Juan's urban form through this framework that one comes to understand the reason why San Juan functioned as the ideal host for U.S. New Deal programs of the 1930s.

The increased involvement of the U.S. in Puerto Rico during the New Deal era coincided with an independent Puerto Rican aspiration to modernize the island. With support from Governor Rexford Guy Tugwell,<sup>1</sup> figures like Luís Muñoz Marín<sup>2</sup> advocated for increased legislative autonomy for the Puerto Rican people. The shaping of a unique political, economic, and social identity necessitated a spatial and architectural language that embodied the "new Puerto Rico."<sup>3</sup> Thus, the history of San Juan's development through the 1970s enables one to understand how the city itself functioned as a mediator between U.S. aid and the Puerto Rican

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<sup>1</sup> The last U.S.-appointed Governor of Puerto Rico. He served as Governor from 1941-1946. Chapter II discusses his presence in this context more specifically.

<sup>2</sup> Leader of the *Populares* party in 1941, seeking to implement large-scale changes for the Puerto Rican people. Became the first Puerto Rican elected Governor of the island, and held office 1949-1965.

<sup>3</sup> Vivoni-Farage, Enrique. "Modern Puerto Rico and Henry Klumb." *Docomomo* 33 (2005): 30.

self-determined political, social, and architectural modernization program beginning in the 1940s. This chapter seeks to introduce how the notion of modernity in Puerto Rico differed in the eyes of the U.S. versus those native to the island. It also demonstrates how the process of urbanization in San Juan, at a large scale,<sup>4</sup> exposes the pressures of the island's past and its future aspirations for itself.

*Establishment and Development: Formal vs. Informal Colonial Urban Development*

The colonial core of San Juan, or Old San Juan, was established in 1521 as a means for the Spanish powers to maintain a political presence in the wake of the military stronghold on the island.<sup>5</sup> As a port city, the first major development in the colonial era was to build “defensible settlements” in the face of the competition between European powers. “Hence, the earliest cities [in the Caribbean], founded in the sixteenth and seventeenth centuries, usually took the shape of fortresses...The initial fortresses expanded as populations grew, and the original layout of these outposts can be traced directly to colonial influence.”<sup>6</sup> Spanish control over Puerto Rico “served primarily to bolster Spain’s desperate attempt to retain supremacy in the Caribbean.”<sup>7</sup> As such, the “main purpose of this settlement was to make money for the European metropolis, through expansion of the sphere of influence.”<sup>8</sup> Economic viability became heavily dependent on the port of San Juan as a trade route between Europe, North

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<sup>4</sup> In the chapters that follow, the scale of this exploration shrinks: first to the campus of the UPR in Río Piedras, and later to the scale of the actual buildings on campus.

<sup>5</sup> Safa, Helen Icken. *The Urban Poor of Puerto Rico: A Study in Development and Inequality*. New York: Holt, Rinehart, and Winston, 1974. Print. 6.

<sup>6</sup> Jaffe, Rivke, Ad De Bruijne, and Aart Schalkwijk. “The Caribbean City: An Introduction.” Introduction. *The Caribbean City*. By Rivke Jaffe. Kingston: I. Randle, 2008. Print. 4.

<sup>7</sup> Safa, *The Urban Poor of Puerto Rico*. 6.

<sup>8</sup> Jaffe, et. al., “The Caribbean City: An Introduction.” 4.



America and South America, and originally relied very little on native farmers of the island's own countryside. Thus, from the inception of Spanish rule, San Juan as economic generator superseded internal resources both human and agrarian.

The growth in population of colonial San Juan soon necessitated the establishment of a new settlement. In 1714, Río Piedras<sup>9</sup> was founded "in a location far enough inland to be secure from attack without fortifications."<sup>10</sup> "While urban locations were selected to guard against attack from outside, the internal structure of cities was based on inner defense strategies. Taking into account the possibility of revolts and riots of slaves and then later the subjugated working classes, colonial planners sought to enforce a distinct social and class separation within the city."<sup>11</sup> Race and class, therefore, were embedded into the spatial discourse and reality of the Caribbean colonial city.

Official law was employed as a means to institute Spanish urban policy. Specifically, the Spanish crown codified its social, political, and economic policies for its empire in the Law of the Indies (*Leyes de Indias*), modified and implemented throughout the 16<sup>th</sup> and 17<sup>th</sup> centuries. Locally, the Law of the Indies dictated the early urban form of San Juan and Río Piedras, "with streets emanating in gridiron pattern from a central plaza."<sup>12</sup> The plaza, as in mainland Spanish cities, functioned as the "nucleus of urban life,"<sup>13</sup> as civic, religious, and governmental buildings encircled the plaza. "The social and economic status of the population descended in the move

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<sup>9</sup> Today, the main campus of the University of Puerto Rico [UPR] is found in Río Piedras. Henry Klumb was commissioned to design the campus' master plan at its inception. The role that the UPR-Río Piedras played in the shaping of the modernization of Puerto Rico will be discussed more in depth in chapters that follow.

<sup>10</sup> Safa, *The Urban Poor of Puerto Rico*. 7.

<sup>11</sup> Jaffe, et. al., "The Caribbean City: An Introduction." 5.

<sup>12</sup> Safa, *The Urban Poor of Puerto Rico*. 7.

<sup>13</sup> Safa, *The Urban Poor of Puerto Rico*. 7.

outward from the central plaza toward the periphery. On the outskirts of the capital were the homes of the artisans and laborers, the precursors of the modern urban proletariat.”<sup>14</sup> Thus, one’s physical and spatial proximity to the plaza dictated social order. “Some of these measures were implemented from a public health perspective, but the general policy also served to deliberately demonstrate colonial authority through the imposition of ‘civilized’ norms through architecture and urban layout.”<sup>15</sup>

The informal section of the colonial city was comprised of the subjugated strata of society—slaves and the working class. In contrast with the formal and calculated growth of San Juan and Río Piedras, these sections of the city were “largely outside the domain of official urban planners...While the formal inner city was constructed in a very European manner, the informal parts of the city display the influence of African cultures. These shantytowns, communal yards, and building decorating styles offered opportunities for architectural expression outside the control of the white elites.”<sup>16</sup> Specifically, the *barrio* of Santurce— a peninsula east of Old San Juan and south of the Atlantic Ocean—functioned as the informal city linking the formal sites of San Juan and Río Piedras.

“Since San Juan was the only official port opened for trade with Spain, the city was the island’s economic center during the late 18<sup>th</sup> and early 19<sup>th</sup> centuries. Through this port, sugar, coffee, and other agricultural staples produced by the city’s hinterland were exported...the

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<sup>14</sup> Ibid. 7.

<sup>15</sup> Jaffe, et. al., “The Caribbean City: An Introduction.” 8.

<sup>16</sup> Ibid. 8.

military [also experienced] a construction boom.”<sup>17</sup> In the early 1800s, African slaves were brought through San Juan to be employed in housework in the city, but more often to work on plantations in the city’s outskirts.<sup>18</sup> This perpetuated the tension between expansions of the formal colonial city against the endurance of the growing informal city. In the 1850s the Spanish government began slating native slums—or the informal city—as points for development of new military construction.<sup>19</sup> “Pushing nonwhites outside the city protected [the colonial dwellers] from any sudden racially oriented uprising. Since the 1820s, Spanish policies had become more hostile and restrictive regarding the movement, rights, and activities of nonwhites in the city.”<sup>20</sup>

*Territorial Power Shift: San Juan in the U.S. Context*

When possession of Puerto Rico changed hands from the Spanish to the U.S., a shift in the definition of the city’s spatial organization also transpired. Whereas the Spanish, as a traditional colonial power, blatantly sought to utilize San Juan as an economic generator for the mainland with little regard for social reform of its people, various policies suggest that the Americans sought to act in the name of the “social welfare” of the Puerto Ricans.<sup>21</sup> To a certain

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<sup>17</sup> Matos-Rodríguez, Félix V. *Women and Urban Change in San Juan, Puerto Rico: 1820-1861*. Gainesville. University of Florida, 1999. Print. 37.

<sup>18</sup> *Ibid.*, 41.

<sup>19</sup> *Ibid.*, 42.

<sup>20</sup> *Ibid.*, 42.

<sup>21</sup> For example, the Jones Act of 1917 as well as President Franklin Delano Roosevelt’s “Good Neighbor Policy.” For further reading, see Tyrrell, Marygrace. “Colonizing the New Deal.” *The Caribbean City*. By Rivke Jaffe. Kingston: I. Randle, 2008. 69-93. Print. See also: Lewis, Gordon. *Puerto Rico: Freedom and Power in the Caribbean*. New York: Harper Torchbooks.1968.

extent, there existed a perpetual mirage of attaining the urban amenities that increasingly constituted the “American Dream.”

In 1898, the United States obtained control of Puerto Rico as a result of the Spanish-American War and initially declared it an “unincorporated territory under the jurisdiction of the War Department.”<sup>22</sup> Congress originally maintained that Puerto Ricans were citizens exclusively of Puerto Rico, however the Jones Act of 1917 ultimately granted Puerto Ricans U.S. citizenship. The battery of legislative measures conveys a distinction between the way in which the Spanish and the U.S. approached the function of Puerto Rico within their respective “empires.” As scholar Marygrace Tyrrell notes in his article, “Colonizing the New Deal,” “the New Deal in Puerto Rico provides some of the first concrete evidence that Puerto Ricans’ citizenship did indeed matter to those who chose to live on the island.”<sup>23</sup>

*Economy, Migration, and the Influences of U.S. Urban Form: 1898-1930*

Not unlike its Spanish predecessors, the United States constituted a major force in shaping the Puerto Rican economy. When the U.S. obtained control over the island in 1898, “large tracts of land in Puerto Rico were concentrated in the hands of a small number of owners, mainly U.S. entrepreneurs.”<sup>24</sup> Within the San Juan region, the U.S. presence on the island furthermore represented a shift away from the formal-informal urban dichotomy that had existed during Spanish colonialism. Santurce, for example, once the iconic informal city,

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<sup>22</sup> Tyrrell, Marygrace. “Colonizing the New Deal.” *The Caribbean City*. By Rivke Jaffe, Kingston: I.Randle, 2008. Print. 70.

<sup>23</sup> *Ibid.*, 70

<sup>24</sup> *Ibid.*, 76

began a process of gentrification in the late 1800s when the *barrio* functioned as the main railway route from Old San Juan to Río Piedras. “The demolition in 1897 of the centuries-old walls that had girdled San Juan allowed the space outside the walls to become dense with housing and made possible a linear city that followed the route of the tram line outward toward Río Piedras.”<sup>25</sup> This shift away from the previous urban organizational mechanism was further reflected in the changes in population during the early 20<sup>th</sup> century.

“In 1900 the population of San Juan, Santurce, and Río Piedras combined still numbered only 4% of the entire island,”<sup>26</sup> the rural areas more saturated with the Puerto Rican population than the city itself. With regard to agrarian output, “US tariffs favored sugar production above all else, leaving the cultivation of coffee without investors.”<sup>27</sup> Owner-absenteeism coincided with the years of the Great Depression, exacerbating the lack of work available in rural Puerto Rico, and yielding an “over-dependence on mono-crop agriculture [sugar].”<sup>28</sup> Large-scale urban migration followed suit. During the 1920s and 1930s San Juan’s “slums made up one-half to three-quarters of the percentage of residential growth during that decade...The recent industrialization in Puerto Rican cities and the surrounding urban infrastructure could not absorb the steady flow of migrants. “Boundary lines between the three settlements [Old San Juan, Santurce, and Río Piedras] became blurred and eventually Río Piedras was absorbed by the municipality of San Juan to create one large metropolitan complex.”<sup>29</sup> Puerto Rico needed a

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<sup>25</sup> Álvarez-Curbelo, Silvia. “The Center of Everything: Consumption, Architecture, and City.” 228.

<sup>26</sup> Safa, *The Urban Poor of Puerto Rico*. 7.

<sup>27</sup> Tyrrell, “Colonizing The New Deal”. 76.

<sup>28</sup> Ibid.

<sup>29</sup> Safa, *The Urban Poor of Puerto Rico*. 7.

New Deal in the city because the rural resettlement program<sup>30</sup> was too late and too weak to reverse the tide.”<sup>31</sup> Ultimately, the core of the industrial labor force of this time settled in shantytowns within the municipality’s borders.<sup>32</sup>

San Juan as a U.S. port-city grew in importance after World War I. “While in 1900, Puerto Rico stood at number 26 on the list of markets for American exports, by 1936 it had climbed to number 7.”<sup>33</sup> Furthermore, with “high prices paid for sugar on the world market” during this time, there was an increase in public spending and private investment on the island.<sup>34</sup> “In the twenties, architecture...embodied the...heated debated between tradition and modernity, Puerto Rican-ness and Americanization, democratization and colonial order.”<sup>35</sup> The arrival of the first skyscraper to San Juan in 1922 by engineer Miguel Rivera Ferrer solidified these tensions.<sup>36</sup>

San Juan’s aforementioned incorporation of neighboring *barrios* functions as a node in its transition from Spanish colonial city to U.S.-influenced metropolis. An understanding of the evolution of Santurce as well as the city’s original shantytowns illuminates this trend. In 1950, for example, “Santurce had almost 75% of the population of the metropolitan area. [This] led to

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<sup>30</sup> For further analysis of the rural resettlement program, there will be a discussion of this in the Tugwell section. He was a prominent advocate for this as a “solution” to the industrialization of American cities while an economist and part of FDR’s “Brain Trust.” In her introduction, Rivka Jaffe argues that “In contrast to most of the world, where cities develop from a rural background, historical circumstances have meant that in the Caribbean, urban areas developed prior to the rural hinterland.” Perhaps this is why it was so difficult for Tugwell to implement the Resettlement Arc in Puerto Rico; once industrialization occurred and significant migration to San Juan passed, he was fighting against a historic phenomenon greater than the efficacy of his economic theories.

<sup>31</sup> Tyrrell, “Colonizing The New Deal.”76.

<sup>32</sup> Safa, *The Urban Poor of Puerto Rico*. 1.

<sup>33</sup> Álvarez-Curbelo, “The Center of Everything: Consumption, Architecture, and City.” 236.

<sup>34</sup> *Ibid.*, 238.

<sup>35</sup> *Ibid.*

<sup>36</sup> *Ibid.*, 239.

the proliferation of slums along both sides of the channels and lagoons that bordered the area, threatening to take over the urban landscape. [This]...translated into a flight to the new *urbanizaciones* in the suburbs.”<sup>37</sup>

*Housing, Consumerism, and the “New Puerto Rico:” San Juan in the 1940s*

On September 19, 1941, Rexford Tugwell was sworn in as Governor of Puerto Rico.<sup>38</sup> By this time, Luis Muñoz Marín and his *Populares* party succeeded in securing a prominent position in the island’s legislature, however, “he was not certain about how to go about implementing change and, as a result, gradually allied himself with Tugwell.”<sup>39</sup> At this juncture in the cultural and spatial identity of Puerto Rico, “many social and political leaders believed that the issue of modernity had to be addressed by means of a process of destruction, or an attempt to eradicate the past, ‘breaking the memory’ and eliminating evils while forgetting the causes that brought the country to that level of deterioration.”<sup>40</sup> Architecturally, this manifested itself in an intentional “desire to eliminate obvious references to a [specific] style.”<sup>41</sup>

With his background in Economics and Planning, Tugwell turned to the establishment of formal agencies—like the Puerto Rican Housing Authority and the Water Resources Authority (PRWRA)—to craft the island in the early 1940s. The Housing Authority, specifically, was a source for jobs during the war, as well as managed “the construction of all government-funded

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<sup>37</sup> Ibid., 243.

<sup>38</sup> Chichester, Steven A. “‘Make America Over:’ Rexford Guy Tugwell and His Thoughts on Central Planning.” Thesis. Liberty University, 2011. Print. 87.

<sup>39</sup> Namorato, Michael V. *Rexford G. Tugwell: A Biography*. New York: Praeger, 1988. Print. 139-140.

<sup>40</sup> Otero, Rosa D. “Permeable Walls and Place Recognition in Henry Klumb’s Architecture of Social Concern.” Diss. University of Pennsylvania, 2005. Print. 92.

<sup>41</sup> Ibid., 92.

homes in Puerto Rico. With the success of the cement industry, the PRWRA, and the Housing Authority, Tugwell insisted that the legislature continue government intervention in order to produce more beneficial programs and industries."<sup>42</sup>

The baby boom generation functioned in many ways as the major protagonist of Puerto Rican urbanism from the 1940s onward.<sup>43</sup> Housing the urban working class, therefore, was influenced by American patterns of residential development.<sup>44</sup> Unlike Latin American squatter settlements, which had a tendency to ultimately "develop into substantial working class neighborhoods,"<sup>45</sup> San Juan shantytowns were mostly "eradicated by an ambitious urban renewal program that clears these areas for other residential, commercial, or public purposes."<sup>46</sup> Whereas Latin American squatter residents often were able to "improve their homes and pressure the government for public services....[enabling their settlements to be] absorbed into the overall process of urban growth,"<sup>47</sup> the destruction of their San Juan counterparts resembled the urban blight policies of developing U.S. cities.

U.S. political policies continued to perpetuate the evolution of San Juan's urban landscape. Operation Bootstrap in the early 1940s sought to cement the U.S.' commitment to Puerto Rico's health. This "ambitious development program...[was] designed to improve the standard of living of the Puerto Rican people through government-sponsored industrialization, land reform, and vast increases in government expenditures for education, public health,

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<sup>42</sup> Chichester, "Make America Over." 91.

<sup>43</sup> Sepúlveda Rivera, Aníbal. *Puerto Rico Urbano: Atlas Histórico De La Ciudad Puertorriqueña*. Vol. 4. San Juan: Carimar, 2004. 62.

<sup>44</sup> Tugwell's involvement with Greenbelt towns will be discussed in a future chapter.

<sup>45</sup> Safa, *The Urban Poor of Puerto Rico*." 18.

<sup>46</sup> Ibid.

<sup>47</sup> Ibid.



housing, and other social welfare programs.”<sup>48</sup> As in the U.S., the expansion of highways and upward mobility contributed to suburbanization, or *urbanizaciones*. Rivka Jaffe explains the ramifications of the adoption of U.S. suburbs on San Juan:

Many town centers, which enclosed the old colonial residential and administrative district, have now either become rundown areas or have been converted for commercial and tourist purposes in processes of gentrification. The new elites generally choose to live in recently constructed U.S.-style suburbs, commuting to the old center or newly created core zones only to conduct their commercial or political business. The recreational activities of the middle class are relocated to shopping plazas inspired by North American malls. Urban sprawl and traffic congestion are side effects of this ‘standard’ of suburbanization, the expansion of informal squatter settlements on the outskirts of the city, the so-called ‘suburbs of the poor.’ The corollary of these developments is a revamped version of spatial polarization.<sup>49</sup>

Thus the consumerism embedded in American culture permeated the development of San Juan, contributing to an urban condition in direct opposition to the earlier Spanish colonial priorities.

By the end of World War II, the success of public transit enabled a commercial corridor to emerge along Ponce de León Avenue, forming a new ‘heart’ or ‘downtown’ for San Juan. This reflected the aspirations toward social and economic mobility that were being encouraged in the emerging middle classes.<sup>50</sup> With an infusion of U.S. tourism and its capitalist emphasis on commercialism, the importance of the plaza as urban nucleus quickly dissipated. The center of Old San Juan shifted from the notion of the civic square with radiating program and social class to a commercial district along the main avenue of Santurce. “Thus the ecological model of the

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<sup>48</sup> Ibid., 1.

<sup>49</sup> Jaffe, et. al. “The Caribbean City: An Introduction.” 9.

<sup>50</sup> Álvarez Curbelo, “The Center of Everything: Consumption, Architecture, and City.” 228.

city has changed from the traditional Spanish colonial pattern, focusing on a plaza, to the American industrial pattern, focusing on a central business district.”<sup>51</sup>

The emergence of the urban middle class functioned as the impetus for “the spread of values and utopian expectations for everyday life, linked in many cases, to the American experience, [and] produced at many levels a sort of *tabula-rasa* mentality.”<sup>52</sup> As the city began to reinvent itself from this perspective, changes began to take shape at the smaller scale of the individual family as well. “The house in the *urbanizaciones* became an arena for modifications of lifestyle ranging from diet to furniture, appliances, and decoration.”<sup>53</sup> The shift to a goods and services economy furthermore affected these changes. “Patterns, behaviors, and utopias linked to a consumer society played a larger and larger role in the Puerto Rico ‘on the road to development.’”<sup>54</sup>

#### *Post-World War II: 1950-1970*

In her article “The Center of Everything: Consumption, Architecture, and City,” Silvia Álvarez Curbelo characterizes the 1950s in San Juan as driven by an “ideology of development and the industrialization-by-invitation.”<sup>55</sup> She argues that the island’s “culture of acquisition” was “felt in every city-planning and architectural decision.”<sup>56</sup> Residential and commercial

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<sup>51</sup> Safa, *The Urban Poor of Puerto Rico*. 8.

<sup>52</sup> Álvarez Curbelo, “The Center of Everything: Consumption, Architecture, and City.” 244.

<sup>53</sup> Ibid.

<sup>54</sup> Ibid.

<sup>55</sup> Ibid., 229.

<sup>56</sup> Ibid., 229.

projects alike embodied the desire for change, as the city shifted to accommodate growing populations.

This search for a uniquely Puerto Rican architecture wavered between replication and innovation. The beaches of Santurce, for example, became host to many architectural experiments. “The creation of architecture for the tropics became one of the principal driving forces for architects in Puerto Rico, who in the fifties began to develop an abstract vocabulary of forms that addressed such seminal issues as cross-ventilation and natural light, site topography, and continuity between interior and exterior.”<sup>57</sup> In 1949, the Caribe Hilton Hotel designed by Toro y Ferrer<sup>58</sup> was officially opened to the public. This moment “was emblematic of a period of profound transformations in the life of the capital and of the country...The Caribe Hilton crystalized an optimistic vision of the future for the Puerto Ricans. Tourism [became] a bridge to convert Puerto Rico as a destination of international caliber. The diversification of the economy [as promised by Luís Muñoz Marín and the PDP] started to become a reality.”<sup>59</sup> “It was with the project of the Caribe Hilton Hotel that voices of architectural change became a chorus ... The sale of the polished image of the Island as reflected in the gleaming new hotel forged a new mythology of the tropics which, paradoxically, brought about a change in the way the society saw itself.”<sup>60</sup>

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<sup>57</sup> Torres Santiago, Jerry. “The Invention of the Gates of Paradise: Images, Architecture, and Context in the Development of Hotels in San Juan.” Ed. Enrique Vivoni-Farage. San Juan: Archivo De Arquitectura Y Construcción De La Universidad De Puerto Rico (AACUPR), 2000. 152. Translated by Andrew Hurley.

<sup>58</sup> American-trained, Puerto-Rican contemporaries of Henry Klumb.

<sup>59</sup> Sepúlveda Rivera, *Puerto Rico Urbano: Atlas Histórico De La Ciudad Puertorriqueña*. 71. (Translated by the author of this Thesis.)

<sup>60</sup> Torres Santiago, “The Invention of the Gates of Paradise.” 150-151.

The importance of the growing urban middle class is evidenced by the change in population that occurred on the island between 1940 and 1960. In 1940, the total population of the island was 1,869,255, with only 24% considered urban population. In 1960, the total population of the island increased to 2,349,544, with the urban population comprising 42%.<sup>61</sup> “The frantic optimism behind the ideology of development brought unavoidable changes: the Island moved from the environment of the street to that of the avenue, from the small town to housing developments, from the corner grocery store to the shopping center.”<sup>62</sup> These large scale shifts were indeed exacerbated by the arrival of the car en masse to the island. “...By the fifties Puerto Rico was inscribed within the ‘errant’ car culture. A large percentage of public transportation disappeared with the elimination of the tram and the train. Sidewalks were erased from the collective imaginary; the city no longer walked.”<sup>63</sup> The focus on mass-transit superseded the importance of pedestrian-friendly environments. “The traditional urban centers began to lose vitality and deteriorated rapidly. These multifunctional and socially heterogeneous city-centers contrasted with the new single-function *urbanizaciones* with a new, segregated, spatial, social and economic morphology.”<sup>64</sup>

Social vision for the growing population, therefore, was necessarily intertwined with the architectural realities and achievements of the 1950s. All of this operated under the umbrella of

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<sup>61</sup> Sepúlveda Rivera, *Puerto Rico Urbano: Atlas Histórico De La Ciudad Puertorriqueña*. 62.

<sup>62</sup> Torres Santiago, “The Invention of the Gates of Paradise.” 155.

<sup>63</sup> Colón Zayas, Eliseo R. “When I’m Here, I Feel that the Night is Always Young: San Juan and the Delights of an Architecture for Leisure and Diversion.” *Ever New San Juan: Architecture and Modernization in the Twentieth Century*. Ed. Enrique Vivoni-Farage. San Juan: Archivo De Arquitectura Y Construcción De La Universidad De Puerto Rico (AACUPR), 2000. 190. Translated by Andrew Hurley.

<sup>64</sup> Sepúlveda Rivera, *Puerto Rico Urbano: Atlas Histórico De La Ciudad Puertorriqueña*. 63. (Translated by the author of this Thesis)

the island's evolving political landscape. On July 25, 1952, the Constitution of the Commonwealth of Puerto Rico<sup>65</sup> was officially recognized by the U.S.<sup>66</sup> "Throughout the fifties, [Luís Muñoz Marín] attempted to call attention to the need for a balance between material conquest and the values of sociability and spirituality, without which progress would be hollow."<sup>67</sup> Housing the masses was an extreme preoccupation of Muñoz Marín's government, and the typology implemented for residential design "was proscribed, typical of the era, by what was most efficient and functional."<sup>68</sup> The arrival of the FHA and other federal benefits targeting WWII veterans enabled the working class to secure the new single-family dwelling lifestyle. In order to guarantee loans, the agency required that the assured homes followed certain standards of construction and that they conformed to the building typology similar to existing single-family homes. In contrast to the U.S., the traditional and local materials of construction were abandoned, and concrete was uniformly adopted in the construction of the homes.<sup>69</sup> Thus, *urbanizaciones* were a synthesis of U.S. influence and the assertion of Puerto Rican specificity.

This balance is also illuminated in the realm of public housing. In 1953, the largest federally-sponsored public housing project in San Juan—the Luis Llorens Torres housing project—was completed. Its siting was motivated by Muñoz Marín and the PDP's ideas about Puerto Rican society. As Luz Marie Rodríguez explains:

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<sup>65</sup> In Spanish, *el Estado Libre Asociado* (ELA)

<sup>66</sup> *Ibid.*, 59.

<sup>67</sup> Álvarez Curbelo, "The Center of Everything." 246

<sup>68</sup> Sepúlveda Rivera, *Puerto Rico Urbano: Atlas Histórico De La Ciudad Puertorriqueña*. 62. (translated by me)

<sup>69</sup> *Ibid.*

“the practice of locating public-housing projects near private middle-class neighborhoods that were already developed or in the process of being developed, responded to the social ideal of the leaders of the time, who understood that the goal of this type of government intervention was not limited only to providing houses, but also to elevating the standard of living of the residents. Convinced that it is the community and not the individual that promotes social change, they tried to facilitate, through integration with middle-class families that the residents of the housing project ‘learn, become integrated, and improve.’”<sup>70</sup>

Residential planning, both public and private, was both a tangible product and a tool utilized by leaders in Puerto Rico for internal self-reform.

On a larger, urban scale, consumerism and the rise of the shopping mall—much like in the U.S.—perpetuated the lifestyle demands of the mid-century middle class. From 1950-1970, Álvarez Curbelo argues that “the rise of the shopping center as one of the unmistakable icons of urban progress affirmed the advance of consumerist identities and interests at the expense of other community and civic spaces and identities.”<sup>71</sup> “The shopping centers that were built in San Juan in the late fifties shared the criteria that had shaped a large part of the public architecture sponsored by the PDP [Popular Democratic Party]. But like the house in an *urbanización*, they represented something different. They were monuments to the ideology of a consumer society determined to optimize the standard of living and bring it up to the level of the shining example of the United States.”<sup>72</sup>

When he stepped down from office in 1964, after 16 years of transformation, Luís Muñoz Marín cautioned the Puerto Rican people of the dangers of sprawl, despite the success

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<sup>70</sup> Marie Rodríguez, Luz. “Suppressing the Slum! Architecture and Social Change in San Juan’s Public Housing.” *Ever New San Juan: Architecture and Modernization in the Twentieth Century*. Ed. Enrique Vivoni-Farage. San Juan: Archivo De Arquitectura Y Construcción De La Universidad De Puerto Rico (AACUPR), 200. 108. Translated by Nathan Budoff.

<sup>71</sup> Álvarez-Curbelo, “The Center of Everything.” 229.

<sup>72</sup> *Ibid.*, 247-48

that occurred during his time.<sup>73</sup> Roberto Sánchez Vilella<sup>74</sup> succeeded Muñoz Marín as Governor of Puerto Rico. “In this period, he didn’t just understand the magnitude of acceleration of change required, but rather articulated the protocols of service and good administration that guided the large and small projects that the agency undertook.”<sup>75</sup> His experience in civic service for the island greatly enhanced his ability to relate to the visions of his predecessor. In his position as Secretary of Public Works (1951-1959), Sánchez Vilella oversaw one of the most significant periods of public works construction in the island’s history. Beginning in 1955, urban renewal projects began to occur, especially in rehabilitating Old San Juan. “Two city renovation plans [1963 and 1966] in the 1960s created by the *Corporación de Renovación Urbana y Vivienda* (CRUV) are important in the history of planning in Puerto Rico. Both left profound impressions on the urban fabric of San Juan.”<sup>76</sup>

“The construction boom continued through the sixties; then, in the early seventies, the phenomenon of ‘urban sprawl’ suddenly became an issue for real concern.”<sup>77</sup> Education was seen as the best solution to mediate the polarization of urban and rural dwellers; education was to unify Muñoz Marín’s new Puerto Rico. While Álvarez Curbelo argues that the “shining

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<sup>73</sup> In his speech on February 11, 1964, he said: “*No queremos convertir a nuestro país en una enorme ciudad de piedra con algunas manchas verdes de parques y de sembrados, ni en una jungle de hormigón...*” Translated by the author of this Thesis: “We do not want to convert our country into an enormous city of stone with a few patches of green for parks, nor a jungle of concrete...” Sepúlveda Rivera, 77.

<sup>74</sup> Sánchez Vilella was the second Puerto-Rican elected Governor, and served after Luís Muñoz Marín from 1965-1969. Trained as a civil engineer at Ohio State University, he graduated in 1934. The same year as his graduation he entered public service working as an engineer with the Department of the Interior where he worked on one of the major infrastructure projects under the auspices of the Puerto Rico Reconstruction Administration (PRRA). In 1941, he was named the Subcommissioner of the Department of Interior and a little after, directed the recently created Authority of Transport. He served as mayor of San Juan in 1945, and simultaneously served as the Secretary of Public Works and Secretary of State from 1951-1959.

<sup>75</sup> Sepúlveda Rivera, *Puerto Rico Urbano: Atlas Histórico De La Ciudad Puertorriqueña*. 60. (Translated by the author of this Thesis)

<sup>76</sup> *Ibid.*, 73.

<sup>77</sup> Frances-Gallart, Mary. “Ahora Seremos Felices.” 59.

example of the U.S.”<sup>78</sup> was foremost in the leaders’ vision for reform, the stylistic emergence of Tropical Modernism, as well as the intentional restructuring of the University of Puerto Rico prove that the Puerto Rican leaders were seeking to craft something unique-though not intentionally independent of their U.S. counterparts. The University of Puerto Rico-Río Piedras [UPR] emerges as a symbol of modern Puerto Rico that was crafted to function as an antidote to the consumerism that was enveloping the entirety of the island.

### *Conclusion*

Through tracing the evolution of San Juan via the influences of both Spanish and American urban planning ideologies, one comes to understand that the control of space is more a matter of incorporating rather than contending both foreign and domestic settlement ideas.<sup>79</sup> “The process of cultural domination and reproduction of European and North American ideas, values and habits has been the norm rather than the exception during the centuries of colonialism.”<sup>80</sup> The course of this study, therefore, illustrates that even in the face of choosing to absorb Western culture or politics, there are examples not solely of conventional, aggressive resistance, but rather an assertive hybrid.<sup>81</sup> While this resistance occurred later in the realm of politics, the site of San Juan—city as entity—continued to mediate American standards. Jaffe adds that, “like other groups around the world, Caribbean people are not passive objects of globalization and cultural domination; they are subjects, self-conscious actors.”<sup>82</sup> The Puerto

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<sup>78</sup> Álvarez Curbelo, “The Center of Everything.” 229.

<sup>79</sup> Jaffe, et. al. “The Caribbean City: An Introduction.” 1.

<sup>80</sup> Ibid., 14.

<sup>81</sup> For example, in the Puerto Rican political sphere, auto-determination/ the party with Louis Munoz that Tugwell helped to gain power after his term as governor.

<sup>82</sup> Ibid.



Rican people, therefore, have a hand in the continual evolution of San Juan; as each “colonial” power reinvents the structure of the city, it perpetuates a unique sense of urban “newness.”<sup>83</sup>

The legacy of Puerto Rican leaders that followed Governor Tugwell speaks to his influence on the Island’s own narrative of modernization. As scholar Torres Santiago illuminates in his article, “The Invention of the Gates of Paradise:”

“The implementation of the populist PDP agenda, with its eagerness to modernize the country, underscored the idea of topicality as the defining element of Puerto Rico’s architectural identity, replacing the traditional iconography rooted in ornamentation and typologies. Relieved of the burden of its initial political controversy, modern architecture presented itself in Puerto Rico as a synonym for technological progress, and as the reflection of a modernity that abjured the need for revolutionary change.”<sup>84</sup>

The University as the mid-century Puerto Rican icon of reform transcends the individual politicians’ agendas during this era.

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<sup>83</sup> Ibid., 1.

<sup>84</sup> Torres Santiago, “The Invention of the Gates of Paradise.” 151.

## II. Rexford Guy Tugwell, Puerto Rico, and Midcentury American Planning

Inherent in its disposition as an island, Puerto Rico has been host to the exchange, arrival, and departure of diverse people and ideas. This seeming fluidity functioned both as an asset and a detriment to the political movement seeking to modernize the Island in the mid-1900s. At this juncture in American urban history, concerns for agriculture, sanitation, and education were of primary importance. While U.S. involvement in Puerto Rico in the early 1900s sought to pursue these objectives on the island, improvements did not succeed in raising the standard of living equal to that of the mainland. “By 1940, many problems were still unsolved. Living standards were still very low...These deplorable conditions were the natural consequence of an increasing population subsisting on an inadequate land area and employing agriculture as practically its almost sole means of support.”<sup>85</sup> This social and economic agrarian landscape, combined with the platform of economic democracy of the newly elected Popular Democratic Party in 1940, set the stage for Rexford G. Tugwell’s (an agrarian economist) appointment to the Governorship of Puerto Rico in 1941. Both the Popular Democratic Party and Tugwell “appealed to the people on the basis of their economic problems.”<sup>86</sup>

Tugwell’s passion for the relationship between agriculture, economics, and lifestyle greatly preceded his work in Puerto Rico. It is precisely because of his diverse background ranging from academic to City Commissioner to federal government advisor, that Tugwell took a special interest in the development of Puerto Rico. At its essence, Tugwell had a thorough preoccupation with the resolution of inefficiency, especially in the poverty of rural populations,

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<sup>85</sup> Lugo-Silva, Enrique. *The Tugwell Administration in Puerto Rico: 1941-1946*. Rio Piedras, PR: n.p., 1955. Print. 8.

<sup>86</sup> *Ibid.*

and this topic transcended the many positions and appointments he held that ultimately led him to the Governorship. Planning, he argued, was the solution. As a young man, Tugwell found himself at an epicenter of Great Depression poverty. This sparked his epistemological interest in the need for perpetual economic advancement in society, and he unceasingly and unwaveringly presented creative solutions often in the face of staunch opposition and criticism. In the realm of political thought, Tugwell's concerns aligned with the American shift in concern of the "Welfare State" that characterized President Franklin D. Roosevelt's administration in Puerto Rico. Through understanding and witnessing the crisis of the U.S. farmer in the early 1900s, Tugwell was able to experiment in Puerto Rico from a place of understanding and experience. He was able to apply his knowledge to the island's sugar-cane fields and mono-crop agrarian economy.

The importance of Tugwell's arrival to Puerto Rico cannot be understated in the discussion of the island's vision for modernization in the built realm. While many of his ideas were rejected as unfit for the continental U.S., Tugwell's governorship, overall, is perceived on the island as a triumph of collaboration with the leaders of the Popular Democratic Party, and a significant force in the shaping of their contemporary social and built infrastructure. Whereas Tugwell was too radical in the U.S. or for President Roosevelt, his strong opinions and steadfast convictions propelled the island en route to effective self-government long after the end of his term. Free from President Roosevelt's utopian rural visions, Puerto Rico effectively functioned as Tugwell's second chance to realize his own resolution to the crisis of the mid-century American farmer.

*The Development of an Economic Theory: Rexford G. Tugwell 1891-1931*

Born in Sinclairville, New York in 1891, Tugwell's relationship to agriculture permeated his youth, as his father was a fruit canner and farmer. After completing high school, he continued his education at the University of Pennsylvania's Wharton School of Business, completing his PhD in economics in 1922.<sup>87</sup> His academic career began at the University of Pennsylvania however, in 1931, he became a full professor at Columbia University at the age of 40. During his education and career in academia, his seeming "unorthodox views on economics" evolved.<sup>88</sup> In his book, *Administration of a Revolution*,<sup>89</sup> Charles T. Goodsell unpacks the essence of Tugwell's relationship with economics:

"Along with Adolph Berle and Gardiner Means of Columbia, Tugwell decided that the arrival of huge business corporation and advanced industrial technology meant that the days of laissez-faire capitalism in America were over. The economy must be planned, Tugwell argued; together government and industry must set prices and allocate capital investment in a rational, unified way. At the same time, he insisted, government must not become totalitarian, and—he made clear—all doctrinaire solutions must be rejected, including Marxian socialism."<sup>90</sup>

His strong belief in the necessity of rationality and empiricism tied Tugwell to the institutional school of economic theory and caused his confidence in planning as a means to achieve a more practical application of society's ills. "By adopting a pragmatic outlook and relying upon cultural sciences for support, institutional economists presented a body of doctrine which had the

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<sup>87</sup> Goodsell, Charles T. *Administration of a Revolution; Executive Reform in Puerto Rico under Governor Tugwell, 1941-1946*. Cambridge: Harvard UP, 1965. 16-20. Print.

<sup>88</sup> Goodsell, 17.

<sup>89</sup> Ibid.

<sup>90</sup> Ibid.

welfare of the public as its goal, to be accomplished through social reform and an experimental approach.”<sup>91</sup>

In addition to the fundamental principles shared by institutional economists, the idea of “cultural equilibrium” functions as a central tenant to Tugwell’s ideas and actions of economic and built development. Institutions, such as agriculture in America, were experiencing pushes and pulls in the given and changing economic climate of industrialization. This caused institutions to reach new equilibriums in the context of society. As such,

“Tugwell believed, as did many of the ‘institutionalists,’ that man had to shape institutions rather than men so that both undesirable or antisocial impulses and economic activities would be corrected. This attitude stemmed from the belief that basic human drives were too strong to be channeled by police methods. Thus, the desire to change institutions rather than men was accompanied by a belief in democracy and planning.”<sup>92</sup>

It was Tugwell’s fundamental belief in the power to shape institutions, and consequently the role institutions play in the shaping of society that enables one to understand the investment he had in forming institutional structures in Puerto Rico.<sup>93</sup>

#### *The New Deal and Planning during the Roosevelt Administration: 1932-1937*

Tugwell’s political career began in 1932, when he became a member of President Roosevelt’s “Brain Trust.” As a New Deal advisor, Tugwell saw two fundamental problems that he suggested the Administration address. The first issue, he argued, was “the need for an extensive land reclamation program,”<sup>94</sup> due to poor treatment of land and overproduction

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<sup>91</sup> Myhra, David. "Rexford Guy Tugwell: Initiator of America's Greenbelt New Towns, 1935 to 1936." *American Institute of Planners, Journal* 40.3 (1974): p.177.

<sup>92</sup> *Ibid.*, 177

<sup>93</sup> *Ibid.*

<sup>94</sup> *Ibid.*, 178.

during the early part of the century. Additionally, he prioritized in his recommendations the settling of the displaced farm family, as a result of industrialization's integration into agriculture production. This especially rendered large quantities of farm labor irrelevant in the new economy. Thus, people were moving to cities in search for work with skills they did not possess, a condition which the broken economy struggled to naturally absorb.<sup>95</sup>

President Franklin D. Roosevelt, in contrast to Tugwell's opinions, believed that better farm management could contribute to the improvement of rural lifestyles. "He believed [in slum clearance]...and that the people released to rural homesteads, a 'back to the land' movement. Tugwell, on the contrary, felt that this would not correct the problems inherent in the farm situation."<sup>96</sup> His background in agrarian economics led him to focus on a more urban solution than the President's proposal. "Poor land makes for poor people, Tugwell believed, so it was necessary either to find these poor people better land and teach them to work it profitably, or relocate those who could not continue to farm close to employment opportunities in the cities."<sup>97</sup> Where President Roosevelt believed the solution to rural poverty could occur in the rural context, Tugwell "believed very strongly that rural poverty could only be corrected in the city. These correctives would be industrial employment and the growing opportunities in the service industries."<sup>98</sup> In the quest to eliminate rural poverty, Tugwell believed new urban resettlement projects must be created. These "new towns," as he conceived it, "would house the displaced farm family while the father, or head of the

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<sup>95</sup> Ibid.

<sup>96</sup> Ibid.

<sup>97</sup> Ibid.

<sup>98</sup> Ibid., 179.

household, could obtain employment in nearby industry.”<sup>99</sup> This fundamental disagreement with the President ultimately became the source of Tugwell’s ideas for the future Greenbelt towns.

In the position of Assistant Secretary, and, later, Under Secretary of Agriculture in 1934, Tugwell began to realize his conceptual framework within the Federal Department of Agriculture. His first agenda was to pursue “land reform and soil conservation programs in an effort to improve economic conditions on American farms.”<sup>100</sup> Furthermore, it was in his capacity as Assistant Secretary of Agriculture that Tugwell first visited Puerto Rico in 1934. “Astonished by the ‘precariousness’ of life on the island, he made concrete proposals to his superiors in Washington for both emergency assistance and long-term reconstruction. He remained in touch with the Puerto Rican situation throughout his period in the Department of Agriculture, and occasionally was called upon for advice on insular matters by the president.”<sup>101</sup>

The heart of Tugwell’s tenure at the Department of Agriculture, however, was the conceptualization and realization of the Resettlement Administration (RA).<sup>102</sup> “In 1935, he organized the Resettlement Administration, which attacked the problem of rural poverty with such measures as retirement of poorland, establishment of rural and suburban communities, and provision of low-cost credit to farmers.”<sup>103</sup> From his perspective, the goal of the concept “was a simultaneous attack on the wastage of people and the inefficient use of resources.”<sup>104</sup>

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<sup>99</sup> Ibid.

<sup>100</sup> Ibid., 178.

<sup>101</sup> Goodsell, 19.

<sup>102</sup> See image 01.

<sup>103</sup> Goodsell, 17.

<sup>104</sup> Quoted in Myhra, 177, [original source: Tugwell, Rexford Guy, “Diary Notes,” manuscript, FDR Library, Hyde Park, New York. (1959).160. “The Resettlement Idea,” *Agricultural History*, October.]

The program sought to solve this inefficiency by “assist[ing] the families in the worst situations to find new and more economic farms or to locate elsewhere in other occupations with a prospect of work and income.”<sup>105</sup> The goals of the agency were divided into four major components: Rural Rehabilitation, Rural Resettlement, Land Utilization, and Suburban Resettlement. The concern for the American people was at the center of Tugwell’s work with the RA. He explained:

“In the strictest sense, the Resettlement Administration is not in the housing field at all. It is building houses, true, but its considerations go beyond the fact, important as that fact is, that millions of Americans need new homes if a minimum standard of decency is to be attained. What the Resettlement Administration is trying to do is to put houses and land and people together in such a way that props under our economic and social structure will be permanently strengthened.”<sup>106</sup>

Thus, Tugwell viewed the importance of the actual buildings only as an outward expression of the systemic act of planning. The emphasis on the social and economic network, as physically realized by built development, is the catalyst for Tugwell’s innovation of the Greenbelt towns. Many colleagues, however, criticized the RA for possessing socialist leanings, and their lack of support ultimately led to the dissolution of the RA in 1937.

### *Planning the Greenbelt Towns*

The Greenbelt Towns—a direct product of Tugwell’s Resettlement Administration—sought to affirm Tugwell’s conviction that the city, rather than the country, was “the corrective for the amelioration of rural poverty problems.”<sup>107</sup> “Arguing that urban growth was inevitable,

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<sup>105</sup> Quoted in Myhra, 177. [original source: Tugwell, Rexford Guy, “Diary Notes,” manuscript, FDR Library, Hyde Park, New York. (1959).160. “The Resettlement Idea,” *Agricultural History*, October.]

<sup>106</sup> Quoted in Myhra, 177 [original source: Tugwell, Rexford Gy, “Diary Notes,” manuscript, FDR Library, Hyde Park, New York. (1936).28. “Down to Earth,” *Current History*, July.]

<sup>107</sup> Myhra, 177.



Tugwell's Greenbelt concept was to demonstrate how housing could be surrounded with a more pleasing environment in order to accommodate the expanding rural to urban migration. "In less than two years, Tugwell's Resettlement Administration planned and constructed three new communities<sup>108</sup> and litigated a fourth."<sup>109</sup> While conceptually controversial, the speed with which this occurred was praised by the Administration.

The Garden City movement initially developed in the United Kingdom at the turn of the 20<sup>th</sup> century shed light onto urban design strategies that mediated the rural and the urban. "Influenced by the ideas of early planners such as Ebenezer Howard<sup>110</sup> and Clarence Stein, [Tugwell] dreamed of not just one but a whole chain of garden cities...that could be built on cheap land outside the crowded cities...Building these garden cities would provide work for some of the ten million men who had lost jobs during the Depression, as well as affordable housing in healthful surroundings for low-income families."<sup>111</sup> The first town was located just 12 miles outside of D.C., in what later became Greenbelt, Maryland. "Three teams of able architects and draftsmen<sup>112</sup> were quickly hired, one for each of the green towns in the program—a task eased by the fact that architecture had been the hardest hit of the professions

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<sup>108</sup> "Greendale, Wisconsin, near Milwaukee, and Greenhills, Ohio, near Cincinnati, are the other two towns. A fourth town, to be located in New Jersey, was never built." [source: City of Greenbelt, MD.]

<sup>109</sup> Myhra, 176.

<sup>110</sup> For a greater distinction between the English Garden City Movement and Tugwell's Greenbelt Towns, see Lewis Mumford's introduction to the republication of Howard's book in 1946: "Tugwell saw uncontrolled urban growth and a lack of planning as part of the problem. This situation could easily be corrected, he believed, through demonstration projects in suburban settings, physically illustrating how urban growth could be developed if a conscientious effort was made to surround housing with a more pleasing environment. Howard, on the other hand, believed urban form could be made more livable only if city dwellers were removed entirely and located in rural, self-sufficient garden cities. Tugwell didn't agree with so drastic a measure. He believed in the city and was confident of its continued growth and development." [Myhra, 179.]

<sup>111</sup> Sucher, Dorothy. "Greenbelt, Rexford Tugwell and the Hope Diamond." *Greenbelt News Review* [Greenbelt, MD.] 21 Mar. 2002, Volume 65 ed., No. 17 sec.: 1+. Print.

<sup>112</sup> Please see image 2.

during the Depression, as new construction had all but ceased.”<sup>113</sup> Criteria for design and residence in a “Tugwelltown” was quite specific, as “designers labored to create housing for families earning \$1200 a year.”<sup>114</sup> Furthermore, “the first families were chosen not only to meet income criteria, but also to demonstrate willingness to participate in community organizations.”<sup>115</sup>

Finally, “Greenbelt was an experiment in both the physical and social planning that preceded its construction. Homes were grouped in superblocs, with a system of interior walkways permitting residents to go from home to town center without crossing a major street. Pedestrian and vehicular traffic were carefully separated.”<sup>116</sup> “The homes built for Greenbelt included apartment buildings, row houses, and a few free-standing prefabricated homes.”<sup>117</sup> Chapter Three will more specifically discuss how the design of these towns functioned as an important precedent for Henry Klumb’s housing in Puerto Rico.<sup>118</sup>

*Beyond the New Deal: New York City Planning, 1938-1940*

The dissolution of the Greenbelt Towns marked a shift in Tugwell’s career from working at the federal level, to operating at the scale of the city. “Tugwell remained in the Roosevelt Administration for only four years, but when he left he discovered that his government work had made him so unpopular that Columbia University did not want him back.”<sup>119</sup> In 1938, he became the first permanent chairman of the Planning Commission of New York City under

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<sup>113</sup> Sucher, 16.

<sup>114</sup> Ibid.

<sup>115</sup> City of Greenbelt, Maryland.

<sup>116</sup> Ibid.

<sup>117</sup> [Greenbeltmuseum.org/history](http://Greenbeltmuseum.org/history).

<sup>118</sup> Henry Klumb was on a design team for Greenbelt, MD.

<sup>119</sup> Sucher, 16.

Mayor Fiorello LaGuardia. The Office of the Commissioner was “empowered to guide both private and public development...[and also] planned...not only the spatial dimension as in the cases of zoning and street layout but the temporal and financial dimensions as well.”<sup>120</sup> The agency was expected to plan on a long-term basis that was to continue to accompany the future goals for the evolving masterplans of New York City. The foresight and vision expected of him in this capacity catered to Tugwell’s deep commitment to planning as an organizational entity within government.

In his tenure as Director, Tugwell’s main agenda included planning lower-density public housing in the city, as well as completing a 50-year masterplan for the city. Robert Moses’ strong opposition to Tugwell’s ideas, however, ultimately prevented many of his projects from coming to fruition. Through Tugwell’s experience working at the New York City Commission, he concluded and conceptualized that “the planning function of society should be entrusted to an institution that is separate from the legislative, executive, and judicial branches of government.”<sup>121</sup> He believed in the necessity for an independent body for several reasons. Primarily, planning involves a multiplicity of interdisciplinary functions including, but not limited to, “legislating, executing, and adjudicating.” Also, “ideal planning must be above local, short-term, and specialized influences, and association with any of the traditional branches would make this impossible.”<sup>122</sup>

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<sup>120</sup> Goodsell, 142.

<sup>121</sup> Goodsell, 142.

<sup>122</sup> Goodsell, 142.

*“The Last Appointed Colonial Governor:” 1942-1946*

In 1940, after two years as Director of the New York City Planning Commission, Tugwell was recruited by Secretary of the Interior, Harold Ickes, to study policy in Puerto Rico. He was asked to head a study for the federal government to investigate methods of enforcing the five-hundred-acre law in Puerto Rico. The enforcement of this law was well-suited for Tugwell given his prior interests in Resettlement and the effective and equitable distribution and maintenance of land which permeated his work. The law itself was central to the Puerto Rican agrarian economy. It prohibited the ownership of more than 500 acres by any single entity, a law that had long been ignored by large corporations who sought to maximize output and profit. “Although Tugwell was outraged to hear of such blatant disregard for governing laws, he understood that indignation would not help Puerto Rico reach a solution that would promote society’s best interests.”<sup>123</sup> His response was rooted in a belief “...that men could assure progress by designing social mechanisms to meet specific needs, emphasizing experimentation as the technique of planning.”<sup>124</sup>

Tugwell traveled to Puerto Rico in February, March, and May of 1941 to preside over hearings and carry out the assignment from Ickes. It was through these travels that he became acquainted with Luis Muñoz Marín, president of the Puerto Rican Senate and leader of the majority *Populares* party. Both leaders shared a commitment to eradicating the mass-poverty exhibited throughout the Island. Through his work and alignment with Muñoz, Tugwell began to receive job offers on the island in 1941. Muñoz offered him Chancellorship of the University

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<sup>123</sup> Tugwell, *The Stricken Land*, 8. [quoted in Chichester, 81]

<sup>124</sup> Myhra, 177.

of Puerto Rico, and in the topic and commitment of the modernization of Puerto Rico, Tugwell saw a tremendous opportunity for himself. He found the offer with the University favorable, but began to consider that his experiences may be better suited for the Governorship. In his book *The Stricken Land*, Tugwell reflects:

“I had had considerable experience in government, and, although I had hoped not to have further jobs requiring administrative responsibilities, the modernizing of the Puerto Rico executive department was so badly needed as to challenge anyone with a feeling for good government; the governorship could be a wartime task, undertaken as a temporary duty, and, after it was done, I might go to the University as Chancellor.”<sup>125</sup>

On August 1, 1941, Tugwell was approved as Chancellor of the University of Puerto Rico [UPR].<sup>126</sup> He was to be Chancellor first, and then segue into the Governorship pending Congress’ approval. “Mr. Tugwell wrote that if he was confirmed as Governor he would seek a leave of absence from the university but that he definitely expected to serve as chancellor even if his confirmation as Governor failed.”<sup>127</sup> At the onset of his position at the UPR, “he called for the formation of ‘a master plan,’ which should be developed within the next couple years in order to educate students in accordance to the needs of society.”<sup>128</sup> The specific plans and designs, as realized by architect Henry Klumb, will be discussed at length in the chapter that follows (Chapter Three).

Prior to his official appointment as Governor,<sup>129</sup> Tugwell immediately began work on the horrendous living conditions he saw on the island. He advocated for the use of New Deal

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<sup>125</sup> Tugwell, *The Stricken Land*, 108.

<sup>126</sup> Chichester, 86.

<sup>127</sup> “TUGWELL BARS SALARY: Won’t Take Pay from Puerto Rico University if Made Governor.” *The New York Times*, August 12, 1941

<sup>128</sup> *Ibid.*

<sup>129</sup> It is interesting to begin with that there was an appointed governorship for a U.S. Territory the size of Puerto Rico.

agencies like the Agricultural Adjustment Administration (AAA), “in order to improve the current financial hardships on the island.”<sup>130</sup> Finally, On September 19, 1941, Tugwell was sworn in as Governor of Puerto Rico at La Fortaleza, the office and residence of the Governor in the heart of Old San Juan.<sup>131</sup> “As governor, Tugwell was able to lead Puerto Rico toward economic recovery by executing various planning policies on the island. He used planning to create new manufacturing industries in order to reduce the island’s dependence on the sugar production, reduced unemployment, and reorganized many public services that were previously inefficient or inadequate.”<sup>132</sup> As such, “he insisted that all coordination, planning, and execution of policies should originate from the Governor, who reported directly to the Department of the Interior.”<sup>133</sup> In many ways he was attacking the same problems he tried to resolve in his earlier positions, but this time he had the power and support from the Puerto Rican Congress to wield significant and actual change.

From the onset, a deep concern for the living conditions of the poor functioned as a central tenant to the modernization of Puerto Rico according to Muñoz’s party’s vision of a modern Puerto Rico. The establishment of the Puerto Rican Housing Authority [PRHA], specifically, contained similarities to Tugwell’s original Resettlement Administration of the late 1930s. The PRHA “helped extinguish poor living conditions on the island by removing families from marshy slums and placing them in newly constructed homes.”<sup>134</sup> “The Authority also

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<sup>130</sup> Chichester, 82.

<sup>131</sup> Ibid., 87.

<sup>132</sup> Ibid.

<sup>133</sup> Baer, Werner, “Puerto Rico: An Evaluation of a Successful Development Program,” *The Quarterly Journal of Economics* 73 (1959): 651 [quoted in Chichester, 83.]

<sup>134</sup> Tugwell, *The Puerto Rican Public Papers of R.G. Tugwell*, 64.

employed hundreds of unemployed Puerto Ricans as well as managed the construction of all government-funded homes in Puerto Rico.”<sup>135</sup> Like the Greenbelt Towns, “an important aspect in the program of the Puerto Rico Housing Authority has been its social service ventures in cooperation with welfare agencies.”<sup>136</sup> This included clubs which participated in the schools, offered vocational training for women, and the publication of a monthly journal, *El Caserío*, for the residents.<sup>137</sup>

During his tenure as Governor, Tugwell established close ties with the leader of the Puerto Rican *Populares* party, Luís Muñoz Marín. “As a politician, Muñoz was naturally most concerned with the political success of the Puerto Rican revolution, just as Tugwell was understandably anxious for its administrative success...it was a breakthrough that permitted the second half of the Tugwell administration to be noteworthy for success in civil service reform...”<sup>138</sup> Operating within the Puerto Rican government, Tugwell established an independent Planning Board on August 10, 1942, that, in many ways, was a manifestation of his gleanings from the failure of the New York City Commissioner's Office. In Puerto Rico, “the [Planning] Board consisted of three full-time members, all appointed by the governor and approved by the legislature, and five subsequent divisions...[in] Economics and Statistics, Finance, Urban Planning, Engineering and Permits.”<sup>139</sup> It was his belief that board members “should not be ‘technical planners, but simply men of good judgment, of intellectual quality,

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<sup>135</sup> Chicester, 91.

<sup>136</sup> Lugo-Silva, 87.

<sup>137</sup> Ibid.

<sup>138</sup> Goodsell, 103.

<sup>139</sup> Chichester, 92-93.

and devotion to the public interest.”<sup>140</sup> “The agency was granted certain budgetary and legislative immunities to preserve Tugwell’s desire for a separate political entity. Muñoz gave his support of the idea and also added certain amendments to the autonomous quality that Tugwell deemed necessary...Mainly, Muñoz objected to the Board having planning power over urban and rural zones alike.”<sup>141</sup>

In the first few years of its existence, the Planning Board mostly reviewed public-works projects, as well as mapped conditions of road systems, drafted civil boundary maps, and collected land use information in the island’s cities. “A ‘war emergency program’ had been created by the legislature in November 1942 to create employment through new public works, and the board was temporarily designated to screen project proposals.”<sup>142</sup> Tugwell brought outside consultants to the Island in efforts to reconnect Puerto Rico with experts on the continent and beyond. Alfred Bettman, a lawyer, planner, and former chairman of the Cincinnati Planning Commission, helped to draft a planning bill for the Island in 1941.<sup>143</sup> After the Planning Board’s establishment, Tugwell also conceived a “Committee on Design,” which brought together designers such as Henry Klumb, Richard Neutra, and Isadore Rosenfield to begin planning civic projects that would be needed after the conclusion of the war. “It was felt that postwar construction of vitally needed hospitals, schools, and health centers could be

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<sup>140</sup> Goodsell, 149.

<sup>141</sup> Ibid., 145-149

<sup>142</sup> Ibid., 157

<sup>143</sup> The bill was promptly rejected by Tugwell for a perceived lack of legislative power over the island. Goodsell, 145.



speeded up if a backlog of plans, specifications, and sites was available the moment peace came.”<sup>144</sup>

*Planning and the University of Puerto Rico (UPR)*

On a finer grain, Tugwell’s changes in the organizational structure of the Puerto Rican government was complemented by the establishment of the Public Administration Program at UPR in August, 1945. As early as October, 1941, “Tugwell had proposed a ‘School of Public Administration’ and had given specific recommendations on appropriations, physical plans, and even course offerings.”<sup>145</sup> The implementation of the College of Public Administration was supported by UPR Chancellor Jaime Benítez,<sup>146</sup> and involved faculty from the U.S. including Professor Augustus R. Hatton of Northwestern University. “James R. Watson, regional director of the National Labor Relationship Board in Puerto Rico, [was appointed] the school’s first director.”<sup>147</sup>

Upon the establishment of the College of Public Administration, Professor Hatton believed that the program should directly target government employees. He argued that with this student body, the courses should be more pragmatic—“including such subjects as personnel classification, government accounting, and departmental management”—and less focused on a liberal arts education.<sup>148</sup> Indeed, “most courses in the program were scheduled for

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<sup>144</sup> Goodsell, 158.

<sup>145</sup> *Ibid.*, 110.

<sup>146</sup> Jaime Benítez, a political scientist by training, spent four decades of his career at the UPR, culminating in his role as Chancellor and President of the University. Educated in the U.S., Benítez was able to work with academic colleagues outside the island in order to help advance the UPR’s curriculum, grow student enrollment, and establish UPR as a reputable and significant institution both on and outside the island. Politically, Benítez aligned with Luís Muñoz Marín and the PDP. He was involved in the construction of the Puerto Rican Constitution.

<sup>147</sup> *Ibid.*

<sup>148</sup> *Ibid.*, 112

the late afternoon or evening to accommodate persons having full-time jobs.”<sup>149</sup> Thus, from its inception, formal educational training in planning was targeted at students who had already begun their careers, presumably in Tugwell’s Administration. “A few years later, a shift was made to a somewhat more academic curriculum after the institution became the ‘School of Public Administration’ within the University’s regular social-sciences faculty and offered the Master of Public Administration degree.”<sup>150</sup> This shift also represents the responsibility the university was undertaking in educating the younger generations to execute the goals of modernization outlined for Puerto Rico as a whole.

#### *Modernization Parallels: Mid-Century Planning in Cuba*

While the modernization of Puerto Rico was a process specific to the island, planning in Cuba as a means for an independent society manifested itself in similar ways. In his book, “Constitutional Modernism, Architecture and Civil Society in Cuba, 1933-1959,” Professor Timothy Hyde explores the process by which “architecture is incorporated within the developing course of civil society.”<sup>151</sup> While his study is particular to Cuba, and while Cuba experienced a different sequence of political shifts than Puerto Rico, parallels are nonetheless relevant in understanding the place for each island’s identity in the wake of European colonial and U.S. political, cultural, and spatial influences.

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<sup>149</sup> Goodsell, 112.

<sup>150</sup> “Today, the school is probably the oldest continuously operating institution of its kind in the Latin American area.”Ibid.

<sup>151</sup> Hyde, 2.

Like in Puerto Rico, “Cuba maintained many aspects of the cultural and social formations developed in the Spanish colonial period that had ended only a few decades earlier.”<sup>152</sup> When political control of the island shifted hands to the U.S., “the result was a mix of colonial anachronisms, self-conscious traditions, and imported innovations that were through various mediums synthesized into modern tendencies.”<sup>153</sup> Havana, not unlike San Juan, functioned as the center for modernism and currents of nationalism after 1933.<sup>154</sup> Hyde argues that the drafting of the Cuban Constitution in 1940 functioned as the node which cemented Cuba’s “transition from colony to nation by the establishment of a stable and durable civil society.”<sup>155</sup> In this spirit, Cuban architects equally as international architects—Josep Lluís Sert chiefly among them—were invited to participate in the shaping of the new Cuban society. “The didactic programs of public education and the didactic intentions of modern architecture shared an obligation to define the uniqueness of Cuban experience within a common narrative of human endeavor, an obligation that derived its corresponding contours from the constitutional mandate to reconcile individual action and collective purpose.”<sup>156</sup>

As Cuba began to shift towards independence, the city became a subject of examination, “not only the physical city, but also the abstract city of regulations and institutions, equally susceptible to transformation and from many perspectives in similarly urgent need of reform.”<sup>157</sup> Resistance to the turbulent political atmosphere pre-independence

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<sup>152</sup> *Ibid.*

<sup>153</sup> *Ibid.*

<sup>154</sup> *Ibid.*, 3.

<sup>155</sup> *Ibid.*, 5.

<sup>156</sup> *Ibid.*, 6.

<sup>157</sup> *Ibid.*, 8.

functioned as a breeding ground for multi-disciplinary concepts for advancing Cuba. In the early twenties, for example, several professional associations formed as future political factions.

“Prominent intellectuals and professionals formed the Junta Cubana de Renovación Nacional (Cuban Committee for National Renewal), issuing a manifesto for national reform. The membership represented a socially and politically influential constituency, including the anthropologist Fernando Ortiz, the architect Pedro Martínez Inclán, the philosopher Jorge Mañach, historian Emilio Roig de Leuchsenring, and Professor Ramón Grau San Martín, who would serve as president of Cuba.”<sup>158</sup> The importance of diversity in disciplinary backgrounds of the country’s leaders percolated even before independence was achieved.

As a means to implement planning through the Cuban government, the Junta Nacional de Planificación (JNP) was established in 1955.<sup>159</sup> Specifically, Eduardo Montouliou argued for an independent city planning body in Havana. As in Tugwell’s multi-faceted interpretation of Planning, the leaders of the JNP also understood this term to have layered implications for Cuban society. “[Eduardo] Montouliou regarded planning ‘as a thought process’ that oscillated between the three temporal moments of future, present, and past...[he argued that] ‘To plan is much more than to draw plans [*planos*], it is to make plans of action [*planes*] and every plan implies a program, that is to say, how the plan will be put into action.’”<sup>160</sup> The JNP was intentionally modeled on Tugwell’s vision for an autonomous Puerto Rico Planning Board.<sup>161</sup>

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<sup>158</sup> Ibid., 9.

<sup>159</sup> Ibid., 91.

<sup>160</sup> Found in Hyde, 92. [Original source: Text of a manuscript prepared by Montouliou in 1957 for the JNP. Eduardo Montouliou, “La planificación, el Plan Nacional y los Planes Regionales. Las funciones y estructura de una junta nacional de planificación. Lo que deben y pueden ser en Cuba” (folder SA321, JLS).]

<sup>161</sup> Ultimately, after Tugwell left, in 1949 Muñoz assumed the Governorship, and ended the political autonomy of the Planning Board that Tugwell designed.

“The JNP itself was conceived in such terms...as an ‘autonomous organism’ capable of functioning in and through diverse environments of law, architecture, engineering, and economics.” Thus, the Cuban leadership at this time valued Tugwell’s intentions of preserving Planning as an organization independent of the fluctuations and self-interested politics of the government.

### *Conclusion*

With rapid political change, the climate specifically in Puerto Rico was ripe for Tugwell’s economic and social theories to thrive. Planning as an interpretation of experimentation enabled him to accept the chancellorship at the UPR originally, and endowed him with a prominent position within the icon of experimentation and symbolic formation of the New Puerto Rico. The restructuring events that occurred in Cuba following Tugwell’s leadership underscore the pertinence of his ideas to the Caribbean societies seeking to formulate a unique national and urban identity. In other words, the U.S. controlled islands were opportune sites for structural experimentation, specifically for individuals like Tugwell who saw an inherent link between design and social reform. Thus, the organizational and planning strategies developed during this time provided a framework whereby Henry Klumb was about to realize specific sensibilities about living and dwelling in Puerto Rico that were integral to the success of Tugwell and Muñoz’s ideas and the modernization of the Puerto Rican lifestyle.

Chapter II Images

Image 01: source :“Resettlement Administration poster by Bernarda Bryson Shahn.

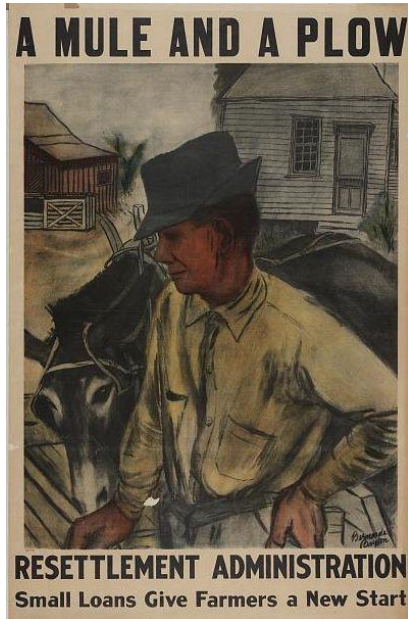


Image 02: “Architects, engineers, and draftsmen at work on plans for the new town of Greenbelt in February, 1936.” source, Greenbelt, MD. News Review



Image 03: "Resettlement Administrator Rexford Tugwell (in white suit) and John Lansill, head of the Suburban Division, Impact a home under construction." Source: Greenbelt, MD. News Review.



Image 04: Governor Rexford Guy Tugwell, 1941. Source: Lugo- Silva p. 11



### III. Tugwell + Klumb: Built Work and the University of Puerto Rico

Governor Tugwell's concern with the Puerto Rican shift from an agrarian economy—and, therefore, the great waves of urban migration that ensued—also had implications for the new standard of living across the island. Housing, as part of the massive urban renewal plans that were occurring in the wake of the New Deal, began to shape San Juan and its suburbs alongside political achievements for self-government. Thus, the notion of dwelling pervades the Puerto Rican mid-century Modernization campaign, underscoring the pertinence not only of shelter and habitat, but also of a unique climate and lifestyle. Architecture constructed under the Tugwell Administration,<sup>162</sup> therefore, sought to create an inherently Puerto Rican identity which simultaneously operated within and beyond the framework of European Modernist architecture. German-American architect Henry Klumb proved essential to this agenda.

In his article "*Sobre Henry Klumb*," current Dean of the School of Architecture at the UPR, Francisco Javier Rodríguez Suárez explains: "I never had the privilege of meeting Henry Klumb, but I spent a great part of my life in his buildings. During my adolescence, I heard his name almost in a mythological context, and when I finally encountered photos of him, I developed a type of iconographic admiration usually attributed to figures like James Dean."<sup>163</sup> Klumb's legacy in Puerto Rico can be attributed to many key factors. As a student of Wright, Kahn, and Neutra, his fluency with European and American modernist principles provided him a seeming canonical design vocabulary as a point of departure. Not unlike Tugwell's feeling of

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<sup>162</sup> Equally as under his successor Luis Muñoz Marín.

<sup>163</sup> Rodríguez Suárez, Francisco Javier. "Sobre Henry Klumb." *La Torre* XIV.51-52 (2009): 157-77. [translated from Spanish by the author of this Thesis]: Spanish original: "*Nunca tuve el privilegio de conocer a Henry Klumb, pero he pasado gran parte de mi vida entre sus edificios. Durante mi adolescencia escuché su nombre casi de forma mitológica, y cuando finalmente me topé con fotos de él, desarrollé un tipo de admiración iconográfica que solamente se atribuye a personajes como James Dean.*"



freedom, Klumb was presented with opportunities for design independence on the island that otherwise did not exist in previous work contexts. In this sense, "Puerto Rico must have seemed to Klumb the chance to complete what he had started while working with Wilhelm Faehler during the heyday of social housing experiments in Germany in the 1920s."<sup>164</sup> Furthermore, "Tugwell's administration proved crucial for Klumb...His work in Greenbelt and his connections with the Resettlement Administration, including having known Tugwell since 1937, led to an invitation to work in Puerto Rico. More importantly, Tugwell's progressive political agenda suited Klumb."<sup>165</sup>

While his initial impetus for moving to Puerto Rico was to aid in the planning of civic projects, Klumb's true passion rested with the exploration of housing design in both public and private contexts. From single-family residences, to academic dormitories, and rural community planning, the island provided Klumb the site to experiment and evolve. The search for prototype is a strong current that runs through his residential work, an element that was no doubt influenced by his time spent working on Tugwell's Greenbelt towns, as well as the need for economy of material and labor both in that context as well as in Puerto Rico. The specific modernization of Puerto Rico is literally manifested in his designs through the use of new materials and structures on the island, which promoted this vision. This is why his work at UPR is so important, because Klumb designed within the vacuum of the literal site for the new Puerto Rican identity, the University.

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<sup>164</sup> Isenstadt, Sandy. "Between Worlds: A Place for Modernism." *Klumb: An Architecture of Social Concern*. Ed. Enrique Vivoni Farage. Rio Piedras: University of Puerto Rico, 2006. 235.

<sup>165</sup> Ibid.

The ideological marriage between Tugwell and Klumb, however subtle on the surface, cannot be ignored. Both men were visionaries for their time, their voices frequently silenced by more powerful bureaucrats and mentors in their earlier careers. While Puerto Rico welcomed the concepts and practices of Tugwell and Klumb as its society evolved, it would be wrong to view each man's work as a selfish pursuit: "Indeed, Klumb would later encapsulate his entire career in terms consonant with the Popular Democratic Party platform as 'an architecture of social concern.'"<sup>166</sup> While both men gave greatly to the formation of the island's new identity, they also received significant intangible gifts in return; mainly, the knowledge that their theories, when realized, indeed had the capacity to greatly benefit society in ways they had only dreamed. This chapter seeks to explore how the ideas prevalent in Tugwell's Greenbelt Towns—as an amalgam of Klumb's work with Wright and Kahn—resurface and reconfigure in his designs for faculty housing at the UPR. This idea, furthermore, is situated within the context of Klumb's evolution as a designer concerned with architecture's direct influence on society, as well as other built work on UPR's campus.

*Henry Klumb: A "Nomadic" Design Education (1905-1942)*

Heinrich Klumb was born in Cologne, Germany in 1905. In 1918, he decided that he wanted to become an architect, and entered the academy in the midst of Germany's broken national spirit after the world war. His education, however, was shaped by several significant pedagogical movements which helped to remove young architecture students from the economic and social hardships of the Weimar years. As a student at the *Staatliche Bauschule* in

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<sup>166</sup> Ibid.

Cologne," Klumb's education was influenced by the *Deutsche Werkbund* School... [While] the Werkbund group was heterogeneous, all its members were dedicated to popularizing an education in the crafts tradition and to establishing a center of instruction."<sup>167</sup> He gained a deep appreciation for nature from the *Wandervögel* movement, which urged students to "take long walks in nature and to become one with it, far from the problems of the city."<sup>168</sup> Thus, Klumb's "education grounded him in the European Modern Movement with its staunch commitment to social improvement, rational construction technologies, and simple abstract forms."<sup>169</sup>

In 1926, Klumb graduated the *Staatliche Bauschule* with honors and continued working for Cologne-based architect Wilhelm Faehler, where he had worked since September of 1925. "Early in his career, [Klumb] was searching for something 'more human' in scale other than the new Bauhaus currents prevailing in Europe coupled with the highly influential work of the Swiss architect, Le Corbusier."<sup>170</sup> During Klumb's two years with Faehler, "he worked on various housing and public building projects at this firm. His responsibilities included general architectural duties and architectural and structural design supervision."<sup>171</sup> Thus, from the start of his professional life, Klumb was deeply involved in the design and social challenge of housing.

In 1927, at the age of 22, Klumb emigrated to the U.S. with aspirations to work for Frank Lloyd Wright. "By the time he left, his friends were calling him 'Klumbumbus' because of his desire to discover new worlds and the 'Lloyd of Norther Germany' because of his admiration for

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<sup>167</sup> Vivoni Farage, Enrique. "Henry Klumb and Poetic Exuberance in Architecture." *Klumb: An Architecture of Social Concern*. Ed. Enrique Vivoni Farage. Rio Piedras: University of Puerto Rico, 2006. 5.

<sup>168</sup> *Ibid.*, 7.

<sup>169</sup> Wright, Gwendolyn. "Introduction." *Klumb: An Architecture of Social Concern*. Ed. Enrique Vivoni Farage. Rio Piedras: University of Puerto Rico, 2006. ix-xiv

<sup>170</sup> Otero, 25.

<sup>171</sup> *Ibid.*

the work of Frank Lloyd Wright.”<sup>172</sup> Klumb first lived in St. Louis, where he worked as a draftsman in a musical instrument factory, and promptly changed his name to “Henry.” It is from St. Louis that Klumb, in 1928, began contacting Wright for employment opportunities. In 1929, he “enrolled in two courses, Elementary Statistics and Estimates and Contracting, at Washington University in St. Louis.”<sup>173</sup> Finally, later that year, Klumb moved to Taliesin in Spring Green, Wisconsin, to join a diverse group of colleagues.<sup>174</sup> While working for Wright, Klumb initially performed “general architectural work, model making, and shop work; building construction; gardening; and farming.”<sup>175</sup> His relationship with Wright quickly strengthened, enabling Klumb to work intimately with his mentor on construction and more detailed projects. During the first year, almost immediately, Wright sent Klumb to Arizona for 5 months, where they worked on-site to design “Wright’s temporary winter headquarters near Chandler, Arizona, the Camp Ocotillo.”<sup>176</sup> This was his first encounter with design in a desert climate, an experience that proved invaluable for Klumb’s later attentiveness to climate in the Caribbean. In 1931, Klumb led the first European exhibition of Wright’s work in Holland, Germany, and Belgium, which lasted nearly one year. This opportunity endowed him with the chance to lecture, manage, and arrange exhibits at several prominent museums in the region.

By the time Klumb left Taliesin in 1933, he had worked for Wright in Illinois, Arizona, Wisconsin and abroad. He and his colleague Stephen Arneson left Wisconsin for Brainerd,

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<sup>172</sup> Vivoni, 7.

<sup>173</sup> Otero, 27.

<sup>174</sup> “Yen Liang from Beijing, Yuan His Kno from Shanghai, William and Geraldine de Knabel from Paris, Karl E. Jensen from Copenhagen, Rudolph Mock from Basel, Takehito Okami from Tokyo, and Manuel Sandoval from Nicaragua.” Neutra had previously been a part of this cohort when he met Wright in 1924. From *Ibid.*, 29.

<sup>175</sup> *Ibid.*

<sup>176</sup> *Ibid.*, 30.

Minnesota, where they tried their hand at small civic projects. Lack of success in Brainerd led the two to move to Chicago for a short 3-months, where they tried, again, to establish a practice. “In this city, [Klumb] worked on a study of prefabricated low-cost housing. In addition, he worked for a design studio, the Iannelli Studio in Park Ridge, on the design and supervision of exposition buildings and exhibits.”<sup>177</sup> Klumb’s experience abroad with Wright’s work, as well as his brief time in Chicago, provided significant experience in exhibit design, which later enabled him to obtain a job with the Department of the Interior.<sup>178</sup>

### *Frank Lloyd Wright and the Influence of Usonia*

During Klumb’s tenure at Taliesin, Frank Lloyd Wright began working on the foundations for Broadacre City. He published the beginnings of his urban design concepts in the book *The Disappearing City* in 1932. These ideas came out of a long standing interest in designing “affordable homes on a massive scale for the American middle class.”<sup>179</sup> Indeed, Wright had already dabbled in the mass distribution of his designs with the publication, in 1901, of “several inexpensive suburban homes in several issues of the Ladies Home Journal.”<sup>180</sup> The inception of the Usonian Homes, therefore, emerged from a deep understanding in the shifts of American culture to the valued ownership of cars, homes, and other goods.

The urgency to provide affordable housing led Wright to conceive of a “single story [home] built on a monolithic concrete slab and joined to a carport and not a garage.”<sup>181</sup> “Wright

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<sup>177</sup> Otero, 52.

<sup>178</sup> Ibid.

<sup>179</sup> PBS, Usonia.

<sup>180</sup> Ibid.

<sup>181</sup> Ibid.

experimented widely with the proper materials for his Usonian houses. The Rosenbaum House [1939] is built of brick and cypress and in later houses he experimented with various combinations of masonry and wood construction.”<sup>182</sup> These programmatic elements, as well as the process of Wright’s experimentation in the design of different types of Usonian homes, reappear in Klumb’s work beyond his time with Wright.

The Herbert and Katherine Jacobs House (1936-1937), located near Madison, Wisconsin, is an example that clearly illuminates the principles comprising Wright’s Usonian ideas.<sup>183</sup> L-shaped in plan, the home is structured in modularity, based on a two-foot by four-foot grid. Its programmatic elements operate around the masonry core of the house which contains the laundry space and the boilers which support the radiant heating system. The fireplace in the living room functions as a second focal point in the home.<sup>184</sup> “Wright’s vision [elevating the Broadacre City], staged like a pronouncement, ran against the grain of the New Deal programs. It must be considered therefore as both a criticism of regionalism as imagined by Roosevelt’s administration and an argument for individualism as the basis for all organization.”<sup>185</sup>

### *Beyond Apprenticeship: Henry Klumb and Public-Sector Design*

As Wright was involved with the design of his Usonian homes, Klumb began to pursue his own ideas about affordable housing. In 1934, despite the poor economic climate of the Depression, Klumb moved to Washington, D.C. to seek work with the government. The

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<sup>182</sup> Ibid.

<sup>183</sup> Please see image 01.

<sup>184</sup> Usonia1.

<sup>185</sup> Pimlott, Mark. [originally found in Vincent Scully. *Frank Lloyd Wright*. (New York, George Braziller, 1996 / 1960), 20.]

following year, using his experience in exhibitions as well as his desire to engage with residential design, Klumb presented a solo exhibition of single-family home design ideas at the Art League, entitled “Modern Houses.” “This event represented an opportunity for Klumb to publicly display and expose his capabilities and potential as a designer of buildings in the modern language prevalent at that time.”<sup>186</sup> It is the personal determination shown in the organization and rigor of this event that shaped Klumb’s future success. The houses proposed, while targeted at a middle-class budget, function as a point of departure for his later explorations in housing. Conceptually, the notion of prefabrication is first communicated strongly in this collection of work: “Klumb maintained that prefabrication was an essential tool in the making of low-cost housing; however, fully prefabricating the house implied the absence of an individual social need.”<sup>187</sup>

Furthermore, the publically acknowledged success of “Modern Houses” functions as a node in Klumb’s career that marks the transition of his personal practice from that of a student to that of an autonomous architect. His attentiveness to the idea of a “social need” had both material and broad systemic implications for design. On a tangible level, this concept lent itself to the exploration of threshold and transparency in the residential designs. Permeability of light and interaction delineate the public and private spaces of the dwelling, as do the use of seemingly Wright-inspired screens. The notion of the social as integral to architecture, however, also ingrained itself in the construction process. Klumb valued human labor in the

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<sup>186</sup> Otero, 54.

<sup>187</sup> Ibid., 53.

economic process of construction; this insistence on a holistic approach is later seen in his ideas during the rebuilding of the Puerto Rican economy.

While testing his hand at residential design on his own, Klumb also acted as a consultant “for the office of Philip M. Jullien and Company between March 1935 and February 1936, [where] he worked on the architectural and structural design of prefabricated steel and concrete houses.”<sup>188</sup> While immersed in his work, Klumb also met Philadelphia-based architect Louis I. Kahn.<sup>189</sup> The two men, joined by Alfred Kastner,<sup>190</sup> and Louis Magaziner established The Cooperative Planners, a practice dedicated to “integrate modern housing with established landmarks in Philadelphia neighborhoods.”<sup>191</sup> Klumb’s involvement in this design partnership proved influential on his later community projects; working with Kahn was his first experience working as a larger-scale planner. The partners also grappled with the issues of prefabrication and low-cost housing design. Two formative projects resulting from this collaboration will be discussed later in this chapter. “These studies, although never realized, indicate Klumb’s concern to create self-sufficient neighborhoods with their own shopping and recreational centers, instead of suburban ‘developments.’”<sup>192</sup>

Like his partners in The Cooperative Planners, Klumb, too, was hired by Rexford Tugwell’s Resettlement Administration. Between 1935-1942, Klumb helped to “design the New

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<sup>188</sup> Ibid., 57.

<sup>189</sup> Please see Image 02.

<sup>190</sup> German-born and educated architect and city planner working in Philadelphia and D.C. Originally collaborated with architect Oskar Stonorov when he immigrated to the U.S. Kastner was also employed by Tugwell’s Resettlement Agency during the New Deal era. He originally hired Louis Kahn to work with him on Jersey Homesteads (Highstown, New Jersey), a town planned by the Resettlement Administration. “He went on to serve as Director of the Bureau of Advanced Housing at Princeton University. There, he worked to develop ideas to help rationalize techniques used in housing construction.”

[<http://americanheritagecenter.wordpress.com/2012/08/13/midcentury-housing-one-story/>]

<sup>191</sup> Wright, Gwendolyn, x.

<sup>192</sup> Vivoni, 11.



Deal town of Greenbelt, with its spare forms, varied housing types, and prominent public gathering spaces.”<sup>193</sup> This challenge proved fruitful to Klumb on many levels; first, it provided a formal introduction to Tugwell and his planning ideologies. Additionally, the intersection of Kahn’s influence, the American modifications to Ebenezer Howard’s Garden City Movement, and his passion for low-cost housing design prepared Klumb for his future directorship of the Puerto Rican Committee on Design of Public Works [CDPW] only a few years later. Thus, his time in D.C., from his solo exhibition, to working with Kahn and Tugwell within the span of 5 years, is arguably the most formative in shaping Klumb’s commitment to a modern architecture conscious of context.

In 1939, Klumb’s work with the Department of the Interior in the Bureau of Indian Affairs propelled him to relocate to the west coast.<sup>194</sup> He designed an exhibit entitled “Indian Arts and Crafts” which premiered in San Francisco at the Golden Gate Exposition in the same year. In 1941, his exhibit opened at the Museum of Modern Art in New York. In 1942, however, Klumb shifted his career away from exhibit design, and accepted a position in Los Angeles as a planning architect first with the Greater Los Angeles Citizens Committee, Inc., and later with the Greater Los Angeles Planning Commission.<sup>195</sup> It was in Los Angeles, that Klumb “helped [to] generate that city’s master plan while collaborating with Richard Neutra on modern school designs and minimalist housing prototypes.”<sup>196</sup> In 1943, “the Commission asked him to prepare an exhibit on the importance of city planning and urban development. In this project, Klumb

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<sup>193</sup> Wright, Gwendolyn, x.

<sup>194</sup> Vivoni, 342.

<sup>195</sup> Ibid., 19.

<sup>196</sup> Wright, Gwendolyn, xi.

reiterated his fundamental principles, which might be summarized as stating that the human being should exert control over the built environment.”<sup>197</sup>

Klumb’s work as a planner in Los Angeles was the closing to the pre-Puerto Rico chapter of his career. The evolution of his work as a designer from 1926-1943 was marked by a diversity of project scopes, clients, and collaborators. His designs ranged “from highly-minded technological rationalism to simple enclosures.”<sup>198</sup> Able to learn distinct principles and practices from his mentors, Wright and Kahn, among others, he found a way to distinguish himself from them: “Thus, comfortable in the differing environments of planning, technological rationalization, and a kind of regionalism, Klumb was prepared for a practice that might call upon the various dualities he had internalized as part of his professional constitution.”<sup>199</sup>

*Greenbelt, Maryland: (1935-1942)*

The significance of the Greenbelt Towns in the formation and advancement of both Tugwell’s ideas and Klumb’s personal design trajectory is easily overlooked. The project literally functions as the site of interaction between the two men, exposing each of their relationships toward planning—specifically in the U.S.—and ultimately leading to their collaboration in Puerto Rico in the 1940s. The elements embodied in the concept and realization of the Greenbelt Towns form a type of canon from which Klumb draws for his designs in Puerto Rico.

Tugwell’s initial architectural vision for the Greenbelt Towns greatly differed from their final resolution. Specifically “for Beltsville, Maryland, Tugwell envisioned a group of skyscrapers

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<sup>197</sup> Vivoni, 19.

<sup>198</sup> Isenstadt, 234.

<sup>199</sup> Ibid.

fifty or sixty stories high, cruciform in plan and very widely spaced, containing housing, administrative, and commercial space.”<sup>200</sup> This was no doubt influenced by Le Corbusier’s *Ville Contemporaine*,<sup>201</sup> a schematic city design for three million people, presented at the Paris Exhibition in 1922.<sup>202</sup> John Lansill, Director of Suburban Resettlement within the Greenbelt New Town Organizational Structure, was initially skeptical of designing a city from scratch. He “was able to convince Tugwell to abandon Le Corbusier’s *Ville Contemporaine* idea in favor of single and multi-family housing units.”<sup>203</sup>

Once agreed upon a single-family residential model, Tugwell initially employed engineers on his team. He originally “believed that architects and town planners were too utopian and idealistic,” a remnant from his perception of the difficulty the Public Works Administration (PWA) architects had “in attempting to design reasonable low-income housing within the constraints established by budgets and land use requirements.”<sup>204</sup> Tugwell reflects on this design conflict in his pamphlet “*Architect in Search of Higher Values*” (1929-1933):

“In 1934, I decided to face the cold reality of the world and its empty promises. Mimicking the past was still adhered to but mimicking the imported style assured success and instant acknowledgement of status. Serving fundamental human needs was mainly talked about and except for the Greenbelt Towns, derogatively called Tugwell Towns, architects did contribute little to social design and planning. The lack to identify causes leading ultimately to social chaos prevented this.”<sup>205</sup>

Ironically, the skepticism Tugwell felt toward designers provided an opportunity for Klumb to prove himself capable of presenting compelling solutions for low-cost housing. Through his solo

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<sup>200</sup> Myhra, 183.

<sup>201</sup> Please see image 03.

<sup>202</sup> Myhra, 183. For further reading on the skyscrapers of *Ville Contemporaine*, see Passanti, Francesco. “The Skyscrapers of the *Ville Contemporaine*.” *Assemblage* 4 (1987): 52-65. Web.

<sup>203</sup> Ibid.

<sup>204</sup> Ibid.

<sup>205</sup> Otero, 50. [original source: AACUPR, “*Architect in Search of Higher Values*” (1929-1933), 72.]

exhibition work in D.C., along with the various iterations of housing design with his previous mentors, Klumb was well positioned to impress Tugwell.

Emerging from housing work in D.C., Klumb proposed several housing models for Greenbelt, Maryland between 1935 and 1942. Several of these plans are a departure from the work of his solo exhibition, but also have a closer resemblance—and spatially function as a precursor—to his proposal for faculty housing at the University of Puerto Rico in 1946. Specifically, Klumb’s design entitled “Basic Plan One”<sup>206</sup> will be used to illustrate how he begins to delineate space. “Basic Plan One” is a proposal for a single-story, three bedroom, and one bathroom home. One enters the home directly into the living room, which has access to a backyard terrace. The living room opens to the kitchen, separated only by the suggestion of a table. The kitchen is anchored by an adjoining service space, with its own outdoor access, and the bathroom. The three bedrooms pinwheel to connect the bathroom back to the living room. Several prominent features emerge from the analysis of this plan. First, the adjacency of the kitchen, service, and bathroom function as a discrete “utility” space. Together, they operate as an entity about which the servant spaces are dispersed. This element suggests the potential of partial prefabrication for the residential construction, an intentional move which Klumb explored in later projects.

A study of the elevations and section of “Basic Plan One,”<sup>207</sup> show how this “utility unit” operates both as an aesthetic and climactic asset. In the section, one notices the ventilation louvers in the roof line. This is also perceived in the street elevation, protruding and operating

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<sup>206</sup> See image 04.

<sup>207</sup> See image 05.

in contrast to the lower roof's overhang. An elementary effort to bring the outside in to the house is also apparent in Klumb's use of the wrap-around windows in the corner bedroom, as well as the marriage between the doors and windows leading out to the garden terrace in the living room, as seen in the Garden elevation. This design illuminates Klumb's thinking about the threshold between interior and exterior, passive climate strategies, and middle-class lifestyles, all within the context of a New Deal era budget.

At the neighborhood level, Klumb situates his house plans into a context which complements Tugwell's vision of creating community. As seen in the Plot Plan,<sup>208</sup> "Basic Plan One" was to anchor the neighborhood on the Northeast, Southeast, and Southwest lots on the block. The plans were to be mirrored, in order to create a shared sense of each home's car port. The arrangement of this plan is distinctly closer to a model of townhomes, distinct from "Basic Plan Three," whose siting functions more conventionally as a single-family home.

*The Cooperative Planner's Office: Prefabrication meets Garden City-Influenced Designs (1937)*

In the midst of Klumb's thoughts for Greenbelt, Maryland, he worked with his partners at The Cooperative Planner's Office on similar design puzzles. Two projects during this time additionally inform the way in which he approached faculty housing in Puerto Rico nearly a decade later. The first notable project which emerged from this collaboration is the "planning of a speculative housing development of 800 houses in Philadelphia."<sup>209</sup> This plan begins to embody the operating concept that "a garden town should provide as much land as possible for

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<sup>208</sup> See image 06.

<sup>209</sup> Otero, 59. See image 07.

parks, playgrounds, and other community uses. In addition, streets should follow topographic contours and, whenever possible, should be closed to through traffic.”<sup>210</sup> In the Plan itself, one can distinguish the hierarchy of circulation; from Roosevelt Boulevard and its major through street into the neighborhood, down to the scale of the pedestrian pathways through the community’s central green spaces. This change in scale, and creating the heart of the neighborhood as a park is not only of the era, but also becomes a concept that is gradually reworked in Klumb’s future ideas.

The second influential project during this period comes from another unbuilt Garden Town, this time sponsored by the American Construction Council hypothetically located on “25 acres of partially wooded land... in Montgomery County, Maryland.”<sup>211</sup> Looking, for example, at “Unit 3D,”<sup>212</sup> the importance of distinguishing the home’s serving spaces—the kitchen, laundry, and bathroom—is a significant feature of the design, likely influenced by Kahn. Here, again, one sees Klumb balancing the advantages of prefabrication with the merits of locally-sourced, manual labor. “The design of these units was based on a ‘standard, shop fabricated service unit around which desired living accommodation can evolve free to use locally available building materials and construction methods.” “At first, a preassembled utility unit containing kitchen equipment, a bath, and a service room (storage and air conditioner) was attached and placed centrally to the back wall of the house. As a result, all living spaces directly connected to and surrounded this element.”<sup>213</sup> Modifications in units, based on number of bedrooms and other

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<sup>210</sup> Ibid.

<sup>211</sup> Ibid.

<sup>212</sup> See image 08.

<sup>213</sup> Ibid., 61.

changing program requirements, manifested in the rearrangement of the position of the utility prefabricated unit. Thus, the utility unit of the plan could be placed either in the front or back of the home. In addition to the centrality of prefabrication, this project also portrays Klumb's exploration of flexibility in design; a concept that would later manifest itself in various forms—material and otherwise—in his Puerto Rican work.

*Planning and Puerto Rico: Klumb and the Committee on Design of Public Works [CDPW]*

Invited by Governor Tugwell, Klumb arrived in Puerto Rico in February of 1944, along with his Wright colleague, Stephen Arneson.<sup>214</sup> His primary motivation for moving to Puerto Rico was to accept the directorship of Puerto Rico's new Committee on Design of Public Works [CDPW], part of the Tugwell Administration's planning initiatives for the island's modernization. Tugwell's work with Klumb on the Greenbelt Towns assured him of the architect's commitment to a greater social cause, and furthermore convinced him of Klumb's capacity to operate within a planning system of Tugwell's own design. From the onset of Klumb's employment, "he set about defining architectural policy and the methodologies that would be used in implementing it."<sup>215</sup> The importance of economy of material and labor were intrinsically tied to his creative process, enabling Klumb to operate within the limited budget of the CDPW. As such, he outlined four "operational parameters" that guided his tenure on the Committee. In her article,

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<sup>214</sup> Vivoni, 343. The two also established the ARKLU furniture factory, furniture design practice, which is where Arneson spent most of his time while on the island.

<sup>215</sup> Álvarez Curbelo, Silvia. "The Design Process: Henry Klumb and the Modernization of Puerto Rico [1944-1948]." *Klumb: An Architecture of Social Concern*. Ed. Enrique Vivoni Farage. Rio Piedras: University of Puerto Rico, 2006. 265.

“*The Design Process: Henry Klumb and the Modernization of Puerto Rico [1944-1948]*,” scholar Silvia Álvarez Curbelo describes Klumb’s CDPW priorities:

“the most cost-effective structural methods for a specific problem and specific conditions; materials that would with greatest cost effectiveness serve the location and conditions for which the building was to serve; and a design for the building that respected and accepted the local needs and the habits and traditions of the people for whom it was built.”<sup>216</sup>

This list emphasizes Klumb’s internalization that architecture at this point in the island’s history, while limited in resources, had the capacity to serve as the singly dominant tool in crafting a new and better lifestyle for Puerto Ricans.

This ambitious agenda sought to rectify the disparity Klumb saw between “demand and available resources. Only a fraction of Puerto Ricans had managed to secure a home that satisfied the minimum requirements for providing physical and psychological well-being.”<sup>217</sup> From the beginning, financial concerns within the CDPW itself were challenging. As a definition of “modernity” operated in comparison with the lifestyles of the U.S. middle-class, homeownership became an asset that was encouraged by the growth of *urbanizaciones* and single-family residential work. While the CDPW operated within this value, “even the most minimal of designs for housing units were turning out to be too costly for the desired goal of extending the franchise of homeownership down the economic spectrum.”<sup>218</sup> In this context, Klumb turned back to his experience with prefabrication, trying “to solicit bids for prefabricated houses from American manufacturers and to spark their interest in experimental programs.”<sup>219</sup>

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<sup>216</sup> Álvarez Curbelo, Silvia. 265.

<sup>217</sup> *Ibid.*, 266.

<sup>218</sup> Isenstadt, 237.

<sup>219</sup> *Ibid.*



This initiative served to advance the progression of acceptable housing on the island in two manners: first, prefabrication would encourage the ease of construction, contributing to faster assemblies and, therefore, an arguably quicker time-table for new families to move into more favorable living conditions. Additionally, prefabrication would persuade American companies to establish factories and production offices on the island, contributing to internal economic and labor growth.

Another reason Klumb could initially operate successfully under Tugwell's administrative vision, was because he, too, valued the need for planning in his area of work. As director of the CDPW, Klumb not only modeled a design philosophy, but also expected that the coworkers in his committee would follow a specific work methodology. "Design began, as Klumb endeavored to show, with a written program that stressed financial plans, education, even insurance, and most important of all, an architecture that would address the high levels of rural unemployment plaguing Puerto Rico."<sup>220</sup> Not unlike Tugwell's assertions, Klumb argued that "Puerto Rican hands and Puerto Rican materials must be largely depended upon to solve our problems."<sup>221</sup> Thus, Klumb's tenure at the CDPW enabled him to consciously construct an architecture "aimed not to please architectural critics, but to employ otherwise inactive labor, which, in turn, would help to lower labor costs and make housing more affordable."<sup>222</sup>

As Luis Muñoz Marín's *Popular* party grew in popularity, "Klumb was eager to launch rural housing initiatives and public buildings like town halls, schools, health, and community

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<sup>220</sup> Isenstadt, 237-238.

<sup>221</sup> Ibid.

<sup>222</sup> Ibid.

facilities.”<sup>223</sup> Indeed, Tugwell had also convinced Neutra<sup>224</sup> to join the CDPW from 1943 to early 1945, working with Klumb and an office of Puerto Rican architects<sup>225</sup> and engineers to design civic buildings for the new Puerto Rico. While many of the projects were not built, Neutra’s design attitude during this time can be summarized as including “principles of flexibility, adaptability and extension....on the spatial and programmatic level; standardized and semi-prefabricated reinforced concrete structures were designed to fit different expandable or replicable situations.”<sup>226</sup> Like Klumb, Neutra too, reflected on this sense of his designs embodying an “architecture of social concern:”

“...make the villagers—who for centuries had not much cause to trust a distant government—feel these buildings as their own community property, where in the evenings they can play their domino, strum a guitar for dancers on the community porch, and incidentally, learn by suitable programs something on many things such as child care, diet, cloth making, and more practical housekeeping.”<sup>227</sup>

This sense of designing a holistic community, extending beyond the design of an individual home—not unlike the philosophy of the Resettlement Administration—permeated the Neutra’s work, as well as Klumb’s, during their years with the CDPW. This idea of architecture—the creation of social fabrics in addition to literal dwelling structures—was passed to the new generation of Puerto Rican architects, from their mentors.

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<sup>223</sup> Wright, Gwendolyn. Xi.

<sup>224</sup> For further reading on Neutra’s experiences in Latin America, see [Correia De Lira, Jose Tavares. "From Mild Climate's Architecture to 'Third World' Planning: Richard Neutra in Latin America." 14th International Planning History Society, 2010 Conference. Istanbul Technical University, Istanbul. Reading] “Right after his experience in Puerto Rico in 1945, he went to Cuba, Haiti and the Dominican Republic, and embarked on a US State Department sponsored tour through Ecuador, Peru, Bolivia, Argentina, Uruguay and Brazil. 22

<sup>225</sup> Including Raul Reichard, Osvaldo Toro, and Miguel Ferrer. Toro and Ferrer ultimately formed their own independent firm, going on to design the famous Caribe Hilton in San Juan, 1949.

<sup>226</sup> Correia De Lira, Jose Tavares, 4.

<sup>227</sup> Ibid. [Original source: UCLA/Young Research Library/Special Collections. *Richard Neutra Papers: Articles Miscellaneous*. Box 176, Folder 7: Planning and Fabrication (PL): “Puerto Rico performs,” 12/2/1944, p.2]

While the task ahead of the CDPW was immense, Klumb's professional ambitions caused him to leave the Committee in 1945, taking a position with the Puerto Rico Housing Authority [PRHA]. In the same year, he established his private practice, The Office of Henry Klumb, and began to participate in private work, including the design competition for San Juan's Hotel Caribe. Klumb's involvement with the University of Puerto Rico began the following year. From 1946 to 1966, Klumb operated as the sole architect for the UPR, designing twenty-six buildings<sup>228</sup> with a diversity of program requirements: "Like 'university cities' throughout Latin America, the University of Puerto Rico served as a laboratory for the liberal arts and sciences, a setting for young citizens to experiment with radical modern ideas."<sup>229</sup>

*Richard Neutra: Contextualizing the CDPW*

Richard Neutra's journey to the CDPW did not greatly differ from Klumb's own professional trajectory. Born in Vienna in 1892, Neutra emigrated to the U.S. in 1923 by way of Germany.<sup>230</sup> Equally enamored with Frank Lloyd Wright, Neutra was convinced that "America was indeed the capital of 'modern' architecture."<sup>231</sup> In his book *Richard Neutra and the Search for Modern Architecture*, Thomas Hines characterizes Neutra as an architect who "studied the needs of each individual client and adapted his own ideas to those needs. He was especially concerned that good design be available to people of modest means and that even his most expensive architecture be translatable into less costly forms."<sup>232</sup> These concerns translated into

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<sup>228</sup> Of which 19 are built.

<sup>229</sup> Wright, Gwendolyn. Xi.

<sup>230</sup> Hines, 5. For more information on Neutra's career, see Hines, Thomas S. *Richard Neutra and the Search for Modern Architecture*: Oxford UP, 1982. Print.

<sup>231</sup> *Ibid.*, 6.

<sup>232</sup> *Ibid.*

Neutra's involvement with the California State Planning Board in the 1930s and 1940s, as well as a consultant to the U.S. Housing Authority.<sup>233</sup>

In 1942, Neutra implemented many of his ideas for social concern in his Channel Heights project near the Los Angeles harbor at San Pedro.<sup>234</sup> "Channel Heights was funded by the Federal Works Agency, and was coordinated by the L.A. Housing Authority. It was the last permanent housing project completed after the beginning of the war."<sup>235</sup> The goal was to provide affordable housing for shipyard workers near the harbor. The project became increasingly important, as war became eminent, and attention to national defense escalated.<sup>236</sup> Channel Heights also incorporated ideas of communal living that permeated the New Deal Greenbelt projects, and later, infused into designs for residential life at the University of Puerto Rico. "In addition to residential flats, Channel Heights offered a store and market building, a crafts center, and a combined nursery school and community center."<sup>237</sup> The holistic lifestyle approach proscribed in this master plan very much aligned with Governor Tugwell's Planning agenda in Puerto Rico.

Following Channel Heights, work was sparse, and Neutra accepted a position as visiting professor of design at Bennington, "a progressive women's college in Vermont," in 1942.<sup>238</sup> The following year, based on the legacy of the Channel Heights design, Neutra was beckoned from Washington to aid in the "massive design project for the post-war construction of schools,

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<sup>233</sup> Hines, 6.

<sup>234</sup> Please see image 09.

<sup>235</sup> *Ibid.*, 179.

<sup>236</sup> *Ibid.*

<sup>237</sup> *Ibid.*, 217

<sup>238</sup> *Ibid.*, 194

hospitals, and health facilities in Puerto Rico,”<sup>239</sup> to join the CDPW. He accepted the offer, agreeing with Governor Tugwell that “the horrors of poverty, illiteracy, malnutrition, overpopulation, and maldistribution of wealth had to be combated if the concurrent aims of Puerto Rican self-sufficiency and human enrichment and development were to be realized.”<sup>240</sup> Between 1943 and 1945, Neutra worked with the CDPW and became “chief architect of open-air schools for more than 150 locations.”<sup>241</sup> His designs employed many of the passive techniques that were beginning to define Tropical Modernism on the island. These elements included the use of screens and louvers, proper site orientation so as to capitalize on prevailing winds, and the use of modularity as a means to mass produce units for different sites.<sup>242</sup> “Our purpose,” Neutra explained, “was to avoid any institutional character, making these buildings genuinely belong to the people.”<sup>243</sup>

Neutra continued to be involved in the greater post-war dialogue of rebuilding beyond his tenure at the CDPW. He advocated for the U.S. to play an active role in improving its own cities, and argued that “unless Canada and the United States take the lead in the development of contemporary architecture, with particular emphasis on housing for low income groups, they will be outpaced by the war-torn nations of Europe.”<sup>244</sup> Neutra put his convictions into practice particularly in his participation of a planning commission for the island of Guam in the 1950s.<sup>245</sup> While the project ultimately did not come to fruition, it nonetheless illustrates the urgency with

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<sup>239</sup> Ibid.

<sup>240</sup> Ibid.

<sup>241</sup> Ibid.

<sup>242</sup> Ibid.

<sup>243</sup> Ibid.

<sup>244</sup> Ibid., 196

<sup>245</sup> Ibid., 230

which Neutra viewed the proper development of U.S. cities. Neutra's experiences in Puerto Rico arguably solidified this commitment.

*Beyond the CDPW: Faculty Housing at the University of Puerto Rico [UPR]- Río Piedras, 1946*

As mentioned in previous chapters, the University of Puerto Rico was central to the political agenda of modernizing Puerto Rico. As Tugwell accepted the governorship on the island, Jaime Benítez, an academician and colleague of Muñoz, assumed the Chancellorship of the UPR in 1942 for an indefinite term. From an academic standpoint, Benítez aspired to revamp the general studies curriculum to promote innovation. The graduates of the reinvigorated university would in turn go on to continue to advance the island. As such, Benítez understood that a strong faculty, and a happy one too, were integral to the success of the higher educational system.

Benítez first reached out to Klumb in mid-1945 for his services in expanding the university-owned Chancellor's residence. While this renovation never came to fruition, it served as the impetus for Klumb's work on residences for faculty members. "Benítez knew that under the circumstances, faculty members' well-being was the essential foundation for any university reform,"<sup>246</sup> and therefore set out to make the first large-scale architectural intervention on campus in support of his faculty. The university's farm in Río Piedras served as the site for the commission, and "the preliminary drawings were completed in May of 1946."<sup>247</sup> "Indicative of the climate of university-community involvement is the fact that the plans were exhibited in the lobby of the University Theater [during the process]...where comments from the university

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<sup>246</sup> Arango, Silvia. "Henry Klumb and the UPR, Río Piedras Campus: The Logic of the Results." 88.

<sup>247</sup> Ibid.

community were sought before final approval was given.”<sup>248</sup> Klumb envisioned for the families a seemingly all-inclusive community reminiscent of the shared amenities in his earlier garden town plans. Single-family and multi-family residential units would be balanced by a nursery, play area, community building, and outdoor recreation. As a whole, “the group of buildings was in the midst of green areas themselves surrounded by vegetation.”<sup>249</sup> Pedestrian and transit infrastructure would be added in a minimal way, so as not to detract from the existing green space. Furthermore, recreational area was specifically reserved in the northeast.

In the road diagram for the development,<sup>250</sup> Klumb outlines a two-phase development plan for the neighborhood. Phase One was to consist of twenty-four houses and three apartment buildings along an existing street running from the northeast to the southwest. As seen in the proposed site plan,<sup>251</sup> this existing street already connected to a campus entrance road, thereby providing access for faculty who would initially move into the development. Infrastructurally, Phase Two would add an additional campus entrance road to the development, as well as provide a pedestrian underpass linking the campus with the community. Both south-bound and north-bound bus stops would be positioned on the existing major thoroughfare separating the campus from the development, linking both campuses with a larger public transit network in Río Piedras. The proposed site plan ultimately called for forty-eight single-family homes, and six to nine apartment buildings.

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<sup>248</sup> Ibid., 89.

<sup>249</sup> Ibid.

<sup>250</sup> See image 09.

<sup>251</sup> See image 10.

A study of the site plan also illuminates that the single-family homes were designed to share driveways; carport adjacencies resurface here from Klumb's "Basic Plan One" for the Greenbelt Town. The plan of "Type I"<sup>252</sup> single-family faculty homes possesses other commonalities with Klumb's earlier residential work. Here, again, one enters the home directly into an open living-dining space. A clear connection between the living room and the exterior terrace is emphasized by glazing. "The domestic areas that are assured of cross-ventilation and the best illumination are the living-dining room and studios."<sup>253</sup> In this context, the kitchen operates as a distinct space from the open living room—unlike in "Basic One Plan"—however, a utility core still exists with the cohesion of the kitchen, bathroom, and mechanical area. In contrast to earlier designs, here, the bedrooms operate as a distinct linear region of their own, separated by a corridor that leads from the entrance to the service entrance and carport. Additionally, the ventilation of the bedrooms—in the three-bedroom and two-bedroom models alike—serve as the aesthetic system for the street elevation, emphasizing distinctly Klumb-like horizontal screening. Outside the home, Klumb includes new features with climate in mind. As seen in the photograph of the built homes,<sup>254</sup> concrete paving is used minimally in the instance of the sidewalks, and in the driveway, only where the car tires will meet the ground.<sup>255</sup> In the service yard, laundry trees are incorporated into the landscape.

The design of the three-story multi-family apartments<sup>256</sup> for faculty housing, also possesses similar elements to "Basic Plan One." The proposal contains a pair of two-bedroom

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<sup>252</sup> See image 09.

<sup>253</sup> Ibid.

<sup>254</sup> See image 11.

<sup>255</sup> The stripes of grass integrated into the driveway are an environmental precedent that contemporary designers are returning to, as it offers benefits such as minimizing runoff.

<sup>256</sup> See image 12.



units separated by a circulation core and one-bedroom and three-bedroom unit. The entrance sequence is not unlike aforementioned projects. One enters into a corridor, which ultimately opens into a shared dining and living room. The intentional narrow plan of the building exists to encourage cross-ventilation across this space, and is reinforced by the same horizontal louver system as in the single-family homes. In the two-bedroom unit, the study protrudes from the immediate structure of the building, enabling cross-ventilation to occur here as well. The terrace, or balcony, is situated off of the open living-dining room and faces the street. The position of the bedrooms are more like those in “Basic Plan One,” pin-wheeled off of the utility bathroom core. A look at the building’s elevation<sup>257</sup> sheds light on the role of interior spatial organization relative to climatic concerns. From the street elevation, the louver systems distinguish served versus servant spaces; the bedrooms encourage air-flow, while the bathrooms remain opaque from this view. Depth also functions as an aesthetic element in the elevations; the bedrooms protrude, making room for each unit’s generous outdoor space.

A photograph<sup>258</sup> of the built housing types side-by-side show the harmony in their individual compositions. Materially, the use of concrete and horizontal louvers unite the two designs. The formal strategy of shifting the depth of spaces creates a vivid perceptual experience beyond the climatic advantages. While the scope of the development was not fully realized, the prominence of Klumb’s ideas which outlined a new, updated lifestyle for the modern faculty of the university emerged. “The project as it was finally carried out consisted of 156 housing units of differing sizes [one, two, three, and four bedrooms] organized in 48 one-

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<sup>257</sup> See image 13.

<sup>258</sup> See image 14.

story houses and 9 apartment buildings. The plan also contained a community center [with library, ballroom, tennis courts, and other recreational facilities] and a child-care center.”<sup>259</sup> Thus, with his first project on campus, Klumb established the UPR as a place open to architectural experimentation and research; a definition that would carry the University through the next several decades of its evolution.

### *Master Planning for the UPR, 1947-1953*

After Klumb’s work on the new faculty housing, he became increasingly involved with the future direction of the University’s built campus. Located in the Río Piedras district of San Juan,<sup>260</sup> the university was enclosed by an ornate fence, its entrance marked by a clock tower<sup>261</sup> designed by architect Rafael Carmoega as part of the Puerto Rico Reconstruction Administration (PRRA) in 1936. “Entering this campus’ green domain, which differed greatly from the inner city and the highly developed surrounding neighborhood...was like entering a different world; it was the student’s central park of Río Piedras,”<sup>262</sup> remarked one scholar. In March of 1947, Klumb first became involved in the “Proposal for Physical Development Plan,”<sup>263</sup> which called for more amenities—a library, cafeteria, museum, sports facilities—on its 200-acre main campus.<sup>264</sup> The plan, under the direction of Milton Cobin of the University’s Physical Expansion Office, “presented for the first time, an inventory of University properties [in Río

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<sup>259</sup> Arango, 88.

<sup>260</sup> An area a bit southwest of Old San Juan.

<sup>261</sup> See image 15.

<sup>262</sup> Otero, 152.

<sup>263</sup> Please see image 19. Arango states that this drawing “cannot really be considered a development plan, since it is not prospective but rather shows, possibly in a rather hurried way, several independent projects developed over several previous years by the Design Committee.”

<sup>264</sup> See image 16 for an aerial view of the University circa 1948.

Piedras]: with new acquisitions, the University now had some 200 acres.”<sup>265</sup> With the more formal record of what physical amenities the University had, and which it lacked, came commissions for Klumb to design discrete buildings, ultimately serving to evolve the larger scale master plan with each new facility.

Shortly following the “Proposal for Physical Development Plan,” the UPR established an Office of Planning that was independent from the Office of Expansion. Whereas the Office of Expansion ultimately evolved into University Physical Facilities and focused more on maintenance, the Office of Planning functioned as an entity to “centralize all decisions on educational and physical policy.”<sup>266</sup> This administrative evolution in many ways echoes Tugwell’s vision for the Puerto Rican Planning Office as a separate entity from government, serving as another emphasis on the practical and symbolic role the UPR maintained in realizing the modernization of the island. During the same year, Klumb’s Office became involved solely in University projects, designing five key programmatic elements that sought to highlight the importance of community at the UPR: Museum of Anthropology, History, and Art, a new library, a Student Center, and a Gymnasium.<sup>267</sup> As the siting of each building was taken under serious consideration during the design phase, the composition of the five as a whole slowly began to alter the overall Master Plan of the University. By the end of 1948, Klumb worked with Chancellor Benítez to document the progress of his designs at the UPR.<sup>268</sup> In this document, one begins to see how clusters of Klumb’s designs begin to create more intimate sectors on campus,

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<sup>265</sup> Arango, 89.

<sup>266</sup> *Ibid.*, 94.

<sup>267</sup> *Ibid.*

<sup>268</sup> Please see image.

compared with the earlier plan of 1947. Furthermore, in solidifying the connection between the UPR and the Island-wide agenda for modernization, “it [was] no coincidence that both Klumb and Benítez made an effort to complete the drawings of the most important buildings and also a general layout of the campus before the November elections, when [Luís] Muñoz Marín became the island’s first elected governor.”<sup>269</sup>

In 1953, Klumb was commissioned to create a major Master Plan for the University, marking its 50<sup>th</sup> Anniversary. The political context of this occasion, furthermore, added to the symbolic importance of this Master Plan. Just one year prior, in 1952, Chancellor Benítez was “one of the men who drafted the new Constitution of Puerto Rico, which was approved by popular vote.”<sup>270</sup> Additionally, Muñoz Marín “was also reelected as governor for a second four-year term.”<sup>271</sup> Thus, the events at the University continued to serve as a microcosm for the realization of the New Puerto Rico.

Due to its growing matriculation, the UPR was also in desperate need of an overall development scheme. “While in 1945 the campus had some 6,600 students, by 1954 this number had swelled to 9,193.”<sup>272</sup> Furthermore, the University had recently acquired more land for the inclusion of further medical facilities into the institution. The swift progress of Klumb’s inclusion in the university’s planning efforts is illuminated by scholar Silvia Arango:

”In December of 1953, Klumb presented Jaime Benítez with another Master Plan...[that consisted of] two stages: the ‘Ultimate Development,’<sup>273</sup> which showed what was desired and considered most useful and appropriate once the university had taken full possession of

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<sup>269</sup> Ibid., 100

<sup>270</sup> Ibid., 107

<sup>271</sup> Ibid.

<sup>272</sup> Ibid., 112

<sup>273</sup> Please see Image 21.

the new land, and the 'Intermediate Plan,' which sketched what could be done immediately."<sup>274</sup>

In her chapter "Henry Klumb and the University of Puerto Rico, Río Piedras Campus: The Logic of the Results," Silvia Arango argues that the importance of Klumb's Master Plans lies in the fact that "the 'Ultimate Development' of the Master Plan is the most finished existing document revealing Klumb's thinking about the city."<sup>275</sup> It is from this plan that one can begin to synthesize Klumb's design intentions at a larger scale. Functionally, the campus was designed in sectors, and from the beginning of his work on campus amenities, Klum organized his buildings "around open, democratic spaces accessible to all."<sup>276</sup> Arango analogizes the organization of the plan to a city:

"The conventional academic and administrative areas were in the buildings of the Quadrangle, in the southwestern part of the campus as a sort of 'traditional city;' to the northwest were the new colleges and the medical area, with access from Avenida Central, similar to a 'new neighborhood.' To the southeast was the planned Gymnasium and an open-air sports area, a green space that helped oxygenate the neighboring city of Río Piedras, where many students lived; and in the northeastern corner, similar to an 'industrial park,' were structures dedicated to maintenance services. On the periphery were low-density housing areas for faculty members..."<sup>277</sup>

This was another point of departure from the social aspect of his work with the Greenbelt Towns. Mainly that, "for Klumb, the heart of the university was this permanent agora, this meeting-place where one might come in contact with the 'other,' and where students could exchange ideas."<sup>278</sup>

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<sup>274</sup> Arango, 112.

<sup>275</sup> Ibid.

<sup>276</sup> Vivoni, 32.

<sup>277</sup> Arango, 112.

<sup>278</sup> Ibid., 113.

*Ciudades Universitarias: Latin American “University Cities” in Comparison with the UPR*

While the evolution of the UPR maintained Puerto Rican specificity, it holds a place in the context of a pan-American trend in designing University Cities. “As in other parts of Latin America, the campus, or ‘University City’ [*Ciudad Universitaria*]... served as a laboratory for testing the urban ideas of the Modernist generation.”<sup>279</sup> Thus, the University City—specifically in Mexico City, Caracas, and Rio de Janeiro—becomes a microcosm for post-war mid-century planning in the Americas.

In his lecture “Form and Pedagogy: An Atlas of the 20<sup>th</sup> Century University City in Latin America,” Carlos Garcíavelez outlines the ways in which the University functioned simultaneously as a symbol of progress for Latin American cities, as well as an impetus for an unprecedented pan-american exchange and synergy between art, architecture, and engineering.<sup>280</sup> The design for the Universidad Nacional Autónoma de México (UNAM), for example, was an effort to assemble a national project across political, design, and social boundaries. In 1940, politician Miguel Alemán worked with the federal government to make the University Master Plan a project of national significance. The design began in 1943, with the faculty of architecture participating for an internal competition to design the campus scheme, from which Mario Pani and Enrique del Mural emerged victorious.<sup>281</sup> Under their guidance, other faculty members were commissioned to design individual buildings within the campus plan. Strategically, the plan uses the Stadium building to mediate between university and Mexico City. It is located on the opposite side of a main thoroughfare through campus, which

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<sup>279</sup> *Ibid.*, 112.

<sup>280</sup> Garcíavelez, lecture.

<sup>281</sup> *Ibid.*

enables the building to also function as a public amenity to the city.<sup>282</sup> Furthermore, with the inclusion of Mexican artists (Diego Rivera among others) and engineers, great measures were taken to ensure the integration of native landscape and public green space within the campus.<sup>283</sup>

The Ciudad Universitaria de Caracas underwent a similar transformation. The architect for the campus design, Carlos Raúl Villanueva, originally visited Bogota, Colombia for inspiration in campus design for the Venezuelan counterpart. In 1943, he began work on a master plan reminiscent of the Beaux-Arts, including a central access radiating from the medical area which, in turn, served as the core for the entire complex.<sup>284</sup> In 1946, Villanueva changed directions and broke away from the Beaux-Arts influence, following “a new layout incorporating modern ideas without excluding traditional features such as plazas and streets, courts and corridors, climate and vegetation, light and color.”<sup>285</sup> The goal of this new direction<sup>286</sup> was more in line with modernist approaches to urban design at mid-century; the importance of separating vehicular and pedestrian traffic, “the identification of functions through specific volumes and shapes, [and] the use of an architectural language articulated through the structures and materials,”<sup>287</sup> functioned as criterion whereby Villanueva was able to produce a coherent whole.

In contributing to the notion of Tropical modernism, Villanueva employed similar passive design components in the buildings on campus. For example, the Central Administrative and cultural area nearest to the University Botanic Gardens are characterized by “open ground

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<sup>282</sup> Ibid.

<sup>283</sup> Please see Image 22.

<sup>284</sup> Ibid.

<sup>285</sup> Villanueva, 52.

<sup>286</sup> Please see image 23.

<sup>287</sup> Ibid.

floors, modular units, perforated walls, *brise-soleil* screens and eaves, transparency of the stairways and ramps.” Built form embodies the fluid multi-layered relationships existing in a University setting. “According to the Venezuelan writer Salvador Garmendía, the University Campus is where ‘Caracas...found a unique form of expression in the organization of a space...a sign of identity, and, perhaps, its only lasting creative manifestation.’”<sup>288</sup> “By rescuing traditional values and applying them in new solutions in the sphere of contemporary design, Villanueva created a model of a city, both local and universal in its scope, where the best features of the utopia of modern urban planning at last became reality.”<sup>289</sup> In Villanueva’s sole leadership, and commitment to “drive the architecture process,” he displayed a similar commitment and openness to experimentation in planning as did Tugwell and Klumb with the UPR.

Parallel changes in educational structures occurred in Brazil at this time as well. In 1936, Lucio Costa was commissioned to design the new Ministry of Education and Health building in Rio de Janeiro. This was ultimately the impetus for gathering a cohort of international architects—including Le Corbusier and Oscar Niemeyer—to serve as consultants for the Universidade Federal do Rio de Janeiro. Indeed, they each put forth three consecutive master plans for the new campus, none of which were realized, but in turn served as inspiration to build the Universidad de Brasília. Costa eventually won the commission to design this new university plan, incorporating elements from the others’ proposals for the Universidade Federal do Rio de Janeiro.<sup>290</sup>

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<sup>288</sup> Ibid.

<sup>289</sup> Ibid.

<sup>290</sup> Garciavelez, lecture.



*Conclusions: UPR and “The Heart of the City”*

While the UPR certainly operated within the larger, pan-American direction of University City design, Arango makes an important distinction between the Klumb’s design and the University Cities in Mexico City and Caracas:

“In campuses being constructed about the same time in Latin America...the center of the design tends to be a plaza, whether huge and open, like the plaza at UNAM in Mexico City, or covered and museum-like such as the case of Caracas. In both Mexico City and Caracas, the buildings most distinguished by their size, position, and treatment are those representative of power: the chancellor’s office and the library [administrative efficiency and accumulated knowledge], as in a city one finds the city hall and the cathedral.”<sup>291</sup>

Thus, while in principle, the other Latin American university cities at the time operated within a post-war modernist planning discourse on the surface, at their core, they programmatically displayed similarities to the underlying method for laying out Spanish colonial cities, where social and political hierarchy was spatially determined by proximity to the central plaza. What Klumb was doing, therefore, was a total rejection of this mode of the colonial spatial implications of urban form, and an extrapolation of modern planning much more akin to Kahn’s urban design philosophies related to his plans for the City of Philadelphia.

“Furthermore, it does not seem particularly daring to suggest that in this play of comparative scales, the University Center is to the University what the University itself is to Río Piedras, and what Río Piedras is to San Juan.”<sup>292</sup> “And at the other extreme, on the smallest scale, we find that at the university Klumb applied an ordering system similar to that of his concept of housing...: from a core of ‘served’ areas radiate outward, and in those served areas the utilitarian or necessary zones are distinct from the zones for ‘living’ in the broadest

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<sup>291</sup> Arango, 113.

<sup>292</sup> Ibid.

sense.”<sup>293</sup> Above all, “[Klumb’s] designs rendered in concrete what Jaime Benítez, the chancellor of the University for many years, had called ‘the university of the open book,’ or what Klumb himself called an architecture that was profoundly social, and whose measure was not simply the human being, but human well-being.”<sup>294</sup>

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<sup>293</sup> Ibid.

<sup>294</sup> Vivoni, 32.



Image 03: Ville contemporaine de trois millions d'habitants, 1922, Le Corbusier. Source : Fondation Le Corbusier archives\_ 30830.

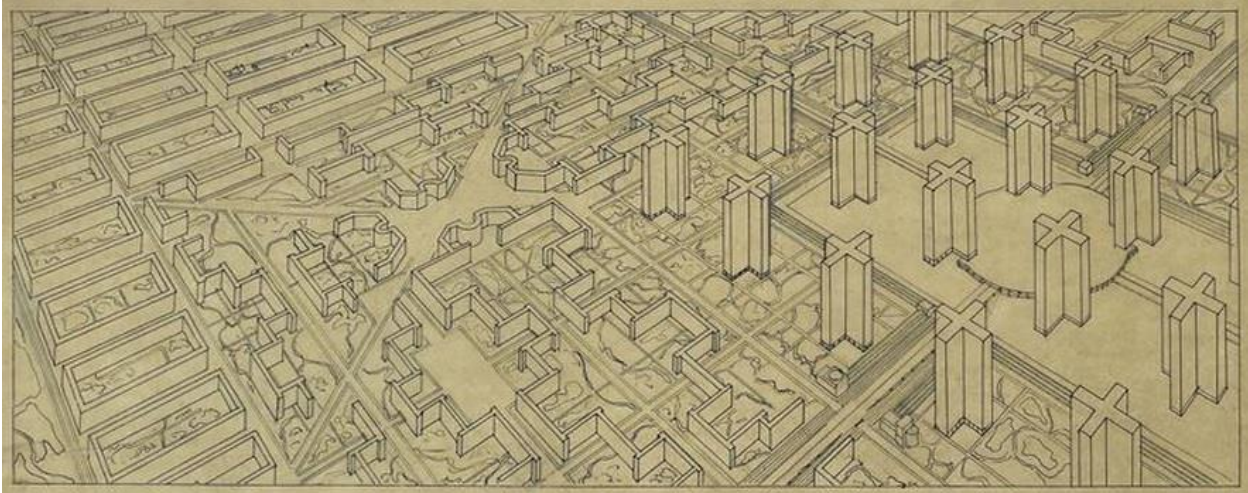


Image 04 : Floor Plan, Basic Plan One, Greenbelt, Maryland.. Source: AACUPR: HKI3003\_P0015: "Greenbelt Homeowners Cooperative, Inc., Greenbelt, MD., [1935]-1942.

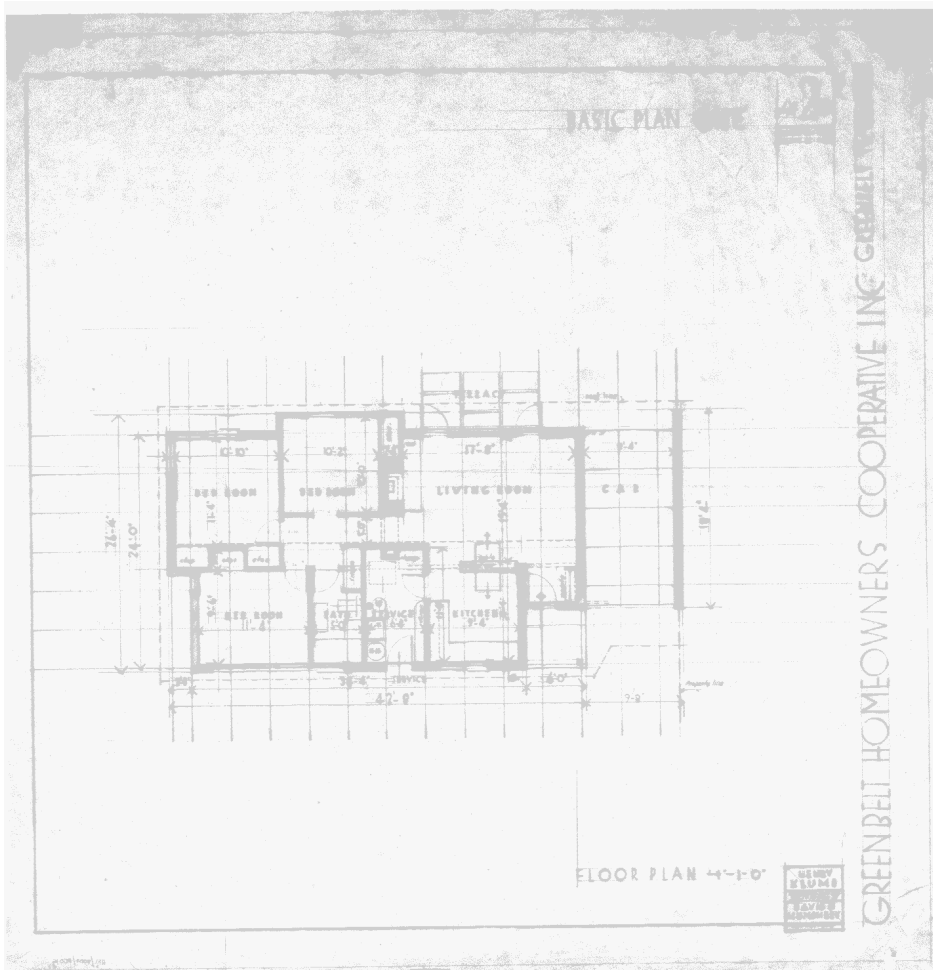


Image 05 : Elevations + Section, Basic Plan One, Greenbelt, Maryland.. Source: AACUPR: HKI3003\_P0016: "Greenbelt Homeowners Cooperative, Inc., Greenbelt, MD., [1935]-1942.



Image 06 : Plot Plan, Greenbelt, Maryland.. Source: AACUPR: HKI3003\_P0061: "Greenbelt Homeowners Cooperative, Inc., Greenbelt, MD., [1935]-1942.



Image 07 : Garden Town Plan, Philadelphia. Source: AACUPR: HKI3013\_P0006: "Alfred Kastner, Louis I. Kahn, Henry Klumb. Architects and Associates. Garden town plan, Philadelphia (Pa.), 1929-1936."

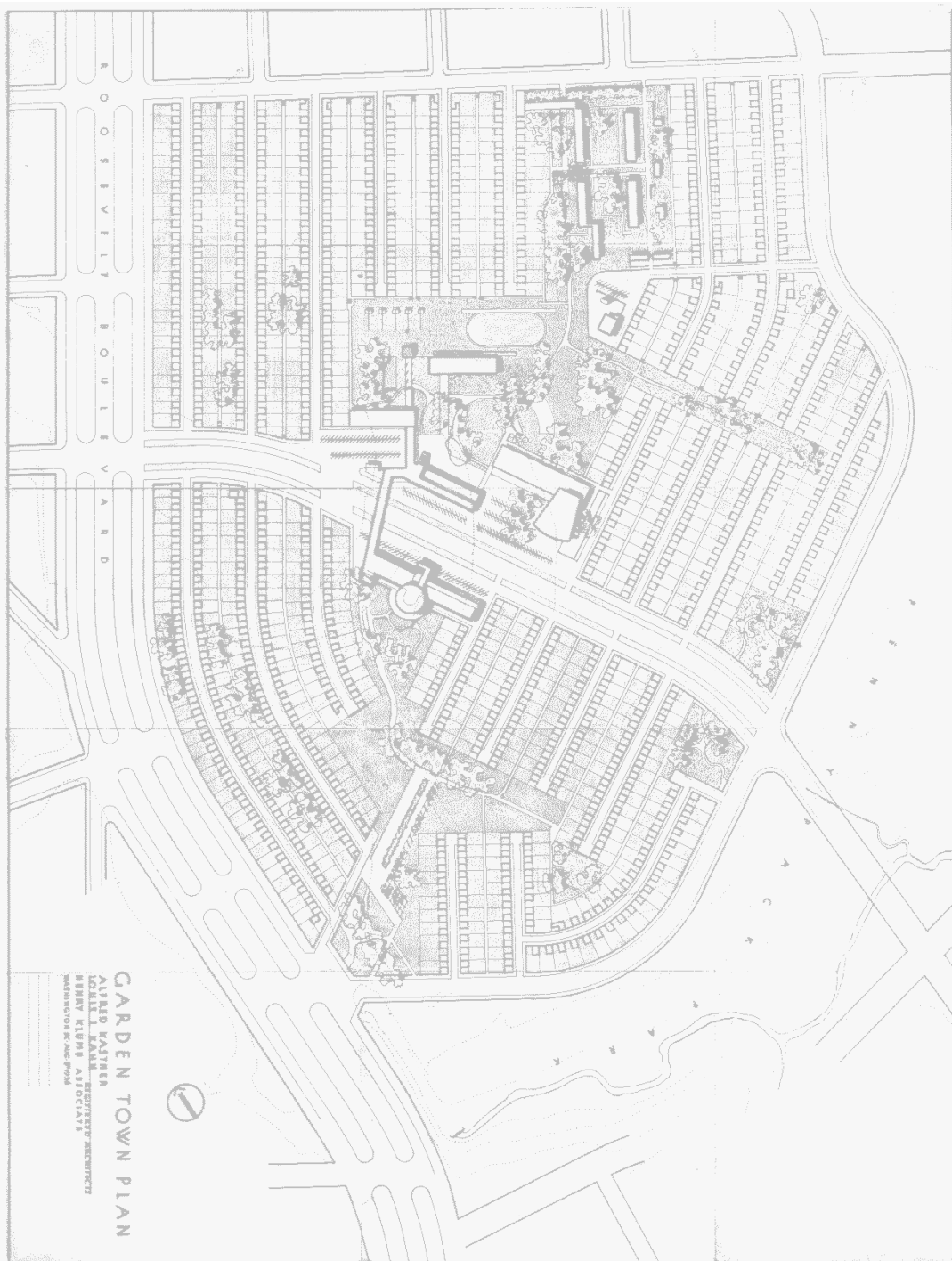










Image 12 : Type I Plan , Single-Family home, Faculty Housing, University of Puerto Rico-Río Piedras.  
Source: AACUPR: HKI0011\_P0036: The Office of Henry Klumb, 1946-1952.

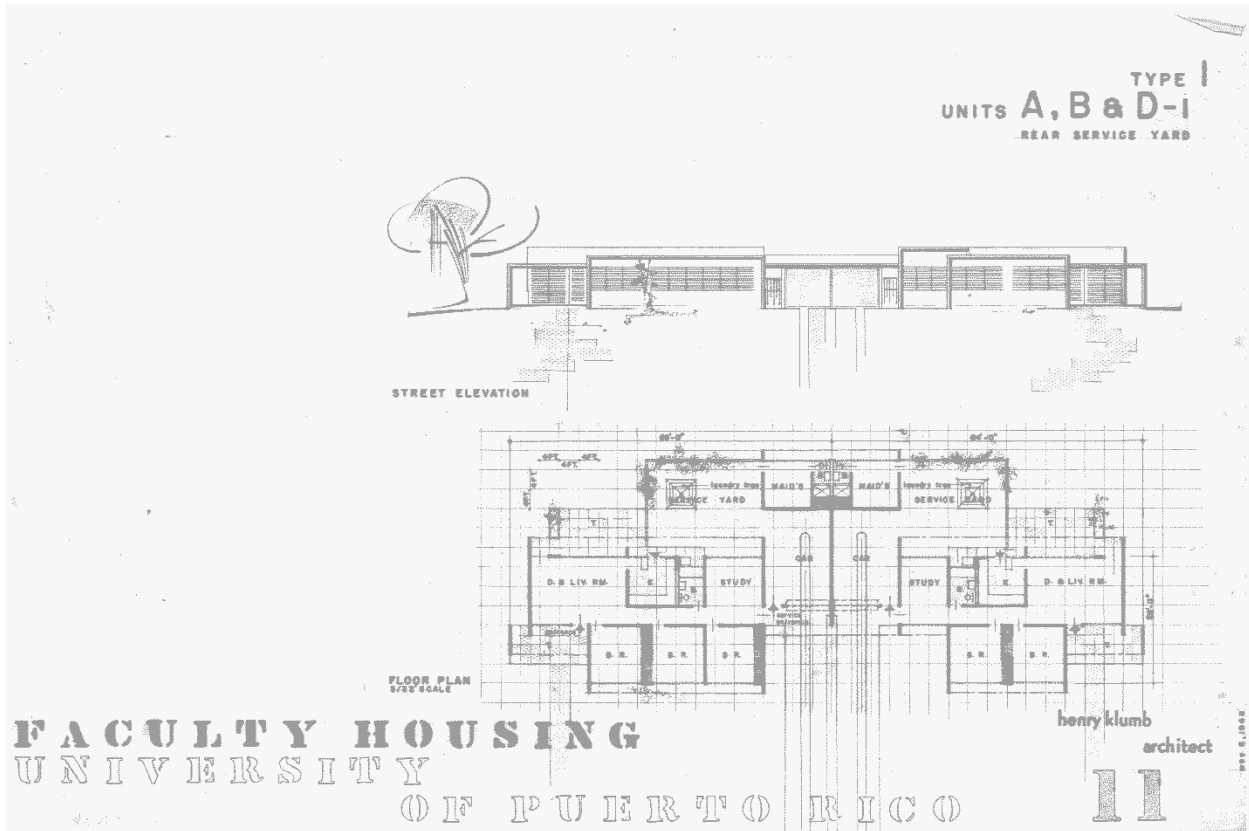


Image 13: Photograph, Type I Plan , Single-Family home, Faculty Housing, University of Puerto Rico-Río Piedras. Source: AACUPR: HKI0011\_F0002: The Office of Henry Klumb, 1946-1952.



Image 14: Plan, Type V Apartments , Faculty Housing, University of Puerto Rico-Río Piedras. Source: AACUPR: HKI0011\_P0044: The Office of Henry Klumb, 1946-1952.

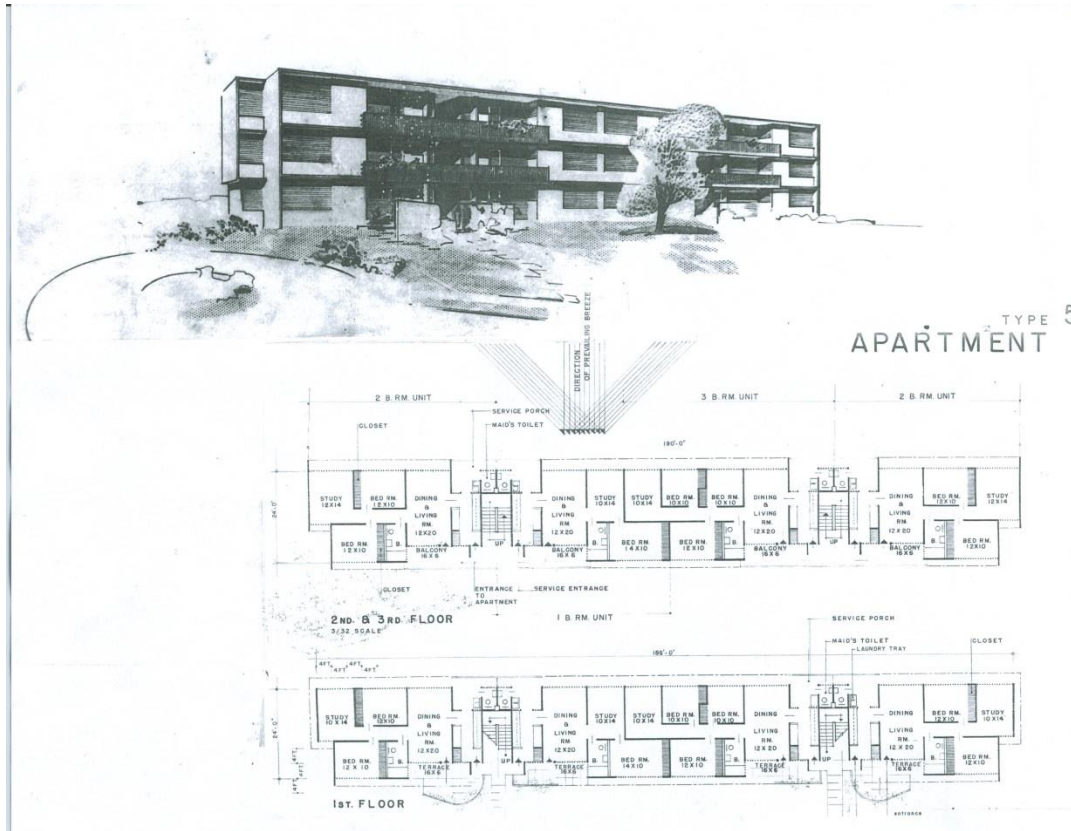


Image 15: Elevations, Type V Apartments , Faculty Housing, University of Puerto Rico-Río Piedras. Source: AACUPR: HKI0011\_P0045: The Office of Henry Klumb, 1946-1952.

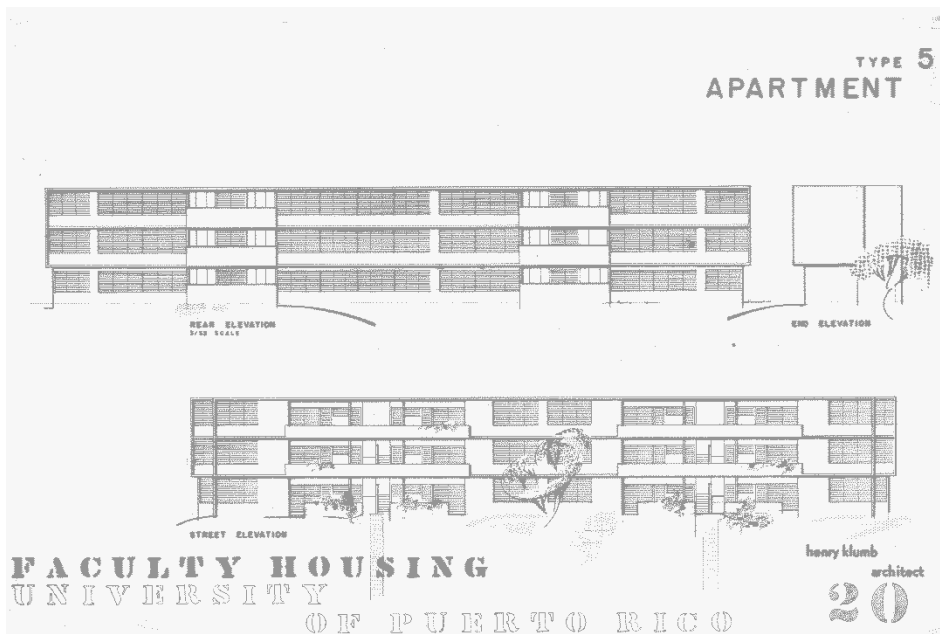


Image 16: Photograph, Faculty Housing, University of Puerto Rico-Río Piedras. Source: AACUPR: HKI0011\_F0001: The Office of Henry Klumb, 1946-1952.



Image 17: UPR Clock Tower, 2013 (built 1936). Photographer: Linda Levin.



Image 18: UPR Aerial View, 1948. Photographer: Charles Rotkin. Source: AACUPR



Image 19: " Proposal for Physical Development Plan" for the University, Milton Cobin, 1947. UPR-Río Piedras. Source: Arango, p.92

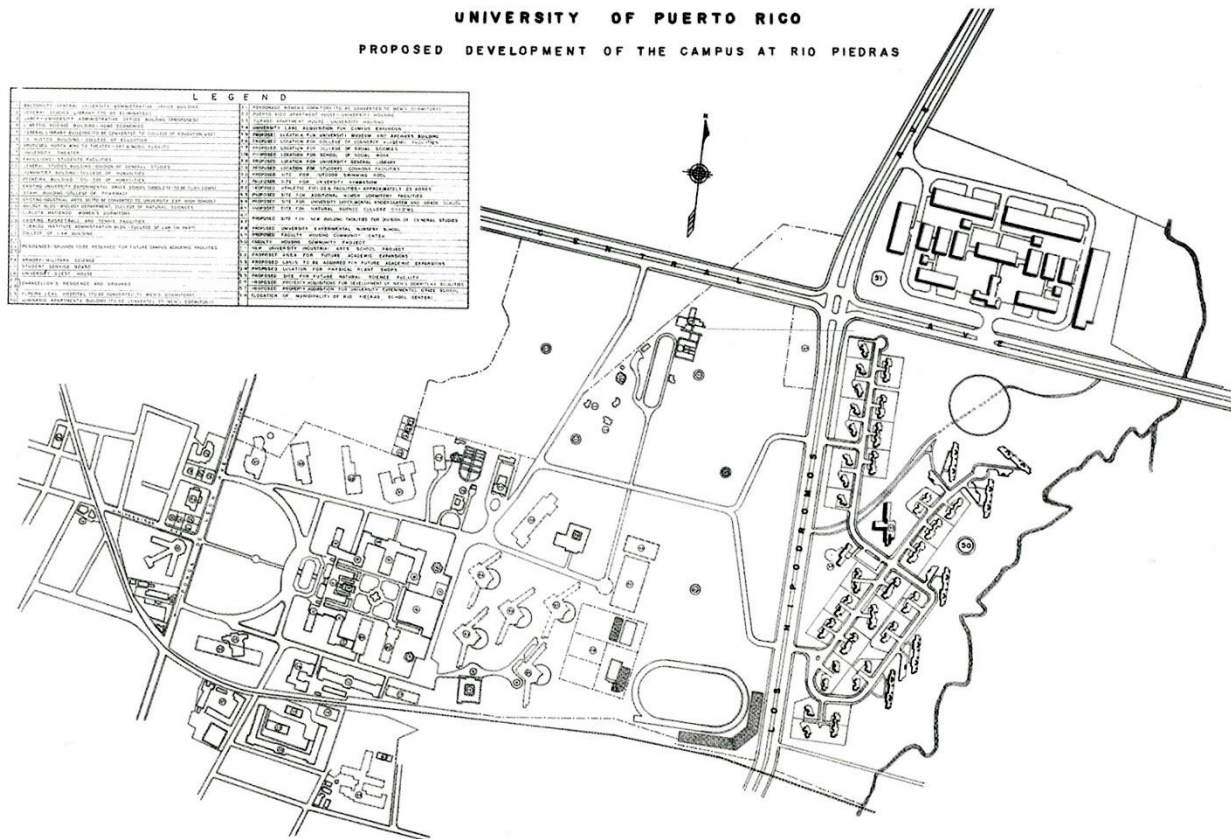


Image 20: "Preliminary Master Plan Study, Henry Klumb, 1948. UPR-Río Piedras. Source: Arango, p.102

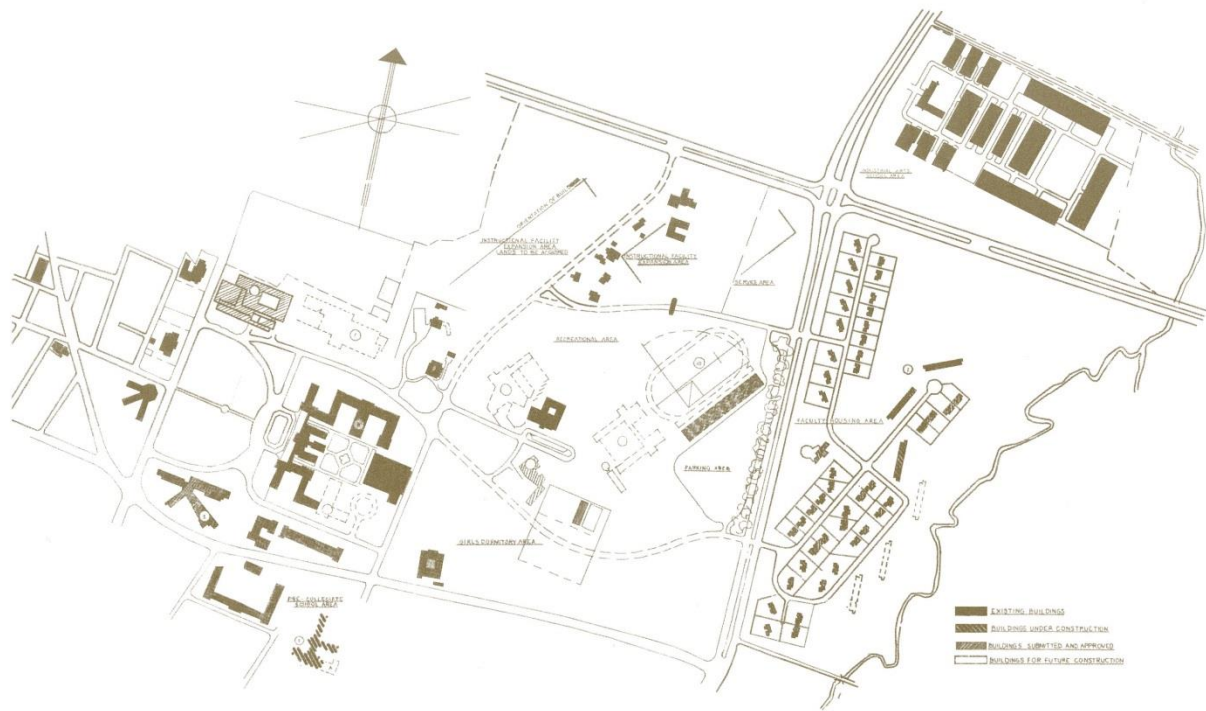


Image 21: "Ultimate Development Plant", Henry Klumb, 1953 Arango p. 110

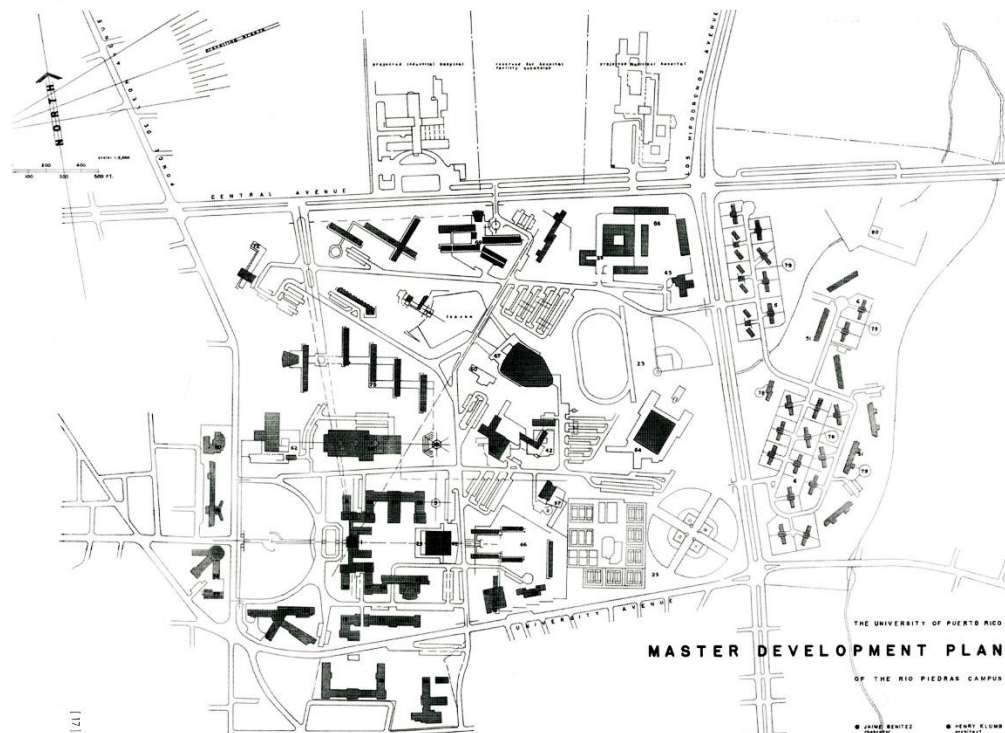
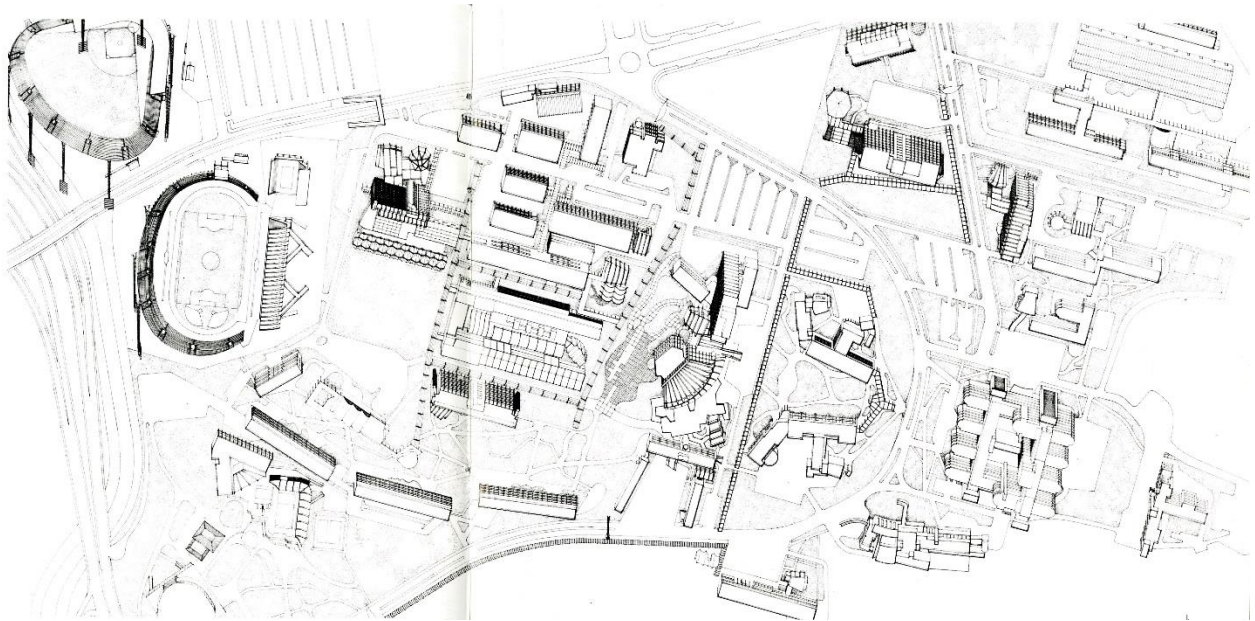


Image 22: UNAM central library and public green space





Image 23: Ciudad Universitaria de Caracas, Villanueva, 1946. Source: Villanueva p.54



Related Images (not cited in body of the chapter)

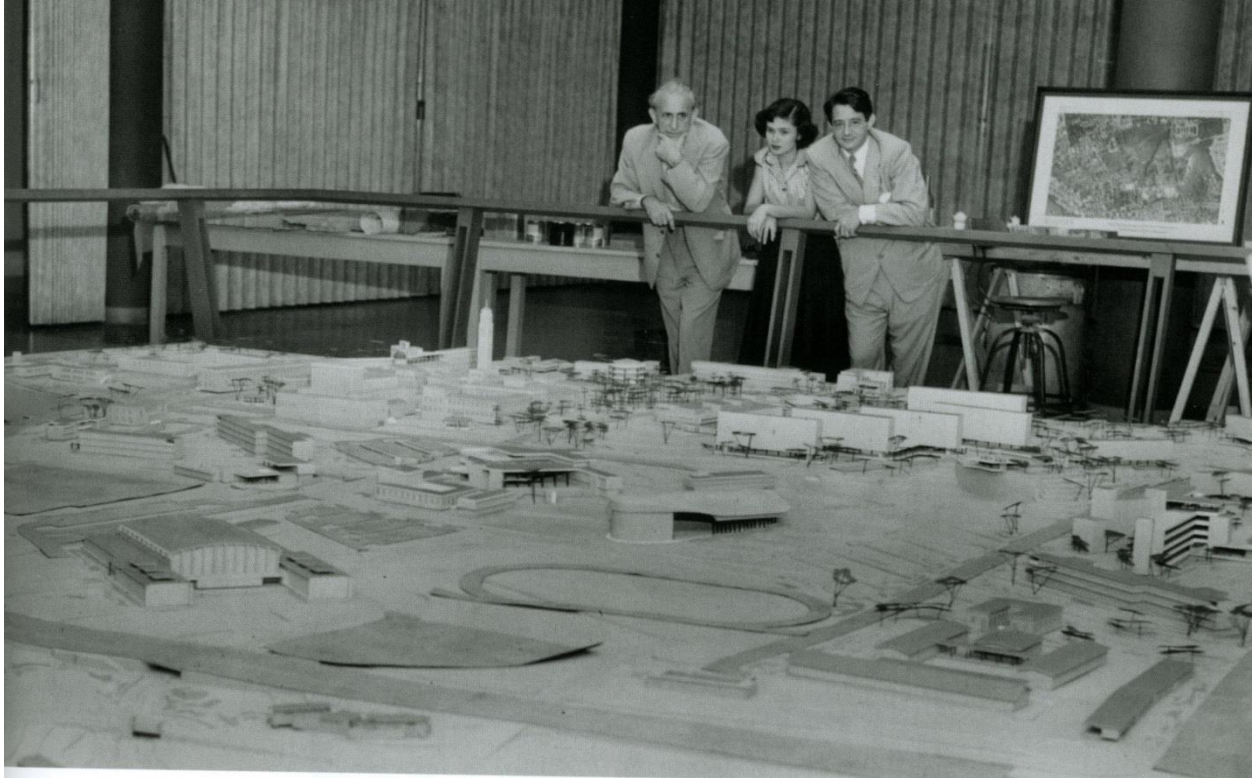
a) FLW (l) + Klumb (r)



b) Klumb at Taliesin West



c) Klumb + Benítez with model of UPR Master Plan



#### IV. Conclusions:

##### Klumb, Tugwell, and Lasting Significance in the Discourse of Modern Architecture

In her dissertation, “Permeable Walls and Place Recognition in Henry Klumb’s Architecture of Social Concern,” Rosa Otero concludes that “in Henry Klumb, we encounter an architect who masterfully recognized the spirit of place by understanding and interpreting its existing conditions (climate, topography, natural resources, etc.) and its people.”<sup>295</sup> In essence, Klumb successfully operated within the tension of local specificity and general mid-century modernist planning attitudes. As a chameleon of sorts, Klumb facilitated a practice interjected with gleanings from collaborations with Wright, Kahn, and Neutra, all the while maintaining a discrete identity as a designer, and creating spaces supportive of a new national identity.

Existing literature offers differing interpretations of Klumb’s legacy within the Modernist discourse. Klumb’s work is thusly interpreted to be at once a technological, functional, and phenomenological feat of *fusion* of a project’s parts, as distinct from harmony or unity of a project with its environmental and cultural context. Klumb outlined for himself and his designs a process whereby priorities and choices were a means to the end of inserting something that had appeared to have already existed. Otero argues that Klumb’s work was a “result of the rearranging and reintroduction not of building prototypes but of architectural elements. Individually, [these elements] emerged in various building types.”<sup>296</sup> Conversely, in his chapter “Breathing Walls” of the anthology *Architecture Oriented Otherwise*, what David Leatherbarrow

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<sup>295</sup> Otero, 297.

<sup>296</sup> *Ibid.*, 152.

coins Klumb's "Breathing Walls" function for him as a departure from Le Corbusier's *brise soleil*, literally embodying Klumb's thesis that "architecture fuses man with his environment."<sup>297</sup>

Whether one characterizes Klumb as operating within an existing design ethos, or departing from it, the notion that his work operates as a paradigm for architectural and environmental fusion is undeniable. It is within the techniques that Klumb employs to accomplish said *fusion*, that one clearly sees the influence of Wright and Le Corbusier. An acute awareness of landscape, and passive strategies to capitalize on prevailing breezes and solar exposure are at the heart of Klumb's process, undoubtedly a remnant from Wright's tutelage. Klumb's take on the *brise soleil* and the *quiebra sol*, for example, are likely inspired by Le Corbusier's idea of *respiration exacte*.<sup>298</sup>

While Klumb's mentors certainly influenced his practice, Leatherbarrow argues that he took some of their principles and pushed them beyond the original incarnation. "Clearly in Le Corbusier's postwar projects the *brise soleil* was as much an instrument of expression as of climate control..."<sup>299</sup> However, there is a difference between the aesthetic expression of a passive system, and its seamless integration into the building's essence. "In Klumb's architecture the breathing wall led to certain effects, it *produced* cool shadows, together with a measured supply of fresh air—donations for which all who use his buildings remain grateful. Certainly the building's elements are passive—they do not move or change position—but they can also be seen to be active if their 'behavior' is seen to result in the creation of qualities the

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<sup>297</sup> Klumb, "My Architectural Design Philosophy." Talk presented at the 65<sup>th</sup> annual FAIA convention, Oct. 2, 1979. Quoted in Otero dissertation, 322.

<sup>298</sup> The notion of using lungs and breathing as an analogy for the city. This was derived in tangent with the ideas for The Radiant City.

<sup>299</sup> Leatherbarrow, 29.

world lacks. This is to say, architectural elements are *passively active*. Seemingly at rest, they are secretly at work.”<sup>300</sup>

This “active passivity” also speaks to Klumb’s feat in understanding and capitalizing on existing site and cultural contexts. “Klumb called prevailing conditions *latent*. He took great pains to understand what was *given* in each location his buildings were to occupy.”<sup>301</sup> Rather than start anew, Klumb designed from a place of contextual privilege. In this spirit, Leatherbarrow argues that in this case, “perhaps a building’s productivity should be described as adjunctive or adjectival, since its chief role is to modify what it inherits.”<sup>302</sup> This *modus operandi* is particularly poignant in the case of designing for Puerto Rico; rather than introduce foreign form as reminiscent of colonial tendencies, Klumb elevated the inherent, and the innate, and in doing so, sanctified the island as it is and in its hopes for itself.

Klumb’s process and its physical manifestations illuminate an individual who has a profound respect for specific places and cultures, as well as one who “equally [possesses a] fervent desire for change, not for its own sake but to enhance human lives and sustain natural ecologies. And so, while this architecture is intimately connected to Puerto Rico, it has a much larger resonance and deserves international recognition.”<sup>303</sup> Gwendolyn Wright asserts that the beauty of Klumb’s work is that it simultaneously functions on a daily basis and endures beyond the conditions of the every day: “In achieving this quality, [his works] embody the creative dynamism of modernism.”<sup>304</sup>

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<sup>300</sup> Ibid., 37.

<sup>301</sup> Ibid., 34.

<sup>302</sup> Ibid.

<sup>303</sup> Wright, Gwendolyn. Xiv.

<sup>304</sup> Ibid.

## V. Bibliography

Álvarez-Curbelo, Silvia. "The Center of Everything: Consumption, Architecture, and City." *Ever New San Juan: Architecture and Modernization in the Twentieth Century*. Ed. Enrique Vivoni-Farage. San Juan: Archivo De Arquitectura Y Construcción De La Universidad De Puerto Rico (AACUPR), 2000. N. 228-275. Print. Translated by Andrew Hurley.

Bacon, Mardges. *Le Corbusier in America: Travels in the Land of the Timid*. Cambridge, MA: MIT, 2001. Print.

Baer, Werner, "Puerto Rico: An Evaluation of a Successful Development Program," *The Quarterly Journal of Economics* 73 (1959): 651

Banfield, Edward C. *Government Project*. Glencoe, IL: Free, 1951. Print.

Benítez, José Antonio. *Puerto Rico and the Political Destiny of America*. Houston? Tex.: n.p., 1958. Print.

Caplow, Theodore, Sheldon Stryker, and Samuel E. Wallace. *The Urban Ambiance: A Study of San Juan, Puerto Rico*. Totowa, N.J.: The Bedminster Press. 1964.

Carranza, Luis E. "Editor's Introduction: Expressions of Modernity in Latin American Architecture." *Journal of Architectural Education (1984-)* 55.4 (2002): 199-200. Web.

Chichester, Steven A. "'Make America Over:' Rexford Guy Tugwell and His Thoughts on Central Planning." Thesis. Liberty University, 2011. Print.

Colón Zayas, Eliseo R. "When I'm Here, I Feel that the Night is Always Young: San Juan and the Delights of an Architecture for Leisure and Diversion." *Ever New San Juan: Architecture and Modernization in the Twentieth Century*. Ed. Enrique Vivoni-Farage. San Juan: Archivo De Arquitectura Y Construcción De La Universidad De Puerto Rico (AACUPR), 2000. N. 168-199. Print. Translated by Andrew Hurley.

Deckker, Thomas. *The Modern City Revisited*. London: Spon, 2000. Print

Dizney Flores, Zaire Z.. "Caché vs. Casheríos: Urban Development, Distinction and Segregation in Puerto Rican Neighborhoods." *The Caribbean City*. By Rivke Jaffe. Kingston: I. Randle, 2008. 209-226. Print.

Frances- Gallart, Mary. "Ahora Seremos Felices: Models of Private Housing Developments in San Juan." *Ever New San Juan: Architecture and Modernization in the Twentieth Century*. Ed. Enrique Vivoni-Farage. San Juan: Archivo De Arquitectura Y Construcción De La Universidad De Puerto Rico (AACUPR), 2000. N. 30-73. Print.

"Frank Lloyd Wright: Life and Work." *Usonia House, 1939*. PBS and the Frank Lloyd Wright Foundation, May 1998. Web. 20 Nov. 2013. <<http://www.pbs.org/flw/buildings/usonia/>>.

"Frank Lloyd Wright - The Jacobs House 1936." *Frank Lloyd Wright - The Jacobs House 1936*. N.p., n.d. Web. 20 Nov. 2013. <<http://www.usonia1.com/index.html>>.

Garciavelez, Carlos. "Form and Pedagogy: An Atlas of the 20th Century University City in Latin America." The 25th Anniversary Celebration of the Druker Traveling Fellowship. Harvard GSD, Cambridge. 13 Mar. 2013. Lecture.

Goodsell, Charles T. "The Planning Process." *Administration of a Revolution; Executive Reform in Puerto Rico under Governor Tugwell, 1941-1946*. Cambridge: Harvard UP, 1965. 139-61. Print.

Gutenschwager, Gerald A. *Planning and Social Science: A Humanistic Approach*. Lanham, MD: University of America, 2004. Print.

Hertz, John B. "Authenticity, Colonialism, and the Struggle with Modernity." *Journal of Architectural Education (1984-)* 55.4 (2002): 220-27. Web.

Hines, Thomas S. *Richard Neutra and the Search for Modern Architecture*. N.p.: Oxford UP, 1982. Print.

Hostos, Adolfo De. *Historia De San Juan, Ciudad Murada; Ensayo Acerca Del Proceso De La Civilización En La Ciudad Española De San Juan Bautista De Puerto Rico, 1521-1898*. San Juan De Puerto Rico: Instituto De Cultura Puertorriqueña, 1966. Print.

Hyde, Timothy. *Constitutional Modernism: Architecture and Civil Society in Cuba, 1933-1959*. Minneapolis: University of Minnesota, 2012. Print.

Isenstadt, Sandy. "Between Worlds: A Place for Modernism." *Klumb: An Architecture of Social Concern*. Ed. Enrique Vivoni Farage. Rio Piedras: University of Puerto Rico, 2006. 221-52. Print.

Jaffe, Rivke, Ad De Bruijne, and Aart Schalkwijk. "The Caribbean City: An Introduction." Introduction. *The Caribbean City*. By Rivke Jaffe. Kingston: I. Randle, 2008. 1-19. Print.

Jarzombek, Mark. "(Un)Designing Mythologies: Puerto Rico and "Operation Bootstrap" Undone." *Thresholds* 21 (2000): 52-60. Print.

Leatherbarrow, David. "Breathing Walls." *Architecture Oriented Otherwise*. New York: Princeton Architectural Press, 2009. 21-42. Print.

Lewis, Gordon, 1968, *Puerto Rico: Freedom and Power in the Caribbean*. New York: Harper Torchbooks.

Lugo-Silva, Enrique. *The Tugwell Administration in Puerto Rico: 1941-1946*. Rio Piedras, PR: n.p., 1955. Print.

Maldonado-Denis, Manuel. *Puerto Rico; Una Interpretación Histórico-social*. Mexico: Siglo Veintiuno Editores, 1969. Print.

Marie Rodríguez, Luz. "Suppressing the Slum! Architecture and Social Change in San Juan's Public Housing." *Ever New San Juan: Architecture and Modernization in the Twentieth Century*. Ed. Enrique Vivoni-Farage. San Juan: Archivo De Arquitectura Y Construcción De La Universidad De Puerto Rico (AACUPR), 2000. N. pag 74-117. Print. Translated by Nathan Budoff.



Matos-Rodríguez, Félix V. *Women and Urban Change in San Juan, Puerto Rico: 1820-1868*. Gainesville [u.a.: Univ. of Florida, 1999. Print.

Mohammed, Asad. "Colonial Influences on Urban Form in the Caribbean." *The Caribbean City*. By Rivke Jaffe. Kingston: I. Randle, 2008. 24-42. Print.

Morse, Richard, 1971, "Trends and Issues in Latin American Urban Research, 1965-1970." *Latin American Research Review*. Part I, Vol. VI, no. 1; Part II, Vol. VI, no.2.

Mumford, Lewis. "*The Garden City Idea and Modern Planning*" from the 1946 *Introduction to Garden Cities of To-Morrow*. *The Urban Design Reader*. Ed. Michael Larice and Elizabeth Macdonald. London: Routledge, 2007. 43-53. Print.

Myhra, David. "Rexford Guy Tugwell: Initiator of America's Greenbelt New Towns, 1935 to 1936." *American Institute of Planners, Journal* 40.3 (1974): 176-88. Web.

Namorato, Michael V. *Rexford G. Tugwell: A Biography*. New York: Praeger, 1988. Print

Otero, Rosa D. "Permeable Walls and Place Recognition in Henry Klumb's Architecture of Social Concern." Diss. University of Pennsylvania, 2005. Print.

Pimlott, Mark. "Frank Lloyd Wright & Broadacre City." *Without and Within: Essays on Territory and the Interior*. Rotterdam: Episode, 2007. N. Print.

Prasertkul, Non Arkara. "Toward Modernist Urban Design: Louis Kahn's Plan for Central Philadelphia." *Journal of Urban Design* 13.2 (2008): 177-94. Web.

Rodríguez Suárez, Francisco Javier. "Sobre Henry Klumb." *La Torre* XIV.51-52 (2009): 157-77. [translated from Spanish by me]

Safa, Helen Icken. *The Urban Poor of Puerto Rico: A Study in Development and Inequality*. New York: Holt, Rinehart, and Winston, 1974. Print.

Sepúlveda Rivera, Aníbal. *Puerto Rico Urbano: Atlas Histórico De La Ciudad Puertorriqueña*. Vol. 4. San Juan: Carimar, 2004. 59-77. Print.

Sternsher, Bernard. *Rexford Tugwell and the New Deal*. New Brunswick, NJ: Rutgers UP, 1964. Print.

Sucher, Dorothy. "Greenbelt, Rexford Tugwell and the Hope Diamond." *Greenbelt News Review* [Greenbelt, MD.] 21 Mar. 2002, Volume 65 ed., No. 17 sec.: 1+. Print.

Torres Santiago, Jerry. "The Invention of the Gates of Paradise: Images, Architecture, and Context in the Development of Hotels in San Juan." Ed. Enrique Vivoni-Farage. San Juan: Archivo De Arquitectura Y Construcción De La Universidad De Puerto Rico (AACUPR), 2000. N. 118-167. Print. Translated by Andrew Hurley.

Tugwell, Rexford G., and Howard C. Hill. *Our Economic Society and Its Problems; a Study of American Levels of Living and How to Improve Them*. New York: Harcourt, Brace, 1934. Print.

Tugwell, Rexford G., and Michael V. Namorato. *The Diary of Rexford G. Tugwell: The New Deal, 1932-1935*. New York: Greenwood, 1992. Print.

Tugwell, Rexford Guy., and Salvador M. Padilla. *Tugwell's Thoughts on Planning*. [San Juan]: University of Puerto Rico, 1975. Print.

Tugwell, Rexford Guy. *Puerto Rican Public Papers of R.G. Tugwell*. San Juan, P.R.: Service Office of the Government of Puerto Rico: Printing Division, 1945. Print.

Tugwell, Rexford G., and Thomas E. Cronin. *The Presidency Reappraised*. New York: Praeger, 1974. Print.

Tugwell, Rexford Guy. *The Stricken Land*. Garden City (N.Y.): Doubleday &., 1947. Print

Tyrrell, Marygrace. "Colonizing the New Deal." *The Caribbean City*. By Rivke Jaffe. Kingston: I. Randle, 2008. 69-93. Print.

Tyrwhitt, Jaqueline, Josep Lluís Sert, and Ernesto N. Rogers, eds. *The Heart of the City: Towards the Humanisation of Urban Life*. 8th ed. Vol. CIAM. New York: Pellegrini and Cudahy, 1952. Print.

Vázquez, Calcerrada P. B. *Housing in Puerto Rico under the Mutual Aid and Self-help Program*. [San Juan?]: International Federation for Housing & Planning, 1960. Print.

Villanueva, Paulina, and Macía Pintó. *Carlos Raul Villanueva*. Boston, MA: Birkhauser, 2000. Print.

Vivoni-Farage, Enrique. *Klumb: Una Arquitectura De Impronta Social = an Architecture of Social Concern*. San Juan, P.R.: La Editorial, Universidad De Puerto Rico, 2006. Print.

Vivoni-Farage, Enrique. "Modern Puerto Rico and Henry Klumb." *Docomomo* 33 (2005): 28-37. Web.

Wirth, Louis, 1938, "Urbanism as a Way of Life." *American Journal of Sociology*, XLIV, 11-17.

Zucker, Paul. *New Architecture and City Planning, a Symposium*. New York: Philosophical Library, 1944. Print.