Puerto Rico's Duncan Del Toro (1919–1950) and Peripheral Modernity

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By

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DEDICATION

This is dedicated to Nicole A. Rodríguez Nigaglioni, for staying by my side during all the restless nights and weekends, for her unconditional support and for believing in me when I did not. For that and much more, I love you.
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ABSTRACT

PUERTO RICO’S DUNCAN DEL TORO (1919–1950)
AND PERIPHERAL MODERNITY

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Thesis Director: Dr. Dorothea Dietrich

This thesis studies the work of Duncan del Toro (1919–1950), the first industrial designer of Puerto Rico. After completing his undergraduate studies at the Carnegie Institute of Technology in 1942, del Toro returned to Puerto Rico to launch a design practice at a time when the island was on the verge of modernization. Del Toro was part of a generation dedicated to transforming Puerto Rico. To understand del Toro’s design work and his achievements it is essential to understand his context. Using a center/periphery approach, this thesis describes the milieus that influenced him growing up and in his career. I will attempt to show how del Toro’s career was defined by the political, cultural and social dynamics between periphery and center. I seek to provide an understanding of the reality of a modernist designer who trained in the center—the United States—but lived and worked in the periphery—Puerto Rico—and highlight the influences that defined his context. Del Toro’s work is looked at through a set of design principles that guided his career: the use of local materials, training of the workforce, the belief in local
industry, the embrace of the values of modernity and the transculturation of such values through a unique local expression.
The cultural idiosyncrasy of Puerto Rico—shaped over centuries of colonial rule—resulted in a bilingual state that although it remains occupied by the United States, Spanish is the official language. Since the topic of this thesis is a Puerto Rican figure and his context, most of the sources consulted were in Spanish. Any translated quotation from a source originally published in Spanish is indicated in the notes. All translations are by the author, unless otherwise specified. Translations are noted in the first appearance from each source, not so in subsequent citations from the same source.

Because of the dearth of documentation of Duncan del Toro’s work, I have noted what and where original materials were found. All figures used in this thesis—unless otherwise indicated—are from the del Toro family archive, which was digitalized in high resolution by the author. All rights over the images are reserved by the del Toro family and thus cannot be reproduced, adapted, distributed, published or displayed without consent from the family.
INTRODUCTION

On a summer night in 1970, a fire erupted in a furniture shop in the corner of Carpenter Road and Barbosa Avenue in the Barrio Obrero neighborhood of San Juan, Puerto Rico. The fire consumed everything in its path. The cause of the fire was never found. That night almost all evidence of the work of Puerto Rico’s first industrial designer, Duncan del Toro (1919–1950), was lost.

Del Toro died in 1950, twenty years before the fire, but his widow kept the business running. For a while the shop continued producing her late husband’s designs. Del Toro opened his shop less than a decade before his death, circa 1946, with hopes of contributing to the growth of Puerto Rican industry, realizing an aspiration that can be traced back to his student years at the Carnegie Institute of Technology (CIT) in Pittsburgh. After completing his degree in industrial design in 1942, del Toro returned to a Puerto Rico—controlled by the United States since 1898—stricken by poverty and unemployment as a result of decades of colonial abandonment. He faced an audience to whom an industrial approach to design was an obscure concept. At first, his ideas of improving life through design, the use of local materials, innovation and education fell on deaf ears. Nevertheless, his arrival coincided with the beginning of a government program designed to fix those issues through industrialization and manufacturing.\(^1\)
Del Toro was born on December 30, 1919 in San Juan, Puerto Rico. Son of Dr. Jorge del Toro, a well-known surgeon from Puerto Rico and Sarah Frances Duncan of Atlanta, Georgia, and nephew of Emilio del Toro, Chief Justice of the Supreme Court of Puerto Rico (1922–1943). He ventured into art and design at an early age, following in his great-grandfather, Domingo del Toro’s footsteps. The former introduced young del Toro to the craft of woodworking and set up a woodshop for him in his house in Barranquitas, Puerto Rico. It was there that del Toro made his first works in wood and bull horn. From his mother we know that del Toro spent some time in the United States during his childhood, it is unclear how much, but enough to be featured in The Constitution newspaper of Atlanta in 1932 with a covered wagon he built with other children (fig. 1). Del Toro was 7 seven years old.2 We can speculate that having American relatives, in addition to the political relation between Puerto Rico and the United States, del Toro spent his childhood back and forth between the island and the mainland.

In 1936, at the age of sixteen, del Toro was chosen to go on a trip to Alaska as part of a travel scholarship awarded by American millionaire George E. Buchanan. The deal with Buchanan’s Alaska Trip for Boys and Girls was that Mr. Buchanan covered one third of the costs, the kid’s parents a second third and the rest needed to be paid by the traveler himself with money earned by some kind of work. Del Toro raised his part of the funds by selling bird sculptures carved out of bull horn. The trip to Alaska was a key moment in del Toro’s development. According to del Toro, it was the preparation for the trip that determined his vocation for design.3
Del Toro was part of a generation dedicated to transforming Puerto Rico. He was one of many, part of a phenomenon. Indeed, the story of his life and work embody the challenges of an entire generation of Puerto Rican and Latin American designers. To understand del Toro’s design work and his achievements it is essential to understand his context. I will use a center/periphery approach to describe the milieus that influenced him growing up and in his career. I will attempt to show how the tensions that exist in the periphery, its inherent characteristics and the influence of the center resulted in an environment in which del Toro was able to develop his design career. The focus on context is not to be taken as a simplistic view of a history. Argentinian designer Silvia
Fernández explains that when speaking of design, it is imperative to consider the influence of the “macroeconomics, politics and social studies of an activity that has its origin in the productive socio-economic development of each country.” ⁴

This is especially true when considering that industrial design emerged in many Latin American countries and other peripheral nations under the influential thrust of the growing power of the United States that commanded a center stage. Interests from that center, i.e., the United States, backed a big part of the modernization and industrialization initiatives launched by the governments of many of those countries during the mid-twentieth century.⁵ It was a time when industrial design was part of public policy. Industrial design was one step in the process of developing local manufacturing industries that could substitute imports from the center where most manufacturing took place. Peripheral governments invested in designing products that local industries, state-owned in some cases, could manufacture to supply the local market, and in the best cases, export to foreign markets. Therefore, to talk about early industrial design in Puerto Rico it is essential to talk about context. In Puerto Rico, programs focused on designing for industries that would replace the need for import were developed and implemented in the 1940s. In most Latin American nations similar programs were instituted much later, typically only in the 1950s and 60s.⁶ By then Puerto Rico had abandoned the import substitute model for a foreign investment model. The half-done nature of the modernization program is not exclusive to Puerto Rico. In fact, it fits a common description of the periphery. As Mary Louise Pratt observed: “truncated, partial,
incomplete, fragmented’—these are the terms used to describe Latin American modernity.”

Our understanding of the periphery is always in relation to something else. In the case of Latin America it is in relation to the United States, perceived as a paradigm of modernity. Thus, to understand how these terms have come to describe the periphery, we must first look at the project of modernity in the center. Pratt’s model is useful: she lists a set of characteristics for modernity in the center. First, she states that in the center, modernity possess a series of fixed traits: democratic, industrial, distinctive of “high/low culture,” urbanized, market and capital-led, advocate of “the bureaucratization of society,” scientific, rational, individualistic, progressive, and believer in “change as an inherently positive value.” The second feature of modernity in the center, according to Pratt, is the “varying narratives of origin” that allows it to be continuously reframed to fit the point being made. Third, Pratt points to the necessity of having an Other to relate to in order to validate its existence. Next, Pratt lists the liquidity of modernity as its fourth feature. She states: “[an] object of study can be centralized and recentralized in many ways and combinations, depending on the argument that one wants to make.” This helps to promote the idea of modernity as a universal truth, applicable anywhere in space and time, thus Pratt’s fifth feature is the understanding that “modernity is a diffusionist project, assigned to interpellate others from a center.” Pratt finishes her description pointing to modernity as a contradiction, wanting to spread its project while depending on the existence of the Other, the periphery.
In this context the periphery emerges as “outside and behind...‘Primitive’ and ‘tribal’ mark the outside of modernity; ‘backward’ and ‘underdeveloped’ mark that which is behind,” always with the illusory hope that it can meet up with the center. Nevertheless, the underlying reality is that the center has no desire for the periphery to move towards it, for that would destabilize the power construct that allows it to exist.

Scholars writing from the periphery challenge the notion of backwardness and the center’s self-proclaimed power to delineate what the periphery is and what it is not. Pratt presents three descriptions of the center/periphery relation common among those who dismiss the center’s rationale: “contradiction, complementarity, and differentiation.” When she speaks of contradiction she refers to how the expansionist agenda of modernity is inconsistent with its own claim of democracy and individualism, something that is “systematically invisible at the center.” Nevertheless, the import of modernity is an inevitable truth for the periphery. We must learn to live with it. How we negotiate our own truth alongside with modernity is what Pratt describes as complementarity. The concept of transculturation, for example, developed by Cuban anthropologist Fernando Ortíz explains how Latin Americans have transformed their culture in coexistence with imported concepts from the center. Rodrigo Montoya of Perú defines “modernity as self-determination and autonomy, and modernization as a capitalist development and the Western civilizing project.” Pratt cites Montoya to explain that while the center’s agenda aims to develop both simultaneously, in the periphery: “it is impossible to achieve modernity through modernization.”
I will illustrate how Pratt’s definition of peripheral modernity is visible in the real scenario of Puerto Rico using del Toro’s career and the contextual reality that shaped many of his decisions. I do not plan to dwell on the tensions between center and periphery, nor qualify the benefits or defects of the relation of the two. What I aim to do is to describe a reality using “empirical and conceptual” definitions that are proper to the periphery without forcing a central paradigm onto cultural artifacts. My thesis seeks to provide an understanding of the reality of a modernist designer who trained in the center—the United States—but lived and worked in the periphery—Puerto Rico—and highlight the influences that defined his context. My thesis and my discussion of del Toro is about the understanding of the reality of innovation in the periphery, not about the description of the forces of power in culture. The documentation of del Toro as a peripheral figure evidences realities of living in the periphery while seeking to innovate. Del Toro’s voice is documented in only a few newspaper articles published about him during his life, most date to the time of his return from Pittsburgh as the first academically trained industrial designer of Puerto Rico. His design work (what wasn’t erased by the fire) survives in a collection of drawings and photographs kept by his family. The evidence found is not enough to examine his enterprise and his convictions without speculation, not because of a lack thereof, but simply because of insufficient proof. The lack of documentation is not to be taken as a reflection of the importance of del Toro’s contribution, for his success can be measured by the longevity of his business, established in his lifetime and carried on by his family for twenty years. Nevertheless, most of his work was lost and the work of his contemporaries with which it could be
compared is not documented. Therefore, it is not possible to evaluate del Toro’s work in terms of innovation, good or bad design.

I will look at del Toro’s contribution as a pioneer through what I have been able to find. In summary, it tells us that he returned to Puerto Rico with aims to develop an industrial design practice; that he set forth with a set of design principles grounded on concepts of modernity that had come into view in Puerto Rico during his childhood and teenage years, and that he had learned during his studies at CIT, which positioned him in line with the cultural trends in and out of the island; that he designed furniture and interiors (with various wealthy families among his clients); and that he opened a furniture factory and showroom. The first half of his career, from 1942 through 1945, will be explained using primary and secondary sources including: interviews with del Toro’s son and daughters, periodicals from the era, as well as letters, photographs, and drawings found in the Architecture and Construction Archive of the University of Puerto Rico.

Further on, I will discuss his work from 1946 through 1950 using a collection of design drawings and photographs found in the family archive. Dated work prior to 1946 was not found. The family collection is comprised of approximately 132 design drawings and sketches of furniture and interiors. Thirty-four clients were identified from the title blocks of the drawings. By the nature of the objects drawn, I could determine that twenty-one of those were corporate clients, including restaurants, retail stores, and bars, among others. The other eleven were private individuals (including del Toro’s own family) for whom he designed furniture, and most of all, residential bars. The only existing furniture found was a cocktail wagon and a sideboard in the family collection. Besides two
establishments that advertised del Toro’s design in the press, a bar and mural for the Arecibo Country Club, and a few objects visible in family photographs, we cannot securely identify which of the drawings in the family archive were taken to completion and which were not. The family collection also includes examples of del Toro’s paintings, sculptures, artistic drawings and a graphic design sketch, but this research focuses exclusively on his industrial and interior design work.

The lack of available evidence hints at the importance given to del Toro’s context in this thesis, for (beyond the natural consequences of a fire) the absent interest in safekeeping and documentation is also an indicator of the peripheral mindset. In Puerto Rico, like in many other Latin American countries and the periphery in general, the history of design has gone mostly unrecognized and undocumented. However, this is not the case for art and architecture. German designer Gui Bonsiepe—who worked on the Chilean government’s design program under President Salvador Allende (1970–1973)—explains that art history approaches design simply as the expression of a style, while architecture history reduces it to a lesser, second rate practice in service of the first.23 Design cannot be considered an “isolated cultural phenomenon,” adds Bonsiepe.24 Its point of difference is the convergence of culture, economics and politics.

The lack of historical documentation that the design industry of Puerto Rico suffers could not be more clearly explained than in Fernández’s introduction to the research project Nodo Diseño América Latina (NODAL) collected in the book Historia del diseño en América Latina y el Caribe: Industrialización y comunicación visual para
la autonomía (History of Design in Latin America and the Caribbean: Industrialization and Visual Communication for Autonomy):

The countries of Latin America and the Caribbean share certain similarities and structural affinities that allow their design past to be integrated into a single work. Sometimes, our shared history is unknown to the local gaze. This work aims to unveil that common trajectory and its peculiarities. The design experiences of Bolivia, Costa Rica, El Salvador, Guadalupe, Guatemala, French Guiana, Haití, Honduras, Martinica, Nicaragua, Panamá, Paraguay, Perú, Puerto Rico and Dominican Republic are not included in this partial panorama. The participating countries count with design experiences linked to the economic development processes of the decade of 1950 that have been documented.25

Latin American design, as Fernández states, is a poorly researched field with—before the NODAL book—nothing but a few brief publications that only tell a broad generalization of the story. A case to this argument is Puerto Rico, where until recently it has not been a common practice to document design.

On the topic that concerns my research—industrial design—but more specifically furniture design, only two books have been published. One of which, *Puerto Rico Clásico: Naturaleza, forma y espíritu; legado del mueble puertorriqueño* [Classic Puerto Rico: Nature, form and spirit; legacy of Puerto Rican furniture] (2005) by collector Edgardo Vega Rodríguez, lacks sufficient evidence to support its interpretations. The other, *A History of Puerto Rican Furniture: Beginnings and Development* (2000) written
by historian Juan Hernández Cruz, focuses on the work of artisans—some of whom produced almost industrial quantities of furniture—in the west side of the island. Nevertheless, both books present a vast array of figures that illustrate the eclectic offerings of the Puerto Rican market in the twentieth century.

Unfortunately, del Toro’s work has fallen victim to what Linda Tuhiwai Smith, Pro Vice Chancellor Māori at the University of Waikato, New Zealand and a descendant of two different indigenous groups from modern New Zealand calls a common effect of colonialism where “your history is erased before your eyes, dismissed as irrelevant, [and] ignored.” 26 Although much of the documentation of del Toro’s work was lost in the fire, it was also lost in a larger sense even before then, as described by Smith—because of the typical lack of interest by the center where history tends to be written and recognized, even about work done in the periphery. My thesis aims, through the documentation of del Toro’s work, as Ruedi Baur explains, to acknowledge “places, signs and objects that were not before.” 27 The study of del Toro’s history can be, following Bonsiepe’s interpretation of Nietzsche, more than a collection of facts and can become a relevant tool for the present. 28 But beyond a tool for the present, “history is mostly about power.” Smith denounces that history is the tale of the dominant power and argues that through history the colonized are “marginalized and ‘Othered’.” Even when the colonized rise up to tell their story it does not mean that justice is made, since the colonizer still controls history. 29

Borrowing a question postulated by Bonsiepe, “why write a history (never the history)? With what interests write it?” 30 I consider that it is important to write about del
Toro for he was among the first Puerto Ricans to put forth the idea of design for industry and design as a tool for social transformation in a time where that position was mostly reserved for foreign professionals who came to Puerto Rico to test and develop their ideas. I hope that my research can establish a baseline of what the design industry looked like in Puerto Rico in the 1940s so that others can build on it and formulate follow-up questions to how that got us to where we are. Bonsiepe in an interview gives an answer quite suitable for my research, observing that, “the center knows nothing about the periphery, and the periphery does not know anything about itself.”

This thesis is an attempt at a definition of Puerto Rico’s design identity, which is determined in big part by its context, or as Bonsiepe puts it: “is constructed continuously in a permanent exchange of ideas that emerged from other contexts.” I believe that in order to be able to assess the contributions of designers like del Toro it is necessary first to collect and expose what evidence is left and establish how he and others like him steered through the circumstances of their context.

2 “Covered Wagon at Tenth,” in Constitution (Atlanta, GA), May 22, 1932, p. 8B.

3 Jorge Felices, “Un viaje decidió la vocación de Duncan del Toro” [A trip decided the vocation of Duncan del Toro], El Mundo (Puerto Rico), September 26, 1942, p. 5.

4 Silvia Fernández, introduction to Historia del diseño en América Latina y el Caribe: Industrialización y comunicación visual para la autonomía [History of design in Latin America and the Caribbean: Industrialization and visual communication for autonomy], ed. Silvia Fernández and Gui Bonsiepe (Sao Paulo: Editora Blücher, 2008), 18. Translated from the original Spanish. All translations by the author, unless otherwise noted.


6 Fernández, 19.


8 Ibid., 23.

9 Ibid., 24.

10 Ibid., 25.

11 Ibid., 26.

12 Ibid., 27–28.

13 Ibid., 28.

14 Ibid., 29.

15 Ibid., 30; Gui Bonsiepe, preface to Historia del diseño en América Latina y el Caribe: Industrialización y comunicación visual para la autonomía [History of design in Latin America and the Caribbean: Industrialization and visual communication for autonomy], ed. Silvia Fernández and Gui Bonsiepe (Sao Paulo: Editora Blücher, 2008), 14.

16 Pratt, 31.

17 Ibid., 32.

18 Ibid., 32.

19 Ibid., 33.

20 Ibid., 34–35.

21 Ibid., 34.

22 Ibid., 32.

23 Bonsiepe, 10.

24 Ibid., 13.

25 Fernández, 18.


27 Ruedi Baur, “Diseño global y diseño contextual” [Global design and contextual design], in Historia del diseño en América Latina y el Caribe: Industrialización y comunicación visual para la autonomía [History of design in Latin America and the Caribbean: Industrialization and visual communication for autonomy], ed. Silvia Fernández and Gui Bonsiepe (Sao Paulo: Editora Blücher, 2008), 234. Translated from the original Spanish.

28 Bonsiepe, 13.
29 Smith, 34.
30 Bonsiepe, 11. Translated from the original Spanish.
32 Bonsiepe, 11.
CHAPTER 1—TWO WORLDS, ONE DESIGNER:
CULTURAL AND POLITICAL CONTEXT OF PUERTO RICO
AND THE UNITED STATES (1919–1938)

To understand Duncan del Toro’s work as a designer we need to look at the context of where he was born in 1919 in San Juan, Puerto Rico and his upbringing. Del Toro was born during what Puerto Rican historian Arturo Morales Carrión calls the age of “imperialism of abandonment,” referring to the first thirty years of the United States rule over Puerto Rico. The island of Puerto Rico has been under foreign rule ever since the arrival of the Spanish Conquistadors to its shores in 1492. It remained a Spanish colony until 1898 when it was turned over to the United States as war booty of the Spanish American War. In 1900, with the Foraker Act, the island was officially declared a non-incorporated territory, i.e., a colony. The relationship between Puerto Rico and the United States will be addressed in this chapter to illuminate the social and political environment that shaped young del Toro and how the cultural duality in which he was raised influenced his goals and principles as a designer.

Del Toro’s family lineage, which goes back to a Captain of the Spanish Conquista, placed him in a position different from that of the majority of Puerto Rican society. However, the policies of the new colonial power disregarded for the most part the economic power that educated criollos had cultivated during the last decades of Spanish rule. Del Toro was part of the first generation of Puerto Ricans to have
American citizenship by birth. His generation had to deal with the compromise of Americanization but embraced the opportunities of an American citizenship without obliterating its Hispanic roots. In the realm of culture, the dual alliances meant the coexistence of different stylistic traditions. In the case of del Toro, it meant that his development showed the influences of Spanish *Isabelino* styles, American art deco, and the influence of European design trends that migrated to the United States with the advent of Nazi Germany.

**1.0–PUERTO RICO: 1898–1938**

Politics and economics will be discussed in two phases, *before* and *after* the stock market crash of 1929 because the United States governance politics over Puerto Rico changed dramatically during the Great Depression.

**1.1–1898–1929**

In 1897 Spain ratified the Autonomic Charter granting Puerto Ricans a series of rights including: representation in the local legislature, the right to vote, and control over various municipal matters. Therefore when the island was ceded to the United States in the Treaty of Paris of December 10, 1898, it generated mixed opinions among Puerto Ricans. While some, mostly the *criollo* class that was the ruling class, saw it as a step back because it represented a loss of newly found rights, other groups rejoiced over the expectations of progress that the American presence would bring. The first thirty years of American colonialism in Puerto Rico are known for the Americanization agenda. With
the installment of a civil government in 1900 through the Foraker Act, the United States initiated a proselytization campaign and sanitization program to persuade Puerto Ricans to embrace the “American way.” People of the island were indoctrinated to the democratic and republican values of the empire, even when the indoctrination presented a clear contradiction of such values in practice.⁴⁰

1.1.1–INSULAR ECONOMY (1898–1929)

When the United States began its rule, Puerto Rico’s economy was mostly dependent on agriculture; a banking system had only begun to emerge and there were no big investments by large corporations.⁴¹ On the other hand, the United States had a capitalist industrialized economy in expansionist mode, with capacities for large productions.⁴²

American investors saw big opportunities in the new acquired territory and by 1930 had invested somewhere around $120 million, mainly in agriculture meant for export. Similar amounts were invested in countries like Venezuela and Perú, which had oil reserves. To them, Puerto Rico offered land that was cheap and fertile, skilled and abundant manpower, open doors to the American free market and a supporting government.⁴³ Although American investments spread across the board of the Puerto Rican economy, the biggest industries that grew during this time were the production of unrefined sugar and tobacco that was shipped to the United States to be processed. There was a big demand for both products throughout the United States but prices were high
because of a tax imposed upon entry. The Puerto Rican crops were exempt of the tax, after 1902, since they were considered American products.\textsuperscript{44}

During this period, the Puerto Rican economy was dominated by absent corporations that managed more than half of the island’s sugar production.\textsuperscript{45} The profits from their operations were exported out of the island. Primarily, three corporations controlled the sugar industry. By 1931 absent corporations owned almost ten percent of the wealth in Puerto Rico and almost twenty percent of the value of land.\textsuperscript{46} The location of big sugar mills in coastal towns provoked the migration of many Puerto Rican families from the inland, where coffee was produced during Spanish rule.\textsuperscript{47} The latter was in decline after a tax imposition and two devastating hurricanes in 1899 and 1928.

This economic model, focused on one or two products—sugar and tobacco, most of which were for export—resulted in shortage of eatable products to feed the local population, leaving many Puerto Ricans suffering from famine.\textsuperscript{48} By 1926 the unemployment rate had risen to thirty percent.\textsuperscript{49} Many, promoted by the government, found their solution in migration, mostly to the United States.\textsuperscript{50}

\textbf{1.1.2—INSULAR POLITICS (1898–1929)}

In 1917, on the eve of the United States’ entrance into the First World War, the United States Congress passed the Jones Act that granted American citizenship to all Puerto Ricans.\textsuperscript{51} Prior to the granting of citizenship, the political structure was shaped by the Foraker Act, which concentrated power in positions appointed by the President of the United States.\textsuperscript{52} The Foraker Act had made evident that the occupation of Puerto Rico
was based on an approach of “cultural and racial superiority.” In general, Puerto Ricans were perceived as incapable of managing their way out of poverty or governing themselves, a perception which did not take into account an economic structure established by the colonial powers that promoted the exportation of capital in lieu of local investment.

With the Jones Act the governor remained appointed by the President but Puerto Rican representation in the legislative branch grew significantly. Every four years, Puerto Ricans—men twenty-one years old and over—would vote for nineteen Puerto Rican members of the new Senate and thirty-four members of the House of Representatives, also Puerto Ricans.

Local politics were divided up by views on the political status of Puerto Rico vis-à-vis the United States; a partisan model still in use today. Parties formed and dissolved, defending one of the three ever present options to resolve the issue of the island’s political status: statehood, independence or autonomy.

1.1.3—EDUCATION AND CULTURAL RESPONSES (1898–1929)

Education reform was a big part of the “Americanization” program. Access to vast funds allowed for big chunks of the government budget to be assigned to education, which was widely welcomed by the people of the island. The new education programs resulted in the minimization of illiteracy “from 80 percent in 1899 to 41 percent in 1930 and 35 percent in 1935.” The first superior education institution was created under these reforms. The University of Puerto Rico (UPR) in the town of Río Piedras (today
part of the capital San Juan) was founded in 1903, originally for the training of teachers. In 1912, in the western town of Mayagüez, the Agriculture and Mechanical Arts College was established. The same year, the Polytechnic Institute in San Germán (southwest of the island) opened its doors as the first private institution for superior education.\textsuperscript{59}

As part of the education reforms English was imposed as mandatory language for all schools; however, this did not sit well with most of the population. Beyond schools, work in the public sector was reserved for those that spoke English.\textsuperscript{60} With decrees like this one, Americans established cultural, social, political and economic dominance, and diminished the cultural values set by the former dominant class.\textsuperscript{61} Victor S. Clark, author of multiple education reforms for the military government, wrote: “If we Americanize schools…the island’s sympathies, point of views and attitudes will turn…essentially American.”\textsuperscript{62}

Many protests and strikes were organized to resist English-only education. On the institutional level, the Ateneo Puertorriqueño took on a key role in the defense of Puerto Rican culture and the Spanish language. Founded in 1876, the Ateneo Puertorriqueño was created to “fulfill the profound need felt by the intellectual elite of the country to elevate the educational level of their fellow countrymen, to increase their cultural wealth, push forward liberal ideas and affirm the national Puerto Rican personality.”\textsuperscript{63}
1.2–1930–1938
1.2.1–PUERTO RICO AND THE GREAT DEPRESSION: ECONOMY
AND POLITICS (1930–1938)

The era of the Great Depression is used as a milestone in describing the context in which del Toro grew up. President Franklin D. Roosevelt (1882–1945) extended the reforms of the New Deal program to Puerto Rico to boost economic recovery through government intervention. Although most New Deal measures were not implemented as is on the island, special plans were developed for Puerto Rico. The Federal government created two agencies to handle the effects of the crisis on the island, the Puerto Rico Emergency Relief Administration (PRERA) created in 1933 to execute short-term solutions, and the Puerto Rico Reconstruction Administration (PRRA) created in 1935, as a stronger long-term endeavor.

Many of the PRRA actions came from ideas brought on by key players of the political minority at the time, among them Dr. Carlos Chardón and Senator Luis Muñoz Marín. Chardón and Muñoz Marín were part of a political sector that believed that the problems of Puerto Rico could not be solved without a drastic reform of the economic model under which the big sugar corporations operated. Their ideas, although rejected by the local conservative majority in power, were received by willing ears in Washington, DC, since the gear of economic development in the United States was shifting towards manufacture. Following some of their guidelines, the PRRA was able to create 60,000 jobs, which was almost half of the sugar industry workforce. During the
PRRA era the public sector of the economy grew to become a determinant player of the island’s economy and it created laws to regulate the sugar industry.  

1.2.2–CULTURAL RESPONSES (1930–1938)

In the 1920s, the struggles to rescue the language and values that defined Puerto Ricans as a Hispanic people continued. In 1936, a strike was held in the Central High School in San Juan, where del Toro was a student. The protest began with the termination of a Spanish teacher who spoke out in legislative hearings against the imposition of English. A colleague of hers, Ricardo Alegría organized the strike. He is remembered today for his efforts in the creation and direction of the Institute of Puerto Rican Culture in 1955. The Spanish teacher, Inés María Mendoza, later married Luis Muñoz Marín, becoming the first lady of the first elected governor of Puerto Rico.

A new generation of writers known as the Generación del ’30 (Generation of 1930) resorted to journals founded by them to publish their ideas. Revista Índice (1929–1931) was the top publisher of authors like Antonio S. Pedreira, professor of the University of Puerto Rico, among others. Their generation believed in celebrating Hispanic heritage while embracing the modernizing effects of the American regime but not its colonial practices. In Insularismo (1935), Pedreira documents the values he understand shaped the “Puerto Rican soul” and studied the evolution of the Puerto Rican people and their identity: “We have an unmistakable manner of being Puerto Rican, but this manner, which could not benefit from a full development, is presently damaged by the transformation forced upon it by the chemical process of a new culture.”
2.0–COEXISTENCE OF STYLES

2.1–ARCHITECTURE

To characterize the design landscape of the first third of the twentieth century in Puerto Rico, during which del Toro grew up, has not been an easy feat for historians, because it is impossible to point to a singular style that describes the environment of the era. Puerto Rican architect and historian Jorge Rigau, lists “Vienna, the classical world or the Orient” among the visual lexicons combined in the local architecture of the time.\textsuperscript{74} To add to the amalgam of European styles, after 1898, Puerto Ricans “faced key identity issues of cultural assimilation” brought on by the Americanization program.\textsuperscript{75}

As a public art form that establishes a common visual context, architecture addresses these cultural tensions in Puerto Rico. Puerto Rican historian Silvia Álvarez Curbelo finds that architecture exposes, beyond its physical and aesthetic values, a complex system of commercial, political and cultural principles.\textsuperscript{76} She says:

Architectural styles…have been a chronicle of Puerto Ricans’ searches for identity; the complexity of styles has reflected the real and imaginary relationships that we have had with our near and distant environments: the Caribbean, Latin America, Spain, the United States. Our styles have registered the evolution of our paradigms of identity.\textsuperscript{77}

According to Argentine historian Rafael E.J. Iglesia, “cultural identity and its relationship to the construction of a habitat,” especially in Latin America, is related to the constant threat of cultural annihilation posed by external powers. This in itself has led to an infatuation with a foreign definition of modernity that has led to an incomprehensible
state of identity. Nevertheless—according to Puerto Rican architectural historian Enrique Vivoni Farage—it is the sometimes contradictory, sometimes harmonious coexistence of styles like “California Mission style, the revival of the French Renaissance style, the Ultramodern style, the revival of the Spanish Renaissance, and the Modern movement” that shapes Puerto Ricanness.

2.1.1–SPANISH-CRAZED ARCHITECTURE OF THE STATE

To house the official institutions of the new rulers, official State buildings were used as a first attempt to Americanize the urban landscape of the island and as on the mainland, constructed in neoclassical or federal styles. American architecture firms were sent to Puerto Rico to train local architects in the latest trends of historical revivals popular in the United States. The former were met with rejection by the local ruling class of French-inclined tastes. The replacement of said class of the “criollo landowners” elite with a “new bourgeoisie,” led to a revival movement based on a nostalgic version of Spain and everything Hispanic.

The new government adopted the Spanish Renaissance revival style that was also gaining popularity in the United States after the Spanish American War. The former coincided with the local appreciation for everything Spanish expressed in the fine arts and literature. Vivoni Farage explains, “as in classical antiquity, the conqueror was himself conquered by the aesthetics of the defeated.”

By this time the first Puerto Ricans to train as architects in American schools were returning home to establish their practices on the island. Many of them were educated
in the philosophy of Spanish and French revivals. Therefore, when they arrived on the
island, they had no problem catching up with the trends and implementing the historicist
agenda, although most of them had not seen Europe other than in books.

The advent of the Second World War and the reshaping of institutions to modern
standards brought the end of historicist styles in Puerto Rican architecture. Art deco,
adopted since early on in 1925, brought the Miami and Hollywood styles of easy,
practical living to the island. Local architects were quick to adapt the style regarded as
“modern and functional, efficient, hygienic and economical” to the local cultural values
with Spanish arches and neon floral décor, among other motifs.

Nevertheless, the success of the revival style made its way to the dwellings of the
emerging middle class. While the architects that served the official government and the
dominant class shifted their interests to the functionality of art deco, it was the middle
class neighborhoods that kept alive the Spanish legacy.

2.1.2–PRIVATE DWELLINGS

In the new metropolitan towns a rising class, the new “Caribbean bourgeois[ie],”
resorted to architecture to imprint the community with its values. Through a wide range
of exotic foreign styles imported from “France, England, Spain, and, of course, the
United States,” landowners presented themselves with “false assertions of aristocracy.”
Two devastating hurricanes, San Ciriaco (1899) and San Felipe (1928), and one
earthquake, San Fermín (1918) provided a tabula rasa that allowed the new elite the
chance to construct their cities time after time in the newest trending styles.
Opportunities were also welcomed by architects who, as Rigau notes, “mix[ed] styles, orders, and the most disparate architectural vocabulary” as a “way of displaying erudition.”

In the case of modernism, appreciation for the style grew as architects considered adaptations to the Caribbean condition. Modernist ideals were introduced to Puerto Rico, in part, by the work of Antonin Nechodoma, a Czech architect who had migrated from Chicago to the island. Nechodoma is remembered for his “plagiariz[ation of] many of [Frank Lloyd] Wright’s designs: facades, fragments of plans, detailing, and even furniture.” But in its pass he popularized a modified version of the Prairie style language. “Horizontality… customarily underlined by ample, expressive overhangs which almost completely surround the structure. Wood, stained glass, and mosaics” were Nechodoma’s trademarks. Local contemporaries, like Alfredo Wiechers who exhibited stronger ties to French styles in the southern town of Ponce, and others who had trained in architecture schools in the United States shared a belief for the need for “integration of local climatic conditions with formal, stylistic concerns.”

2.2–FURNITURE

According to historian Juan Hernández Cruz the transition to American rule disrupted the woodworking tradition that had gained international respect during the nineteenth century and had been singled out for special praise at the Paris Exposition Universelle of 1855. Héñandez Cruz credits the industrialization set forth in the twentieth century for increasing the popularity of mass-produced American “overstuffed
furniture” over the masterful work of local cabinetmakers. The latter resorted to incorporating heavy upholstery into the carved Victorian pieces to please the newly-found tastes of their clients. At the same time he praises the introduction of “rattan furniture” that although costly, was very appropriate for the Caribbean weather.98

Hernández Cruz was able to identify the styles used by local cabinetmakers, which include Victorian, Queen Anne, art deco, native (cane) and Isabella II, among others. The most popular style among the upper middle and upper classes was the style known as Isabelino or de medallón that can be considered an interpretation of the Victorian style. The “structure” of Isabelino chairs, for example, is described as “medium cabriole legs, medallion backrest separate from the seat.”99 Caribbean adaptations replaced the upholstery, typical of Victorian seating furniture, with cane weave. However, for many cabinetmakers, the modern style was often a stretch since they could only base it only on magazine images that wealthy patrons brought to them.100

Although the cabinetmaking firms Hernández Cruz documented were mostly artisanal operations, some stand out. Bernadino Rivera Velazco, from the southern town of Yauco, is said to have set up a furniture shop of 200 employees, the largest on the island according to the author.101 Therefore, it serves as evidence that there was industrial-level production of furniture in Puerto Rico before or, at the same time, of del Toro’s career. Precise years cannot be identified since Hernández Cruz does not give dates of operation. However, the most well-known furniture makers of the time have to be the brothers José and Rafael Margarida. Their shop, established in San Juan in 1892 gained popularity for the quality of their designs. While they worked with the traditional
styles, they also produced art deco, as well as Danish modernist furniture in a later phase. Margarida’s factory, which eventually employed 83 people, never produced large quantities of furniture because of the attention to detail and quality control held by the owners.\textsuperscript{102}

Hérnandez Cruz points to another cabinetmaker of interest, José C. Cabrero González from San Germán who, according to the author, studied for three years at the Agriculture and Mechanical Arts College.\textsuperscript{103} Furthermore, the Polytechnic Institute in San Germán opened an Industrial Arts Workshop in 1912 to train students in the craft of woodworking.\textsuperscript{104} Although Cabrero González’ degree is not specified, it is worth noting because it evidences that del Toro was not the only college-educated designer or woodworker. Hérnandez Cruz does mention other cabinetmakers that received professional training but most of them in technical schools, not at university level.

3.0–DESIGN IN THE UNITED STATES: 1919–1938

3.1–COEXISTENCE OF STYLES

Simultaneously, design in the United States also favored a wide-ranging spectrum of coexistent styles. The first three decades of the twentieth century in the United States reflect the complexity of the industry through development of new design ideas and the revival of old ones, as well as the American adaptation of international movements. The design industry on the mainland is important to our understanding of what influenced young del Toro considering that a big part of the furniture available in Puerto Rico around this time was imported from the United States. Many of the ideas developed in
this period were running full charge by the time del Toro moved to Pittsburgh for his undergraduate studies.

Our considerations for design in Puerto Rico also apply in part to the design industry in the United States. Although much more advanced in terms of production and demand, it is not possible to talk about just one style that dominated the first half of the twentieth century. Social, economic and political events affected different levels of society in different ways, resulting in a diverse spectrum of styles in furnishings and products. The vast geographical territory that the United States encompasses also means that different influences were felt in different times.

According to furniture historian Oscar Fitzgerald, in the early twentieth century national focus shifted from “nation building and economic expansion” that paved the way of the previous century, to “a period of curbing the excesses of giant corporations and big government.” The “Progressive era” was a time of transformation in the political and economic arenas, as well as in domestic life. Society struggled with the effects of industrialization and mass production, while reformers preached about “preserving human values.” In this scenario, Fitzgerald explains, furniture was used as a tool for civic transformation: “English-born Joseph Twyman, chief designer for the Tobey Furniture Company in Chicago, believed that simple furniture and honest construction might lead to honesty and simplicity in everyday life.”

For example, most furniture makers were more inclined towards the “aggressive commitment to simplicity” of the arts and crafts movement than the extravagance of art nouveau. At a time of economic distress, the
austerity of the arts and crafts style was a better fit for the struggling masses than the asymmetric curvy French style.  

Historic revivals were also common in the furniture market during this time. After the First World War, revivals of Early American furniture as well as American Victorian styles became popular, especially among the middle class. Fitzgerald underscores the diversity of style in early twentieth century United States as a characteristic of “a nation which prized individualism.” Additionally, an industrial mindset allowed the market to provide the masses with vast variety of options that would not have been possible under a craft system.

3.2–AMERICAN MODERNITY, DESIGN AND INDUSTRY

Most importantly when discussing influential styles in del Toro’s work is the history of American modernism itself. In the years after the First World War, the United States shifted to isolationism as a result of a rise in patriotic sentiment that breathed rejection of all non-American ideas. The anti-European sentiment extended to Americans’ choice of furniture. While many Europeans charmed their dwellings with the fine extravagance of art deco and the blunt functional simplicity of modernism, Americans held on to the revived styles of their forbearers. European modernists worked to come up with a style appropriate for the age, a style free from the noise of old Europe that had led to the First World War. One of the proposed styles was art deco. Similar to art nouveau, it embraced the most luxurious goods with magnificent construction and sumptuous décor. Another strain of design, modernism, was gaining
popularity in Germany (a country not invited to the Paris Exposition of 1925). Modernists praised simple and functional goods designed for mass production as a way to democratize good design.

Similar to the case of European designers, a social crisis eventually provoked Americans to embrace new styles. Under the effects of the Great Depression of 1929 manufacturers had to rethink the concept of the goods they produced. The new modernist style presented a way to save on materials and production because of its simple lines while still being trendy. Machine mass production methods became a very convenient way with which to supply furniture to the masses that migrated from rural towns to urban areas looking for economic relief. The simple geometric lines of modernism also meant furniture was easier to clean, a time-saving requirement for women who increasingly entered the workforce and had less time for home maintenance.

The prominence of machine and industry shaped the visual idiom of the style. Streamlining, as it was called for its use of motifs referring to aerodynamic shapes of automobiles, trains and other transportation technology, did not originate in the United States. It was in the United States though, that streamlining was established as the style of the era, the 1930’s. Nicolas P. Maffei credits streamlining as “America's distinctive contribution to Art Deco...[an] authentic national aesthetic to replace the United States' artistic dependence upon Europe.” Maffei quotes historians Sheldon and Martha Cheney when they embrace the style:

...as a valid symbol of contemporary life flow, and as a badge of design integrity in even smaller mechanisms, when it emerges as a form of
expressiveness. For them the essential task of the industrial designer was
to express in everyday objects the most vital of contemporary values: 'In
its own smaller and often menial form' an ordinary streamlined product
was as 'conspicuous a symbol … of the age' as the 'symbol of the cross'
was to the 'medieval mind'. 116

The demands for machine mass-produced goods created the need for a specialized
professional that could supply the industry. Walter Darwin Teague, Raymond Loewy,
Norman Bel Geddes, Henry Dreyfuss, Harold Van Doren and Peter Müller Munk were
among the pioneers of what many saw as “the new profession with the vision of the
future,” the first industrial designers in the United States. 117

3.3–TEACHING MODERNIST DESIGN

The United States obsession with machine production made the nation fertile
ground for the avant-garde ideas of the Bauhaus school of Germany founded by architect
Walter Gropius in 1919. 118 After the Nazis closed the school in 1933, many of the
professors and alumni emigrated to the United States to continue to teach and promote
the modern ideals of art and industry, and design for the masses. Josef and Anni Albers
moved to North Carolina in 1933 where they taught at Black Mountain College. 119
Gropius himself went on to direct the Harvard Graduate School of Design in 1937. 120 The
same year, Lásló Moholy-Nagy founded the New Bauhaus in Chicago, 121 and later the
Chicago School of Design. 122
Although not from the Bauhaus, Eliel Saarinen directed the Cranbrook Academy of Arts in Michigan, which “has been called the American Bauhaus.” Some of the biggest names in American mid-century modernism came from Cranbrook, including Charles Eames and Ray Kaiser (later Ray Eames), Eero Saarinen, Harry Bertoia and Florence Knoll.123

Various other American institutions picked up on the trend of industrial design education, “Pratt Institute in Brooklyn…New York University…and Columbia College,” among them.124 Most relevant to this research since del Toro was an alumnus, the Carnegie Institute of Technology was the first institution to have a “degree program in industrial design.” The program head was Peter Müller Munk, a German silversmith who had “briefly designed for Tiffany and Company.”125

4.0—CONCLUSION

Del Toro was born in a time of great economic, political and cultural distress for Puerto Rico. The effects of an export-based economy left people looking for new ways to thrive. Two decades after the invasion of the United States, Puerto Ricans struggled to defend the traditions that defined them. Meanwhile a new generation of architects returning home from American universities worked to implement the new styles of the century.

In the United States a back and forth dialogue between a historicist approach and an embrace of the machine age defined the period. New methods of production gave way
to a new approach to design that made their way to Puerto Rico where Duncan del Toro was looking for a place to focus his creativity.


Bailey W. Diffie and Justine W. Diffie, *Porto Rico: A Broken Pledge* (New York: Vanguard Press, 1931), quoted in Scarano, 588. The three corporations that controlled the sugar industry were: the Central Aguirre Syndicate in Salinas (southern part of the island), founded by investors from Boston, the South Porto Rican Sugar Company in Guánica (also in the south) from New Jersey and the Fajardo Sugar Company in Fajardo (in the east).

The livelihood of many working class Puerto Ricans was threatened by the economic structure that favored monopolies of big corporations designed to export revenues—limiting opportunities for economic growth on the island. Many *jíbaros* (Puerto Rican word for peasants or working class people) who lived off what their own personal land produced were forced to sell the lands to corporations because it was no longer sustainable to maintain them.

A party intended to accommodate all options of association to the United States in its political platform was formed in 1904. Variants of the former surfaced from time to time (Ibid., 629). Other socio-political causes active at the time of del Toro’s childhood years were the fight for women suffrage and alcohol prohibition. The former was granted to all women who could read and write in 1929 (Ibid., 654). The latter was implemented in 1917, earlier than in the United States, and lasted until 1934 (Ibid., 648).
Ibid., 606.
Ibid., 605. Translated from the original Spanish.
Barreto, 7–8.
Ibid., 6.
Translated from the original Spanish.
Barreto, 7–8.
Ibid., 605. Translated from the original Spanish.
Ibid., 605.
Ibid., 605. Many protested the imposition of English as well as the centralized model that left all the decisions concerning education to an Education Commissioner appointed directly by the President; a Puerto Rican did not hold that post until 1921 (Scarano, 608).
Ibid., 607.
Ibid., 607.
Ibid., 607.
The preservation of Hispanic culture and values shaped the work of a generation of artists in literature and the fine arts. Puerto Rican painter and writer José Antonio Torres Martínó cites poet Francisco Manrique Cabrera who describes this period of Puerto Rican history as “the stage of transit and trauma” (Martinó, 84). In literature, poet and lawyer Luis Llorëns Torres was the epitome on the island of the modernismo movement initiated by Nicaraguan poet Ruben Dario. From his writings, Llorëns Torres and others like Virgilio Dávila and Nemesio Canales looked to preserve the Hispanic values that they understood as the definition of Puerto Ricanness (Scarano, 660–661). In the fine arts, while the avant-gardes’ “-isms” emerged in Europe and Latin America, Puerto Rican painters clung to a folkloric nativism that exploited the traditional iconography that had been developed during the Spanish occupation. Costumbrista painters contemplated the landscape of the island and its dwellers (the jíbaros), their customs, their labor and their dress. The construct of the jíbaro created by this generation of artists in the quest for the survival of Puerto Rican culture under the new power structure of American rule reveals more about the creole elite of the late nineteenth and early twentieth century than about the peasant himself, who prior to the 1898 occupation was sometimes portrayed in literature as a lazy ignorant bum (Carmen L. Torres Robles, “La mitificación y demitificación del jíbaro como símbolo de la identidad nacional puertorriqueña” [The mythification and demythification of the jíbaro as a symbol of Puerto Rican national identity], The Bilingual Review/La Revista Bilingüe 24, no. 3 [1999]: 242, accessed on March 16, 2012. https://www.amherst.edu/media/view/61992/original/BilingualReview%25282%2529.pdf). Painter Ramón Frade justified his work as an act of resistance in the face of the obliterating effects of Americanization: “‘Since all that is Puerto Rican is being swept away by the wind…I seek to perpetuate it in paint’” (Cheryl D. Hartup and Marimar Benítez, “The ‘Grand Manner’ in Puerto Rican Painting: A Tradition of Excellence,” in Mi Puerto Rico: Master Painters of the Island, 1780–1952 [Puerto Rico: Museo de Arte de Ponce, 2006], 25). Frade, and others in his generation like Miguel Pou, Oscar Colón Delgado and Juan A. Rosado, knowingly chose a “system of symbols accessible to Everyman” over the “avant-garde idiom” to accomplish their objective of the assertion of everything Hispanic (Torres Martínó, 84).
Ibid., 676.
The PRERA’s efforts included distribution of food, road construction, and control of the malaria mosquito, among others.
Ibid., 681. The PRRA was responsible for the construction of houses, health clinics and schools, as well as the spread of electricity to rural sectors. Additional, the PRRA opened factories for the manufacture of cement, bottles and cardboard (Ibid., 682). It was a first step towards an economy based on manufacture that took shape during the 1950s (Ibid., 683).
Ibid., 679.
Ibid., 680.
Ibid., 583.
Ibid., 679.
Ibid., 680.
Ibid., 680.
Ibid., 583.
Malena Rodríguez Castro, “Centennial Sieges: Hispanophilia in Puerto Rican Culture,” in
bilingual and bicultural house that influenced very much his design principles and practice. Also similar to New York, graduated in 1918 was Pedro Adolfo de Castro y Besosa (1895–1950), a cosmopolitan whose active voice in design and planning represented the spirit of the Hispanic past. His tool for constructing a “strong mythology of the nation” was the Spanish language. Although in need of modernization to fit the industrial forms of modern society, “its functionality was stressed as the mortar of a coherent and continuous cultural unity.”

Torres Martínó, 83. Pedreira’s view of Puerto Ricanness is pessimistic, which he described as weak, passive and self-absorbed (Scarano, 684). As explained by Rodriguez Castro, “Insularity was therefore a necessary evil to allow one to look at oneself, and then to look at the world. In his way, isolationism and cosmopolitanism were harmonized” (Rodríguez Castro, 309).


Ibid., 63.


Álvarez Curbelo, “Fictional Alahambras,” xi.

Rafael E.J. Iglesia, “Cultural Identity and Architecture: Finding one’s bearing in the labyrinth,” in Hispanophilia : Architecture and Life in Puerto Rico 1900–1950, ed. Enrique Vivoni Farage and Silvia Álvarez Curbelo (San Juan: Editorial de la Universidad de Puerto Rico, 1998), 3–4. Iglesia finds that to understand a culture through its architecture is to understand the arrangement of “the physical habitat (the material, geometrizable, aesthetically enjoyable place); behavior (social, individual, proxemics); and meaning (significance, representation, symbol)” (Ibid., 18).


Álvarez Curbelo, “Fictional Alahambras,” xi.

Vivoni Farage, 121.

Álvarez Curbelo, “Fictional Alahambras,” xi.

Rigau, 56.

Álvarez Curbelo, “Fictional Alahambras,” xii.

Vivoni Farage, 126. The Spanish Renaissance revival accommodated well to values of criollo hispanophiles of the 1920s through 1940s—although some members of said class saw the revival of French Renaissance as more appropriate for the realities of the island—as well as with the strategies of the governing officials (Rigau, 183).

Vivoni Farage, 127. Vivoni adds that the Spanish Renaissance revival in the 1930s made unnecessary the “aggressive attempts at cultural indoctrination” of the early years of the administration, “it was no longer necessary to eliminate the Hispanic character of Puerto Rican culture to accept the ‘American way of life’,” as long as the official styles was determined by the American administration.

Rigau, 183. Rigau describes this generation of architects “as another import from the U.S., having less to do with Madrid than with Miami.”

Vivoni Farage, 130.

Rigau, 183. Using Spanish Renaissance revival architecture as a strategic tool, the American government managed to have Puerto Ricans themselves take part in “the legitimation of United States cultural domination. The first Puerto Rican to obtain a degree in architecture from an American university was Pedro Adolfo de Castro y Besosa (1895–1936). He studied at the Beaux Arts Institute of Design in New York, graduated in 1918 (Vivoni Farage, 130–131). Like del Toro, de Castro y Besosa grew up in a bilingual and bicultural house that influenced very much his design principles and practice. Also similar to
del Toro, de Castro y Besosa embraced the “American way of life” without renouncing his Hispanic roots, his “idea of modernity was codified in the romantic forms of a heritage, though not necessarily a past” (Ibid., 134). Iglesia says, while talking about the formation of cultural identities that the use of principles of the motherland will bolster the integrity of a culture even when used for novel undertakings. Like the Spanish Renaissance revival, which proved to support the agenda of the American government in Puerto Rico, it is a matter “of ‘speaking’ the same cultural language in the sending and receiving contexts” (Iglesia, 10–11).

90 Ibid., 143–144.
91 Vivoni Farage, 142.
92 Ibid., 150. Especially through the use of three common motifs: “the spiral columns, the arches and the roof tiles.”
93 Ibid., 57. The design of private dwellings represents the ideals of the people and not of the State. While official State architecture follows a government agenda, private housing captures the idiosyncrasies of the people of the island. Additionally, it “provided ample room for experimentation and innovation” (Rigau, 133–134).
94 Vivoni Farage, 58.
95 Ibid., 82.
96 Ibid., 110.
97 Ibid., 133.
100 Ibid., 59.
101 Hernández Cruz, 103. Considering the amount of manpower involved it is evident that Rivera Velazco’s was not an artisanal enterprise.
102 Lelis Marqués, “Cuando nació el Caribe Hilton; Notas sobre el Diseño Industrial en Puerto Rico.” [When the Caribe Hilton was born; Notes on Industrial Design in Puerto Rico], Entorno, no. 7 (2007): 12.
103 Hernández Cruz, 19.
104 Ibid., 22.
107 Fitzgerald, 269.
108 Ibid., 287. Models like the Windsor chair made with native materials were the American response to the styles of the Scandinavian early modernists (Ibid., 296). Twentieth-century revivals presented adaptations of historic design idioms applied to modern shapes like “lamp stands and coffee tables, even though these forms never existed in the 18th century (Ibid., 288).”
109 Fitzgerald, 309.
110 Riley, 350 and 378–380; Fitzgerald, 309.
111 Fitzgerald, 310.
112 Riley, 350. Art Deco debuted at the 1925 Paris Exposition des Arts Décoratifs et Industriels Modernes (Ibid.). As a result of the United States isolationism, the nation did not take part in the Paris Exposition. Fitzgerald explains: “Secretary of Commerce Herbert Hoover declared that American designers had produced no innovations worthy of exhibition. However, Hoover did send a commission to report on
the exhibit.” Even though the United States did not have official representation at the Exposition American designers like “Donald Deskey, Kem Weber, and Russel Wright” traveled to see the show (Fitzgerald, 310–311).

Modernism’s goal, according to Riley, was the dissemination of “platonically perfect forms, where the purification of the eyes would achieve a similar purification of the soul” (Riley, 381).

Riley, 381.
Fitzgerald, 313.


Maffei, 122–124. Two events marked the emergence of a new generation of American design, the 1933 Chicago World’s Fair and the 1939 New York World’s Fair (Fitzgerald, 314; Maffei, 124). New technology filled the market with new products, like table radios that gave designers the chance to work with new materials not used previously in furniture like metal, plastic and glass (Maffei, 122–124). The malleable properties of materials like Bakelite were opportune for a diverse range of applications from “products used in industry; packaging and containers; consumer goods, and decorative artefacts” (Patrick Cook and Catherine Slessor, Bakelite an Illustrated Guide to Collectible Bakelite Objects [New Jersey: Chartwell Books, 1992], 12). Plastics, originally considered characteristic of cheap reproductions became the marvel of modern society (Ibid., 9).


Ibid. The Albers developed a curriculum that focused on the arts and the use of “...intuition and the intellect in the search for form and its fundamental laws... [he] stressed the concept of the nonstatic, everchanging world in which problems are solved through information-gathering...[His] method was one of discovery and invention, 'a 'pedagogy of learning' rather than a 'pedagogy of teaching''” (Ibid.).


Manhart, 69. Moholy-Nagy's focus was to train those who would work for the industry to create new products as well as update old ones, all in a profitable manner. Moholy-Nagy understood, as learned from Gropius, “that art was not a luxury but an essential, and that the study of art was a spiritual as well as an intellectual pursuit.” The New Bauhaus’ holistic approach situated art education “within the context of a democratic social structure.” Moholy-Nagy’s ideas proved to be too revolutionary for the Depression-stricken American academy; the New Bauhaus closed its doors rather quickly. Nevertheless, in 1939 Moholy-Nagy reopened the program as the Chicago School of Design.

Fitzgerald, 312. Manhart described Cranbrook’s method as "holistic, emphasizing cultural context rather than curriculum and methods” (Manhart, 64).

Manhart, 66. Education in functional art, i.e. industrial design, gained demand in the United States, not only because of the arrival of European avant-garde minds, but mostly in response to a new market that needed trained professionals to get behind their program for economic growth. By 1935 the United States government developed an education program resembling those of the designers that had emigrated from Europe. The Design Laboratory offered a version of the Bauhaus program under the leadership of Gilbert Rhode and Josiah P. Marvel. Although it did not last past 1937 because of lack of funding, prominent figures like Henry Dreyfuss, Ruth Reeves and Walter Darwin Teague, Sr. passed through its classrooms (Maffei, 122-124).
125 Ibid., 68–69.
In 1936, at the age of sixteen, del Toro was awarded a travel scholarship to Alaska that helped him decide his path towards a profession in industrial design. American millionaire George E. Buchannan awarded the scholarship as part of his Buchanan’s Alaska Trip for Boys and Girls. The deal for the trip was that Mr. Buchanan covered one third of the costs, the kid’s parents a second third and the rest needed to be paid by the traveler himself with money earned by some kind of work. The part paid by Buchanan was a loan that the traveler could opt to pay back whenever he was capable of doing so. The total cost of the trip was $363.

Del Toro raised his part of the funds by carving and selling birds out of bull horn (fig. 2). An article in a local newspaper quotes a letter from Buchanan telling how del Toro sold his creations along the route of the trip from New York to Alaska. According to an interview published in the Detroit Free Press during their stop in that city, del Toro carved more than one hundred birds to cover his part of the cost. The sleek lines and simplified forms of del Toro’s bird sculptures are reminiscent of Rumanian sculptor Constantin Brancusi’s Bird in Space series. Although not as abstract as Brancusi’s, del Toro’s use of elongated curves (a motif that will be seen later in his design work) evoke subtle movements and show his skill in the management of the material.
Figure 2. Birds carved out of bull horn by del Toro, which he sold to finance his part of the trip to Alaska. Reprinted from Jorge Felices, Jr., “Un niño puertorriqueño viajó ya con Buchanan hacia Alaska” [A Puerto Rican child traveled with Buchanan to Alaska], *El Mundo* (Puerto Rico), November 13, 1938, p. 5.

Del Toro explained how before traveling to Alaska his mind was filled with indecision, considering painting, architecture, carving, sculpture, and drawing as possible academic routes. He had made up his mind before the trip was over, as the *Free Press* article tells: “…he has found himself and determined that his future occupation when he gets out of school will be in the field of industrial design…While he is in Detroit Mr. Buchanan will take him to some of the automobile plants.”
Del Toro carried out his plans in the fall of 1938, the year he began his undergraduate studies in industrial design at the Carnegie Institute of Technology (CIT). He graduated as part of the seventh class of the program in 1942.

Almost none of del Toro’s student work has survived and it was not possible to obtain a transcript of his student records for this research. Therefore, the CIT curricula for 1938 through 1942 will be described to understand his college education, as well as the faculty that may have directly contributed to del Toro’s formation.

1.0–CULTURAL MOOD OF THE COLLEGE YEARS (1938–1941)

The time del Toro spent in Pittsburgh as a student happened during the period between the Great Depression and the entry of the United States in the Second World War, which had an impact on all aspects of life. By 1939 France and Britain were already involved in the War. At the same time the United States dealt with internal tensions between non-interventionist organizations and the defenders of the collective security pledge and above all remained focused on building up the economy—an important issue for the emerging field of industrial design. According to historian Harvey Green, beyond socio-political transformation brought on by the First World War, fiscal expansion and later collapse, “revolutionary changes in the manufacture of goods provided consumers with a diversity of inexpensive goods heretofore unknown in human history.” The way the average mid-twentieth century American consumed was changed forever. New methods of manufacturing transformed industries in every level.
New professions were created to attend the new ways of the market. To create the idea of need, advertising emerged, and to deliver new goods, industrial design came to be. Historian and former president of the Industrial Designers’ Society of America, Arthur K. Pulos, explains how after the United States had thrived beyond the Great Depression, its industrial designers were inspired to work on creating the world of the future. Progress seemed more at reach than it had ever been before. It could all be possible in the "American way of life." Through its role in the recovery from the Depression, industrial design had landed a position of respect “as a truly modern generalist profession…among art, engineering, and business.” Seen “as monitors of public taste,” designers were seen as translators that could articulate the latest technology in an attractive and comprehensible way to the consumer. Quality goods at prices available to the vast majority represented more than mere commodities in the recovering United States, they were a concrete expression of “progress and happiness.”

Since the years before the Depression cultural institutions like the American Association of Museums and the Metropolitan Museum of Art, among others, in response to the growing enthusiasm for design, shifted their focus on historical achievements in culture to following the trends of the market and the public’s interests. In the 1930s the newly-founded Museum of Modern Art in New York (MoMA) became an essential actor in the practice of trend setting through a series of exhibitions that set the style of the decade after the Depression.

The exhibition Bauhaus 1919–1928, presented at MoMA from December 7, 1938 through January 30, 1939, was the first in the series. The exhibit showcased the work of
students and faculty of the German school done during the directorship of its founder Walter Gropius, who set up the show. Following the craze for everything design, the exhibit looked to present to the American public the work of the Bauhaus, praised as of “great historical importance…in the different fields of modern art and, above all, its extraordinary influence on industrial design.” In a review of the opening of the exhibit, MoMA curator of Architecture and Industrial Art, John McAndrew, explained that although American art critics acknowledge the importance of the Bauhaus it was not clear for them how it had influenced the design trends of the United States. McAndrew found that for the educated audience of the members of MoMA there was confusion on the relationship between Bauhaus, and the streamline style that was already ubiquitous in everyday goods. He found worthy of analysis the reasons why the public “credited it [the Bauhaus] with parenthood of things of which it would be the first to disclaim—‘modernistic decoration,’ ‘modernistic chairs’ and ‘the streamline fixtures in banks’.”

After the favorable outcome of the Bauhaus show, MoMA set up a string of annual shows called Useful Objects. The series ran from 1940 through 1948 with variant themes like Useful Objects: under $10, Useful Objects: for wartime, Useful Objects: under $100. The shows were designed as an educational experience for the consumer public. Pulos cites The Bulletin of the Museum of Modern Art issue for the first Useful Objects show in 1940 where the Museum “proposed a set of standards that would acknowledge that such products were not examples of fine art and should not be judged in aesthetic terms.” This despite that “aesthetic quality” had the weight of the show,
which was what “helped establish a distinct style that supported MoMA’s elitist notion of
good taste.”

Another MoMA exhibition worth mentioning is Organic Design in Home
Furnishings shown in 1941. It was in this exhibition that the public first saw the work of
Charles Eames and Eero Saarinen. The exhibition was the result of a design contest set up
by Elliot Noyes, designer and premier curator of the new department of MoMA dedicated
exclusively to industrial design. Noyes, Harvard alum that had studied under Gropius,
made the call for “designers ‘capable of creating a useful and beautiful environment for
today’s living, in terms of furniture, fabrics and lighting’.” The Eames / Saarinen duo
took the first prize for their bent plywood chair and living room designs. Noyes
defined Organic Design as a “harmonious organization of the parts within the whole,
according to structure, material, and purpose. Within this definition there can be no vain
ornamentation or superfluity.” The exhibition set a milestone in the history of
industrial design for it was “as much a business deal as a museum exhibit.” Part of the
agreement with contestants was that the winning designs were to be produced and sold at
prices accessible to middle class Americans.

Pulos also mentions another design contest arranged by Noyes meant to
“‘discover designers of imagination and ability in the other Americas’.” Other sources
do not make a distinction between the two contests although they include Latin American
designers Clara Porset from Cuba (but established in Mexico) and, Klaus Grabe, Morely
Webb and Michael Van Beuren from Mexico, among the winners in the Organic Design
in Home Furnishings contest. Porset, who studied under Josef and Anni Albers at
Black Mountain College in North Carolina, is distinguished for her modernist adaptations of pre-Columbian Mexican furnishings. Grabe was also a student of the Albers, while Van Beuren had studied at the Bauhaus.

Related to the exhibitions put on by MoMA and other museums, were the World’s Fairs held in the United States in the years before the Second World War. While the museums showed the public the home and life it could have at that precise moment, the New York World’s Fair of 1939, “Building the World of Tomorrow,” painted the future yet to come.153 A band of pioneering industrial designers was chosen to give shape to the Fair for the role it played in the restoration of industry after the Depression. Walter Dorwin Teague, Gilbert Rohde, Henry Dreyfuss, Raymond Loewy, Egmond Arens, Donald Deskey, Russel Wright and Norman Bel Geddes all belonged to this group.154 The Fair focused on the possibilities of the near future of living with American values,155 assuring the public a utopian world that was not yet at an arm’s reach.156

2.0–SECOND WORLD WAR APPROACHING
(A DESIGN PERSPECTIVE, 1942)

The political and economic situation in Puerto Rico in the years before the Second World War was described in the first chapter. The 1930s in Puerto Rico can be summed up as having been marked by bitter hostility in civil matters, an unaligned government structure and the inability, mostly of the sugar industry, to promote economic sustainability during the Depression. For those reasons, as described in the previous chapter, the Federal government stepped in with the Puerto Rico Emergency Relief Administration (PRERA) and later the Puerto Rico Reconstruction Administration
(PRRA) to manage the crisis on the island. Nevertheless, as Puerto Rican historian Jorge Rodríguez Beruff notes, “unlike other colonial cases…the war did not provoke a crisis for the metropolitan power in Puerto Rico; but on the contrary, it created the conditions for the possibility of overcoming the deep crisis of the years of the Economic Depression.” As the war situation approached and President Franklin D. Roosevelt had to reexamine the naval requisites of the United States, he had no choice but to “redefine the approach towards Puerto Rico guided by the strategic context.” Preparations for the United States entrance into the War meant a substantial investment on the island’s economy. The construction and manufacturing industry initiated as part of the war effort kicked off the industrialization of Puerto Rico that advanced in the postwar period.

In the meantime, in the United States the dawning of a new war seemed to repress consumption back to the austerity of the Depression years. Although the conflict overseas created demand for the design and manufacture of defense equipment, for common Americans it meant a throwback to restrictions on consumer goods. The public, as well as industry, accepted such as a loyal act to their fellow countrymen overseas. Institutions like MoMA continued to shape the style of the nation, but by this time, the style of a nation preparing for war. The 1942 Useful Objects in Wartime exhibition presented domestic goods manufactured with “non-priority materials,” as well as those useful for members of the armed forces and “equipment essential for civilian defense.” Among the materials avoided in the goods exhibited were “steel, chromium, tin, aluminum, copper, or nickel, all of which were essential to the war effort. Even plastics, such as Bakelite, were excluded.” Instead, the goods displayed were composed of “glass,
ceramics, paper, and plywood.” The upcoming war forced a restructuring of the manufacturing industry and the industrial designers behind it.

Some of the substitute materials eventually became a fashion trend after the war. In some cases the substitute became the new standard, perpetually taking the place of the former. For example, plywood became a signature choice for the furniture of the time and the following decades because it allowed designers to explore nontraditional shapes and production methods. Other cases include Pyrex glass containers for food preparation developed by Corning. Designers like Russel Wright saw a design opportunity in the need for “low-cost” goods. His inexpensive American Modern dinnerware series (1939–1959), manufactured by Steubenville, was featured in the already mentioned 1942 MoMA exhibit while other big name earthenware production houses were not included. Once more, in the face of necessity the United States government and industry were forced to make adjustments that conflicted with the consumer culture of the early twentieth century that had just begun to revive after the Depression.

Puerto Rico was no exception to the struggles of rationing during the war. Shortage of goods, particularly of food, took a toll on the progress achieved in the economy in preparation for the coming of the Second World War. With a market mostly based on imports, the island suffered when a fleet of German submarines were deployed to the Caribbean, Gulf of Mexico and the east coast of the United States in 1941.
3.0–FROM PRACTICE TO THEORY: INDUSTRIAL DESIGN AT THE CARNEGIE INSTITUTE OF TECHNOLOGY

As the market’s interest in industrial design as a tool for economic development grew, academic institutions capitalized the opportunity to train professionals in the emerging field. Pulos describes that the institutions that stepped forward shared the determination to “not only teach the fundamental skills of the new profession but also to establish a foundation of knowledge that would analyze human needs, consider alternatives, and recommend appropriate solutions.”

Institutions like Pratt Institute, New York University, Columbia College, and Carnegie Institute of Technology took the lead in the United States by developing programs focused on the industrial aspect of design with an approach that differed from other institutions like the University of Cincinnati and Cooper Union that focused on the craft aspect of the field. Pulos comments, “there was a prevalent belief that the arts and crafts schools lacked the vision that would enable them to submit to the existing capabilities of industries or to subscribe their work to the daily needs of any particular segment of the buying public.”

CIT alumnus Jim Lesko, interviewed the first person in history to receive an industrial design diploma in 1936, Filipino woman Maud Bowers. He discusses with her the confusion and intrigue with the novelty of the discipline. Bowers tells Lesko about the early years of industrial design education:

We had been indoctrinated into designing utilitarian things for sale that would meet the customer’s eye and be better looking than what they had before. Simpler, too, a lot of things were made then, so we had to think about designing simpler things in a more beautiful way. More efficient, for
production as well as user…User and cost…Kept the cost down. It was very tough because it was so new to break into it then.\textsuperscript{172}

The experimental aspect of those years is also captured in a 1940 article published in the newspaper \textit{The Carnegie Tartan} about del Toro and his frame of mind towards design. The article mentions that besides his classwork he dedicated his time to exploring different materials, such as finding an alternative to paper: “he thought of spraying celluloid with a mixture of gold paint and fixative. Viewed from the underside this new material has depth and an unusual quality.”\textsuperscript{173} His curiosity for new materials seems in tune with the explorations of plastics common in the early periods of the field. The article mostly focuses on the fact that del Toro had “given away practically everything he has made. He says that he can tell by looking into people’s eyes whether or not they really appreciate the work, if they do, why shouldn’t they have it?”\textsuperscript{174} The gesture, that seemed to surprise the reporter, is not far from Russel Wright’s philosophy of “good design is for everyone,” a principle very much entrenched in the design boom that would take place after the war.\textsuperscript{175}

While in the early 1930s many of the Bauhaus emigrates had helped shape the design curricula of various American universities, the CIT in Pittsburgh, Pennsylvania became the first institution in the United States to officially offer a bachelor degree in industrial design in 1934. CIT was founded in 1900 in response to Andrew Carnegie’s interest in producing an educated and able workforce for the area.\textsuperscript{176} Lesko attributes Donald R. Dohner with the creation of the Industrial Design program that was based on “his practical experience […] his knowledge of tools and manufacturing processes, his
background in marketing, and his writing in the subject.”177 He includes other faculty members in this roster, among them Alexander Kostellow, Wilfred Readio, Frederic Clayter, Russell Hyde and Robert Lepper, making up a team of supporters that was essential to the program’s birth.178

It has not been possible to find a transcript of del Toro’s student records but it can be assumed by the specifics of the course curricula of the Department of Painting and Design—obtained from the University Archivist of Carnegie Mellon University (formerly CIT)—that during his time at CIT del Toro studied under faculty that included Esther Topp Edmonds, Everett Warner, Mary Murdock, Wilfred Readio, Russell Hyde, MacGilvary, Roy Hilton, Alexander Kostellow, Peter Müller Munk, Robert Lepper, Frederic Clayter, and Clarence Carter.179

While del Toro was at CIT the Industrial Design I and II courses were taught by Müller Munk and Lepper.180 The latter was a sculptor and a muralist, with an interest in economics who found himself in the position to teach industrial design, although, according to Lesko, he did not care for it for he perceived the discipline as purely commercial. His interest in economics, and experience as a muralist might explain del Toro’s mural on the production process of plywood, and economic theorem exhibited in San Juan upon his return from CIT.181 In the classroom Lepper held the meaning of things as priority. He explains in one of his Design Principles that “‘Form evolves out of the necessity of the content. The form will be shallow if the content is not understood’.”182 Lesko mentions how the alumni he interviewed in his research all remember Lepper as a great teacher with an experimental approach directed at teaching
“students how to think logically, with a focus on products,” without “product form.” In a cited interview with Lesko, Lepper explained his approach with an example:

[E]veryone knows a cigarette lighter is made to light cigarettes. Like hell it is! It is a hand-sized object made to ignite and maintain a flame and light cigarettes. It has nothing to do with cigarettes unless you can use it…My point is, you don’t understand it unless you convert it into a definition.

Lepper commented that his approach to teaching design was a topic of dispute between the two professors of the Industrial Design courses. Lepper would defend to Müller Munk—who was a believer in the Bauhaus methodology—his “personal attitude…which was ‘Form Follows Function’ modified by Sullivan to ‘Form Follows Function and Process of how it was made’ as well as how it was done, and that you should understand something of how we made it.” Nevertheless Lepper commented they “were a good team because Peter could do a lot of things that I couldn’t.”

Müller Munk joined the CIT faculty in 1935 to fill the position left empty when Dohner, the program’s founder, left for Pratt Institute. He had an academic background in “silversmith[ing]” and art history, as well as a professional practice in the former. Müller Munk, a fan of the Bauhaus, despised American industrial design for its artistic attitude towards manufactured goods. In his opinion, the Bauhaus focus’ on “an impersonal and scientific point of view,” was the appropriate way to teach design. Nevertheless, Lesko finds ironic that his teaching method prompted “‘students to perceive both sensuous value inherent in pure form as produced by machine and possibilities of creative expression through them’.”
Other professors that may have contributed to del Toro’s formation were Kostellow and Readio. Both of them were part of the group that founded the program. An alumnus interviewed by Lesko described both as “dynamic” and “serious.”

Kostellow’s work is described with words such as “simplicity and elegance,” with a “combination of form balance and organics as a spatial relationship that expresses the identity and purpose of a manufactured product.” Kostellow was an admirer of the Bauhaus who previously worked as an “understudy” for Peter Behrens, in 1938 he left CIT to join the Pratt program.

In a 1942 interview del Toro described Pittsburgh as “a very interesting city! Every day its sky is overcast with smoke, but that smoke is the chisel to the ambitions of the student!,” he calls it a place to “invent, produce, create!.” During his time there, he participated in the thirty-first and thirty-second exhibitions organized by the Associated Artists of Pittsburgh. On his return to Puerto Rico in 1942 he exhibited a selection of his student work showing his skills in design and art, and officially launching his industrial design career guided by the task of applying the modernist principles he learned at CIT to the development of a local design and manufacturing industry. The Puerto Rican press praised del Toro for having ventured into Pittsburgh, “the mecca of art applied to industry.” Another article published four years after his return (1946) still celebrated him for being the first and the only person in Puerto Rico up until that point to have the title of Industrial Designer, “a specialty of modern technology concerned with fomenting new ideas and new principles in industrial manufacturing.”

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4.0—CONCLUSION

When del Toro left Puerto Rico in 1938 to complete his bachelor studies in industrial design at CIT in Pittsburgh, he arrived at a time of great social transformation. On the one hand, it was a time of great advancements and innovation in materials, manufacturing and design, on the other, it required that designers be inventive and resourceful in order to navigate the struggles of wartime. The combination of the realities of the time and his exposure to CIT faculty like Robert Lepper, Peter Müller Munk and Alexander Kostellow, gave del Toro the tools to operate back in Puerto Rico even after the war had passed but the modernization of the country had just began.

The latter contained supplies like “a kerosene lantern, a first-aid kit, a stirrup pump, a water pail, and a wooden san pail” (Ibid., 13).

Pyrex gained wide acceptance for it “could withstand impact and changes in temperature,” in addition to being available in stylish shapes never before seen in its “steel predecessors” (Ibid., 17). Also in that line was the Chemex coffeemaker, invented by German immigrant and chemist Peter Schumbohm. A 1943 advertisement for the Chemex played on the notion of wartime rationing by highlighting the coffeemaker’s advantages with lines like: “Guaranty of Supply. There never was and never will be a shortage of Chemex Filterpaper” and “One single piece of handblown Pyrex Brand Glass” (“History,” Chemex, accessed November 15, 2014, http://www.chemexcoffeemaker.com/chemex/history.html).

Pulos, Design Ethic, 400.

As Pulos notes from the 1942 Bulletin of the Museum of Modern Art issue for the Useful Objects in Wartime exhibit, “Americans had been trained to expect a new version of a product every year.” Restrictions imposed by the War Production Board shifted the market from the “buyer’s market” that surged in the post-Depression years, to a “seller’s market” with increased demand and limited offer. To avoid economic swelling of prices the Office of Price Administration, set “price ‘ceilings’ on manufactured products” (Ibid., 13–15).


Lesko, 271–272. In 1913 CIT created the School of Applied Design within the Fine Arts College. It was there, that the Industrial Design program emerged. Lesko describes how the idea for the program came...
after a request made by Westinghouse Electric Corporation in 1929 for a class “in the fine art of design as applied to electrical machinery” for Westinghouse Design Engineers. For The night class “J.B. Ellis taught sculpture, Donald R. Dohner taught design, and Robert Lepper taught drawing.” Dohner went on to work for Westinghouse “as an Art Engineer” when the company made the strategic decision to invest in the aesthetic value of their products. Westinghouse’s enthusiasm for the CIT program lasted only a few years and by the academic year of 1932–33 the class and other courses of the School of Applied Design were merged into the Department of Painting and Design. Industrial Design classes spurred up again in 1934–35 with the return of Dohner to the CIT.

177 Ibid.
178 Ibid.

“Curricula for the Department of Painting and Design”, College of Fine Arts, Bulletin of the Carnegie Institute of Technology (1938–1939 and 1940–1941): 41–47. The course curricula describes the approach for the “three options of specialized training” available (painting and illustration, art education and industrial design) as “fundamental training in drawing and design in its broadest sense” (Ibid., 16). The courses specific to industrial design majors for 1938–1942 remained the same as in 1934, the first year of the program, according to the curricula listed by Lesko. The only changes found between the 1934, 1938 and 1940 curricula were in the faculty assigned to the courses and the description of the Industrial Design I course. The curricula set the freshmen year apart from the rest, as a foundation year, even though the courses for sophomore year were all the same for the three majors. Industrial design specific courses were offered in the junior and senior years.

180 “Curricula for the Department of Painting and Design”, College of Fine Arts, Bulletin of the Carnegie Institute of Technology (1940–1941): 44. Industrial Design I is described as: “The design of articles for multiple production. Form and its appearance evolved out of an intensive study of function, materials and processes of manufacture.” The sequential course Industrial Design II is described as “A continuation of A–562 [Industrial Design I], involving an application of previous experiences in structural design to problems of greater complexity.”

181 “Exposición de arte y diseño de Duncan del Toro” [Exhibition of art and design of Duncan del Toro], El Mundo (Puerto Rico), September 25, 1942.

182 Lesko, 283–284.
183 Ibid., 281.
184 Ibid., 281.
185 Ibid., 280.
186 Ibid.
187 Ibid., 289.
188 Ibid. Production Methods I and II were also taught by Müller Munk. The description of the first one reads: “A study of present day industrial production methods carried on by means of regular weekly visits to a variety of manufacturing plants in the district. Plant visits will be supplemented by library research of correlated data to be incorporated in written reports.” The following course was an extension of the first one “with further and more detailed analysis of production methods as related to the problems of the designer” (Curricula [1940], 45). Müller Munk left the program in 1944 to further develop his professional career and his involvement in national and international industrial design associations (Lesko, 289).

189 Ibid., 280.
190 Ibid., 276. Kostellow originally taught the Industrial Design courses with Dohner and later with Müller Munk (Ibid., 283). Lepper tells that when Kostellow left to join Dohner at Pratt Institute, it was Lepper who took his place in the faculty (Ibid., 280). However, while Lepper and Müller Munk are listed as the professors of the Industrial Design courses in the 1938–1942 curricula, Kostellow is listed as the professor for Advanced Design (a course for all majors), also with Müller Munk (Curricula).

192 Ibid.
Reyes Padró.


José Arnaldo Meyners, “La industrialización del país: Duncan del Toro revela lo que puede hacerse con la flora de Puerto Rico” [The industrialization of the country: Duncan del Toro reveals what can be done with the flora of Puerto Rico], *El Mundo* (Puerto Rico), January 6, 1946, p. 4. Translated from the original Spanish.
CHAPTER 3–A CLASH WITH REALITY: DUNCAN DEL TORO AND THE MODERNIZATION OF PUERTO RICO (1942–1946)

The ideas and policies for economic improvement set out by the colonial government of Puerto Rico in the 1940s were fundamental for the development of del Toro’s eight-year career that lasted from his return to the island in 1942 until his death in 1950. The government-sponsored industrialization program, and del Toro’s possible involvement in it, is essential to understanding the development of his ideas in the economic context of life on the island. Evidence suggests that del Toro opened his shop circa 1945. Dated work prior to 1946 was not found, so the first half of his career, from 1942 through 1945, is explained using primary and secondary sources such as interviews with del Toro’s son and daughters, periodicals from the era, as well as letters, photographs, and drawings found in the Architecture and Construction Archive of the University of Puerto Rico.

1.0–GREAT EXPECTATIONS AHEAD: THE RETURN OF A FATHER’S SON, AND AN UNCLE’S NEPHEW

If it was about the assessment of the artistic merit of this exhibition I would hesitate to stand at this podium because I lack sufficient competence for such a task. Fortunately, this is not about art exclusively. It is rather about Puerto Rican values and hopes, of which this exhibition is a symbol, and about that I think I can speak with authority, or at least with passionate conviction.196

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On the night of September 26, 1942, with the words quoted above, Dr. José Padín, former Commissioner of Public Instruction and a member of the Higher Education Council of Puerto Rico and a prominent figure with direct ties to the American administration on the island, introduced Duncan del Toro to a select audience of the artistic and cultural circles at the Ateneo Puertorriqueño in San Juan. Del Toro’s art and design work presented included work from his high school years and class projects from his undergraduate studies at CIT. Del Toro, who Padín only speaks of directly in a few lines, is quoted as stating that he aspired to “improving Puerto Rican life,” a principle credited to his upbringing. Padín stressed that with “education, discipline, and technique” del Toro set an example for others to explore the island’s potential for industry. In a review of the exhibition Federico Enjuto, a Spaniard exiled by the Spanish Civil War of 1936, accentuated del Toro’s commitment in comparison to a constructed concept about the European youth who, the author says, “does not favor the study and development of utilitarian art.”

It is interesting to note that Padín’s address at the opening of del Toro’s exhibition as transcribed in the newspaper El Mundo, focused mainly on the family, instead of del Toro himself or his work. Furthermore, the fact that the speaker was Dr. José Padín is evidence of the role that del Toro’s lineage played in his career. As del Toro himself mentions in another article, “My uncle has always shown a loving interest towards me […] and as much to him as to my father, I owe phrases of encouragement and inspiration that have greatly stimulated me.” The support of his family and the advantage of the family’s social position also explain the type of clients that Duncan designed for later on.
Padín elevates the del Toros, which he describes as a resilient family that has been able to persevere through all the troubles that Puerto Rico faced since their arrival on the island in the era of the *Conquista*. The del Toros, Padín observed, shone through stagnation as men of “imagination, deep sense of social responsibility, [and] handicraft;” all qualities visible del Toro himself. He inherited a sense of civic duty from his father, Dr. Jorge del Toro—a distinguished surgeon—and his uncle, Emilio del Toro—Chief Justice of the Supreme Court of Puerto Rico. However, it is in the figure of Domingo del Toro, Duncan’s great grandfather, where Padín finds a perfect model for the young designer’s qualities and convictions. Padín describes Domingo as a researcher and inventor who dedicated his life to promoting the industrial development of Puerto Rico and to the study of native flora, textiles and fibers.

In an article by Jorge Felices, published in the newspaper *El Mundo* on the opening day of the exhibition, del Toro elaborated on his aspirations that Padín had mentioned. He expressed that even while studying in Pittsburgh, he looked forward to “contribut[ing] to the development and progress of the island.” Del Toro believed that many of the issues of everyday life in Puerto Rico could be resolved through design. He explained how traffic problems in the city of San Juan were a design problem, and how he believed that Puerto Rico possessed the raw materials to produce earthenware jugs that could satisfy the increased demand for glass bottles that were difficult to procure due to the rationing of wartime. He also mentioned how he would use the wood of the *yagrumo*, or trumpet tree, a native wood of the Antilles and Central America, as a substitute for cork. Del Toro asserted his belief in success in industry through innovation, which he saw
as essential for the progress of Puerto Rico.²⁰⁷ In an interview published in the same months his exhibition was in display, del Toro declared his professional convictions:

> Through it [industrial design] I will try to make Puerto Rico a Puerto Rican place, making use of our own beautiful landscape and traditions taken to design […] that carry our distinct stamp. I sponsor the immaculately well done, economical, clean, original, and before all, simple design, which beauty rests in the proportions that is the basis of all beauties. […] Puerto Rico can be decorated with its own, and to do so, the people have to be shown what can be done with their own raw materials like clay, bamboo, yagrumo, fiber and coconut. And thus it will create new industries and stimulate those that are already on the rise.²⁰⁸

In the exhibition, del Toro presented a varied display of drawings, oil paintings, and sculptures as well as designs for products such as ceramic vases, a logo design for White Tower Hamburger Co., design drawings for a commercial gas pump (fig. 3), a vending kiosk, a hair dryer, as well as a mural depicting the production process of plywood, and an economic theorem.²⁰⁹

I was able to locate a total of five newspaper articles that discussed del Toro’s exhibition, which was also presented at the University of Puerto Rico after the showing at the Ateneo Puertorriqueño, as seen in an undated newspaper clipping in the family archive. In those articles del Toro communicates his social convictions in harmony with his design principles, including social responsibility or civic duty, the use of local materials, the belief in improving life through design, innovation, industry and education.
After the coverage of the exhibition only one other article about del Toro—published during his lifetime—was found.

![Design for a gas pump, Duncan del Toro, undated. Possibly presented at del Toro’s exhibition at the Ateneo Puertorriqueño.](image)

**Figure 3.** Design for a gas pump, Duncan del Toro, undated. Possibly presented at del Toro’s exhibition at the Ateneo Puertorriqueño.

2.0—A PART OF SOMETHING BIGGER: PUERTO RICO’S MARCH TOWARDS MODERNIZATION

After the hype in the press about del Toro’s exhibition and his designation as the first industrial designer of Puerto Rico, the following three years of his career are a bit obscure since little evidence of his work was found. In a 1963 article, designer Jeff Markel describes how at the beginning del Toro found little support for his ideas. Markel describes that del Toro arrived in a setting “where his profession was virtually unknown
and where, for greater disadvantage, there was very little industry.” In response, del Toro turned to interior design.210

The documents in the family archive suggest that del Toro’s first design commission was for the Bamboo Bar at the Hotel Condado in San Juan, which was inaugurated on December 31, 1942, only three months after the opening of his exhibition at the Ateneo Puertorriqueño. A newspaper clipping advertising the opening of the establishment (fig. 4), credited it as “creation and design of the distinguished Puerto Rican industrial designer Duncan del Toro.” The same ad promotes the “simple and refined atmosphere,” and describes the place as “the hot spot of Puerto Rican society.”211 Less than two months later, on February 11, 1943, a similar advertisement published in the front page of El Mundo (fig. 5), announced the inauguration of El Morocco, a bar in San Juan. The ad also emphasized “interior design by the notable artist Duncan del Toro.”212 After the announcement for the opening of El Morocco, not much was found about del Toro’s work from the moment of his return until 1946.

During an interview done for this research, del Toro’s son mentioned that among the first jobs his father had was in the early days of the Puerto Rico Development Company (PRDCO). He spoke of a designer with the last name Dornbush who along with his father worked with Teodoro Moscoso researching native materials that could be used for industrial manufactory.213 The latter is widely known in Puerto Rico for having spearheaded the industrialization program that transformed Puerto Rico from an agricultural to an industrial economy in the 1950s.
Figure 4. Ad for the opening of the Bamboo Bar, undated.

Figure 5. Ad for the opening of El Morocco. Reprinted from El Mundo (Puerto Rico), February 11, 1943, p.1.
Following on that remark, further research revealed that Adrian Dornbush was a Dutch painter, educator, and art administrator, who came to Puerto Rico as part of the industrialization programs developed by the island’s government in the 1940s. Dornbush’s government work began in 1934 on a Public Works Administration (PWA) art project designed to revive the Key West region of Florida from the effects of the Depression and make it appealing for tourism.\textsuperscript{214} The Key West project served as a model for the art programs later developed by the Work Projects Administration (WPA) on a national level.\textsuperscript{215} During his stay in Key West Dornbush met Rexford G. Tugwell who invited him to Washington, DC to develop an “art program” for the Resettlement Administration (RA) agency that Tugwell devised and directed. The RA, precursor to the Farm Security Administration (FSA), was in charge of the relocation of farmers affected by the Depression.\textsuperscript{216} Dornbush ran the Special Skills department where he developed a furniture design project to furnish the houses of the families resettled by the agency. In an interview in 1965 “conducted as part of the Archives of American Art's New Deal and the Arts project,” from his home in El Yunque Rainforest in Puerto Rico, Dornbush explained:

THE IDEA OCCURRED TO ME AT THE TIME, THAT IF THE GOVERNMENT BUILDS HOUSES FOR THEM TO MOVE IN, FURNITURE IS AN ESSENTIAL PART OF A HOUSE, WHY DON'T WE DESIGN FURNITURE ON THE BASIS OF THE ACTUAL BLUE PRINTS FOR THESE HOUSES TO SEE THAT FURNITURE WOULD BE FUNCTIONAL AND THAT IT WOULD FIT AND BE BEAUTIFUL AND THE THOUGHT OCCURRED TO US ALSO IF THE FURNITURE THAT WE DESIGNED AND PROVED OUT, WERE MANUFACTURED BY ESTABLISHED FURNITURE MANUFACTURERS
who were in those days having pretty hard times too, we could help -- give
a little shot to the economy in that way.  

The project incorporated the national Furniture Manufacturers Association, local
businesses and designers. Even though its reception was not positive at first, opinions
eventually changed after the furniture producers got three million dollars in deals.  

With this background it is not hard to conclude why Dornbush was part of the
team that Tugwell assembled to put his plan for the modernization of Puerto Rico into
action when he was appointed governor in 1941 (a post he held until 1946). Tugwell’s
plan consisted of the replication of the New Deal programs that had proven successful on
the mainland. Dornbush was appointed to run the Manual Industry and Design division of
PRDCO. First Lady Eleanor Roosevelt, a friend of Dornbush, mentioned him in the
March 15, 1944 edition of her newspaper column “My Day,” published during her
second visit to Puerto Rico. Mrs. Roosevelt wrote:

I was particularly glad to see Mr. Adrian Dornbush, who has been setting
up a laboratory of design here for the Puerto Rican Industrial Association.
The island needs industrial development if it is ever to have a better
standard of living, and this is one of the ways in which it may be
achieved.  

Roosevelt mentioned Dornbush again in the “My Day” column when she returned to
Puerto Rico in 1959, and made reference to Dornbush’s reason for moving to the island
“to try out some plans for using native materials and developing native hand skills.” In
the same paragraph she mentions that Dornbush stayed in Puerto Rico and opened a “little factory” on the island.\textsuperscript{221}

José L. Bolívar Fresneda explains that during the Tugwell administration the government set out “a program of agricultural reforms, an aggressive development of infrastructure, administrative reorganization, and a limited program of industrialization through factories operated and controlled by the Insular government.”\textsuperscript{222} Bolívar Fresneda cites economist James L. Dietz who described the economic platform implemented on the island from 1942–1945 as one of “import substitution.”\textsuperscript{223} The appointment of Tugwell as governor was one of the first moves by President Franklin Delano Roosevelt to take charge of the issues of the island in the dawn of American participation in the Second World War.\textsuperscript{224} Although there is not ample documentation of del Toro’s participation in the government programs up to this point beyond his son’s recollection, the policies put in place fit perfectly with del Toro’s ideas and professional capacity.

While the war effort gave a boost to the economy in the United States, the effects on the island, which lacked a war economy, were catastrophic. The threat of attacks on American cargo traveling to Puerto Rico and the need to use ocean liners for the war put the island at risk because of its dependency on imports for most of its supplies. By September 1942, imports were cut by fifty five percent of what they were in 1940. According to Bolívar Fresneda, one third of Puerto Rico’s food was imported; during the war period, most imports were focused on preventing starvation. Food imports rose from thirty-three percent of all imports in 1940 to fifty-seven percent in 1942.\textsuperscript{225} As a result of
the focus on food imports, unemployment increased from sixteen percent in 1941 to thirty-seven percent in 1942 due to the shortage of consumer products and materials for manufactory. Governor Tugwell’s approach to the situation, as explained by Bolívar Fresneda, was that “manufacturing was the only vehicle” and “the solution of these problems was in industrialization.”

Tugwell did not find support for his industrialization program in the American entrepreneurs already established on the island that perceived his New Deal agenda as a threat to the export practices of the sugar industry. The government took charge and conceived a platform based on two parallel agencies designed to operate and fund the industrialization program, the already mentioned Puerto Rico Development Company (PRDCO), and the Puerto Rico Development Bank.

Del Toro’s son recalled that his father worked in the PRDCO program. However, direct evidence linking del Toro to the program or to Dornbush has not been found, but the idea cannot be abandoned easily considering that del Toro’s belief in industry, design and the use of local materials was along the same line as the mission of PRDCO. A 1944 article cites Dornbush’s positive expectations for Puerto Rico’s industries once the war was over. The article goes on to say that Dornbush expressed a particular interest in the needle and furniture industries. He was especially enthusiastic about the new methods being developed for the use of bamboo in furniture, which possesses special qualities like the ability to be curved. PRDCO did experiments to explore the uses of bamboo, which was found to be very convenient for the furniture industry because of its resistance to termites. PRDCO reported that it had entered into a deal with a private furniture
manufacturer to produce a small amount of bamboo furniture designed by the
government agency. Both articles mention that bamboo furniture had a good reception
in the local market, and there was demand for it in New York, Miami and Boston.

The already cited article by Jeff Markel sheds more light into collaborations
between the government programs and private entrepreneurs. The author mentions that
the department under Dornbush’s management was in charge of designing products to be
manufactured on the island for the local market, and eventually export. Markel notes that
as part of the program, Dornbush brought in designers from the mainland, including Alan
Gould, Henry Lockinini, and Anne Franke, among others. The range of products
designed by the program included “wood furniture, […] decorative ceramics, textiles, and
other woven products.” Bolívar Fresneda talks about how PRDCO took into
consideration the export of “articles made of bamboo, fibers, ceramics, needlework and
other” to the mainland, as well as advising “local manufacturers on improved production
and market methods.” The program only lasted from 1944 to 1946 as the government
and thus PRDCO changed its approach to industrialization.

Since the start of Tugwell’s program there were mixed opinions on what route to
take towards industrialization. The governor pushed for state-operated industries, while
Moscoso, PRDCO’s director (1941–1961), believed in bringing American corporations to
establish their operations on the island. On the other hand, Rafael Buscaglia, President of
the Development Bank, thought the government should encourage the development of
native industries by the people of Puerto Rico, and Senator and President of the Popular
Democratic Party, Luis Muñoz Marín wanted to focus on the issuing of government
bonds. After President Roosevelt’s death on April 12, 1945, support for New Deal programs and Governor Tugwell’s leverage in Washington, DC were lost. Mainland investors, who labeled Tugwell and his policies as socialist and experimental, pressured the agency to focus the industrialization agenda on them and not the state-owned operations. PRDCO’s program was not solving the immediate issue of unemployment, for its focus was on projects that would contribute to the economic growth of Puerto Rico in the long term. By the end of the Tugwell administration in 1946, efforts had shifted towards American investments. With the appointment of Governor Jesús T. Piñero, the first Puerto Rican to hold the post, the deal was sealed. Piñero signed into law a tax exemption for all industries that established operations on the island and the doors of the Puerto Rican market were blasted open to foreign investors.

According to Markel, several efforts that began in the program led by Dornbush lived on as commercial ventures like the Puerto Rican Pottery factory led by Hal Lasky and a textile project developed by Geraldine Frank and bought by Ken Beatty. Historian José Luis Colón González explains that Lasky’s Puerto Rican Pottery set up “in the early 1960s,” meant “to train people in ceramics and stimulate artisans to be creative, starting from the basic elements of materials and design to create harmonious works.”

Lasky’s operation began in a makeshift oven in the premises of architect Henry Klumb’s residence in Río Piedras. Klumb was another one of Governor Tugwell’s invitees who came to Puerto Rico in 1944 to direct the Committee on Design of Public Works. Del Toro’s life and work is linked to Klumb in various ways. Klumb, a German architect who had studied and worked with Frank Lloyd Wright in Taliesin from
1929 to 1933, was assigned to assemble an office to design “hospitals, schools, housing, sewers, aqueducts, parks, and roads” as part of Tugwell’s plans for Puerto Rico.245 The same year of his arrival, in partnership with Stephen Arneson, another Taliesin alumnus, Klumb set up Arklu furniture shop, and in 1945 he opened The Office of Henry Klumb for projects outside of the public sector.246

I was able to locate various documents that substantiate a link between del Toro and Klumb in the Henry Klumb Collection at the Architecture and Construction Archive of the University of Puerto Rico. The first appearance of del Toro in Klumb’s work is in the plans for the Teacher Center (1944) that list Duncan del Toro as the industrial designer of the project. The project, which was never built, also lists Klumb, Arneson and Pedro Luis Amador as architects, and Angel Aviles, and Pedro del Manzano, Jr. as auxiliary designers.247 Later del Toro is listed in three separate reports of accounts receivables for Arklu (1949–1951).248 This evidence suggests that Klumb and del Toro were indeed connected in a professional, personal and philosophical level. Their relationship will be described in the next chapter.

3.0–CONCLUSION

The beginning of the 1940s saw the arrival of many foreign professionals that found in Puerto Rico a ready opportunity to develop their ideas together with government support to finance them. Part of that influx of talent was Puerto Rico’s own Duncan del Toro. Although the timing for his return seemed ideal, the road to success was still unpaved. A government program that prioritized foreign investment and the design and
construction of infrastructure more than the design of goods put del Toro’s plan for an
industrial design practice at risk.
José Padín, “Aplicación del arte a la industria: La personalidad de Duncan del Toro” [Application of art to industry: The personality of Duncan del Toro], El Mundo (Puerto Rico), October 18, 1942, p. 12. Translated from the original Spanish.

Unidentified clipping, possibly from the Ateneo Puertorriqueño bulletin or similar. Del Toro family archive.

“Exposición de arte y diseño de Duncan del Toro” [Exhibition of art and design of Duncan del Toro], El Mundo (Puerto Rico), September 25, 1942.

Federico Enjuto, "Exposición de arte y diseño en el Ateneo de Puerto Rico de Duncan del Toro" [Exhibition of art and design by Duncan del Toro at the Ateneo de Puerto Rico], Puerto Rico Ilustrado, October 24, 1942, p. 11. Translated from the original Spanish.

Jorge Felices, “Un viaje decidió la vocación de Duncan del Toro” [A trip decided the vocation of Duncan del Toro], El Mundo (Puerto Rico), September 26, 1942, p. 5. Translated from the original Spanish.

Padín resorts to vegetal imageries to explain the del Toros’ resilience comparing them with the Ceiba centenaria or centennial Ceiba, known for its buttress-shaped roots and thorn-covered trunk, dating back to the pre-Columbian era. Padín contrasts the del Toros to other Puerto Ricans who suffer from aplatanamiento, “our moral anemia” as he puts it. Aplatanamiento, a popular colloquial expression, is the verbalization of the word plátano, the Spanish word for plantain, a main ingredient in the Puerto Rican diet. In the essay Insularismo (1934), Antonio S. Pedreira explained aplatanamiento as an attitude common among those Puerto Ricans who become “acclimated to the tropical blandness” (Antonio S. Pedreira, Insularismo [Madrid: 1934], 40, Translated from the original Spanish). “It is to continue the course of life, without suffocating, comfortably and routinely, without changes or concerns, nodding at our aspirations and squatting in front of the future” (Ibid.) The expression, Pedreira hints, comes from the “effect” of tropical weather on plantains, “The weather melts our will and causes fast deterioration on our psychology. The heat ripens us prematurely and prematurely decomposes us” (Ibid., 39).

Carmen M. Reyes Padró, “Puerto Rico tiene un diseñador industrial: Duncan del Toro” [Puerto Rico has an industrial designer: Duncan del Toro], El Imparcial (Puerto Rico), October 4, 1942. Translated from the original Spanish.

“Exposición.”

Jeff Markel, “El diseño industrial en Puerto Rico” [Industrial design in Puerto Rico], Urbe 6 (September 1963): 36. Translated from the original Spanish.

Undated newspaper clipping found, probably from El Mundo (Puerto Rico). Del Toro family archive.

Front page, El Mundo (Puerto Rico), February 11, 1943, p. 1. Translated from the original Spanish.

Duncan del Toro (son), interview by the author, March 10, 2012, Alexandria, VA.


Ibid., 3.

Ibid., 8.

Ibid., 9.

Ibid., 10.

Unidentified to Adrian Dornbush, November 7, 1945, Archivo de Arquitectura y Construcción,

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Universidad de Puerto Rico.


223 Ibid., 3.

224 Ibid., 26–27.

225 Ibid., 30–32.

226 Ibid., 34–35.

227 Ibid., 39.

228 Ibid., 41–42.

229 Carroll Kenworthy, “Anuncia buena perspectiva para nuestras industrias” [Announces good perspective for our industries], El Mundo (Puerto Rico), August 8, 1944, pp. 1 and 13.

230 “Dan resultados experimentos con el bambú” [Experiments with bamboo give results], El Mundo (Puerto Rico), October 8, 1944, pp. 1 and 8.

231 Markel, 36.

232 Ibid., 37.

233 Bolívar Fresneda, 192.

234 Markel, 37.

235 Bolívar Fresneda, 90.

236 Ibid., 168.

237 Ibid., 177 and 213.

238 Ibid., 180.

239 Ibid., 191.

240 Ibid., 196–197. A couple of the first to take advantage of the new law were the Ponce Candy Company and the Crane China Corporation. In the book Caribe China: A window to Modernity, historian José Luis Colón González explains that the Crane China Corporation, later known as Caribe China, was registered in 1947 and applied for “tax exemption.” Crane China acted as a subsidiary of the Iroquois China Company of Ohio (José Luis Colón González, Caribe China: A Window to Modernity [Puerto Rico: EMS Editores, 2008], 46–47). The factory’s operation consisted mostly of articles for “hotels and restaurants […] some utensils for household use,” to alleviate the production line of the factory in Ohio that focused on meeting the demand for the “Russel Wright China by Iroquois line” (Ibid., 52–54). Also among the first round of tax-exempt corporations was the Caribe Craft Corporation, a furniture manufactory specializing in furniture “made of bamboo fibers, vines and wood of the country” (Bolivar Fresneda, 197–198).

241 Markel, 37.

242 Colón González, 86.


245 Ibid.

246 Ibid., 27–31.

247 El Centro del Maestro, title sheet, December 27, 1944. Archivo de Arquitectura y Construcción, HKI 3056 P0012, Universidad de Puerto Rico.
Summary of Accounts Receivable as of December 31, 1949; Summary of Accounts Receivable as of December 31, 1950; and Accounts Receivable (Pending Collection October 11, 1951), Arklu Industries, Inc. Archivo de Arquitectura y Construcción, Universidad de Puerto Rico.
CHAPTER 4—DUNCAN’S ORIGINAL FURNITURE:
A BUSINESS OF MODERN PRINCIPLES (1946–1950)

There are many similarities in the design principles and convictions of architects and designers in Puerto Rico in the 1940s. After all, they were all products of their time, and their ideas, principles of their cultural environment. For example, Dornbush’s background and his efforts to stimulate the furniture industry in Puerto Rico were along the same line as the design principles that del Toro expressed in the press upon his return from Pittsburgh. According to architect and historian Gwendolyn Wright, Klumb showed an interest in “an ‘architecture of social concern’” and adds “a phrase he seems to have borrowed from Richard Neutra,” the latter also worked at the Committee on Design of Public Works.249 It would be rather difficult, if possible at all, to point to a specific genesis of such ideas in the design industry in Puerto Rico.

The newspaper articles and interviews found show the design principles that guided del Toro’s career: the use of local materials, training of the workforce in industrial manufacturing processes, the potential of local industry, the embrace of the values of modernity and the appropriation of such values through a unique local expression. Each section of this chapter will present one of these principles and how they fit into the socio-political atmosphere of the time. Examples of his work found in the family archive will be used to illustrate these principles. The earliest dated work found is from 1946. It is about this time that del Toro opened his shop.
1.0–SETTING UP SHOP

In 1963 Markel gives 1946 as the year del Toro set up his shop. However, an article from January 6, 1946 mentioned the shop’s monthly production of one hundred floor and table lamps, suggesting that the shop may have been in operation already for some time. To have that volume of production in January the shop must have been set up quite some time before. The same article described the setbacks when the Office of Price Administration (a wartime agency) regulated a retail price lower than production costs, bringing production to a temporary halt.

According to del Toro’s son and two daughters he first set up his shop in the Monte Flores neighborhood of Santurce, San Juan, where del Toro and his wife shared the same corner property with Henry and Else Klumb. It was a house designed and previously lived in by Czech architect Antonin Nechodoma. The Klumbs lived in the main house, facing Sagrado Corazón Street, and the del Toros lived in the studio in the back that faced Magnolia Street.

Evidence found in the family archive shows that del Toro operated his furniture shop in four different locations and under four different names. The first location was where he lived, in 32 Magnolia Street in the Nechodoma house in Monte Flores. There, del Toro used the name DISEÑO—PRODUCTO—BORICUA / Trademark Duncan del Toro (DESIGN–PRODUCT–BORICUA / Trademark Duncan del Toro). This is visible in a sketch advertising the shop (fig. 6) that illustrates a living room set that is also found in a family photograph dated circa December 1946. Sometime in 1947–1948, he moved the shop further down the same street to 2007 Magnolia Street and used the name Tropi-
Art Furniture as seen in another sketch advertising the shop (fig. 7). In 1948 del Toro and his family moved from Monte Flores and so did the business. An ad published in *El Mundo* (fig. 8) with the name Duncan’s Tropi-Studio shows the address now as 103 Park Street. His son confirmed that the locale in Park Street was a showroom while the workshop was at Paraguay Street. The showroom was run by his cousin Laura del Toro de Casellas who had a business degree and a keen sense for sales, according to his son.253 Circa 1949–1950, the shop was moved once again, this time to 2310 Borinquen Ave., cornering Carpenter Rd., and now named Duncan’s Original Furniture (fig. 9). It was a shop and showroom. The business remained there after del Toro’s death in 1950 under the administration of his widow, and was later known as Duncan’s Fine Furniture, until a fire forced it to close in 1970.
Figure 6. Sketch for an ad, Duncan del Toro, undated.

Figure 7. Sketch for an ad for Tropi-Art Furniture, Duncan del Toro, undated.
Figure 8. Published ad for Duncan’s Tropi Studio, undated.

Figure 9. Published ad for Duncan’s Original Furniture, undated.
2.0–IMPORT RESTRICTIONS ON MATERIALS: AN OPPORTUNITY

The already cited January 6, 1946, newspaper article explains that del Toro was convinced that the island possessed plenty of raw materials with potential for industrial manufacture. Del Toro is said to have gone on research expeditions deep into the mountains and countryside where he found at least forty different species of wild fibers and woods with industrial potential. Most of which, del Toro explained, were not being used, and were in fact seen as a nuisance to most farmers who had to chop them down and dispose of them.\textsuperscript{254}

Designer Lelis Marqués mentions that del Toro kept a catalog of the native materials with industrial potential he had found.\textsuperscript{255} Marqués had researched del Toro in the 1990s for an exhibition of Puerto Rican furniture held by the now closed Design Council for Puerto Rico, a division of PRDCO created in 1979 to offer businesses the design services they needed to market their products.\textsuperscript{256} Del Toro’s son clarified that the catalog consisted of a sample board that hung from a wall in the back of his father’s shop.\textsuperscript{257} Marqués credits del Toro with the use of reed from Guíaarte (a mountain in the center of the island where his wife’s family owned land). Given the research on materials by PRDCO already described, and the atmosphere in general, it is possible that del Toro worked with different types of cane or reed. His oldest daughter Frances considers del Toro’s initiative to use the materials at hand to stimulate local industry his most important contribution to Puerto Rican society.\textsuperscript{258}

Marqués described an armchair designed by del Toro and explained: “the success of his designs surpassed both his intent and expectations which had been to offer
satisfactory alternatives, both in terms of design and quality, to rattan furniture no longer available on the island because of World War II trade restrictions. The chair described by Marqués is made of wild cane or possibly bamboo (fig. 10), and it is visible in photographs and drawings found in the family archive. A family photograph taken circa 1946 (fig. 11) shows del Toro with his wife, son, and daughter, seated in a love-seat and matching set that includes the armchair. The photographed set consists of a loveseat, armchair, coffee table, lamp, domestic bar and what appears to be a room divider screen. All the pieces are made mainly with cane and rectilinear wood paneling. An undated sketch for an advertisement of the shop (fig. 6) shows a drawing of the photographed living room set. Another undated sketch for an ad (fig. 7) shows a similar chair that might be a simplified sketch of the same armchair.

**Figure 10.** Drawing of armchair made of cane, wood, canvas and weave. Reprinted from a photocopy of Please Be Seated (Amsterdam: International Federation of Interior Architects/Interior Designers, IFI, 1991).
Figure 11. Del Toro-Rullán family in their home at 32 Magnolia Street in Santurce, Puerto Rico, Ca. 1946. Left, Duncan del Toro with son Duncan, right, María Teresa Rullán with daughter Frances.


Visually, the armchair harkens back to the use of tubular steel by such modernist designers as Mies van der Rohe in his Cantilever Chair with Arms (1927) (fig. 12). In terms of mechanical production it was probably closer to Michael Thonet’s bentwood chairs (fig. 13). Then again, “tubular steel furniture” can be described “as an attempt to modernize bentwood” to fit industrial manufacturing processes, and modern “spatial” simplicity. Although it was a common idea of the mid-twentieth century that “wood in its present varieties can no longer serve modern requirements,” metal furniture was not transferable to the tropical island context due to the menace of rust caused by the salt found in the winds blown in from the coasts.

Del Toro was not alone in his interest in the use of native materials. An already cited newspaper article from October 8, 1944, stressed PRDCO’s interest in bamboo crops. In that year alone, PRDCO distributed 3,790 bamboo plants of eight different species for industrial use. As mentioned before, the PRDCO report emphasized bamboo’s resistance to termites and other insects. Marqués stressed this fact when describing del Toro’s armchair: “The use of cane with canvas, rush and basket weave provided beauty as well as resistance to termites and mildew, always a problem in the tropics.”

Henry Klumb was another strong believer in the advantage of local materials. Vivoni Farage writes: “His projects were characterized by the use of materials accessible on the island, with no pretentions to ornamentation.” When talking about Klumb’s approach to furniture, Vivoni Farage writes: “Unlike his European colleagues such as Le Corbusier, Mies van der Rohe, and Marcel Breuer, who utilized modern materials such as
stainless steel and plywood [...] Klumb preferred to use native woods, leather, and cord.\textsuperscript{265}

Del Toro’s materials of choice, as observed in the drawings found in the family archive, were cane, native hardwoods, native stone, plywood and Weldtex (or striated plywood, created by Donald Deskey and produced in New York by the United States Plywood Corporation).\textsuperscript{266} The dated designs from 1946 show a predilection for cane, while those from 1947 are dominated by Weldtex and stone — although cane is still present in some. Cane elements are barely seen in the designs from 1948 to 1950. This is an interesting fact because it can help register many of the undated designs found in the family archive. It is known, from a 1946 newspaper article and from Marqués’ research, that del Toro resorted to native materials to compensate for the restrictions of wartime, therefore it is logical that after the end of the war, he introduced new materials unavailable to him before. Also, by 1947 the popularity of plywood had grown drastically after the success of the molded plywood chairs designed by Charles Eames and Eero Saarinen (1940) and Charles and Ray Eames’ leg splint for the Navy (1942).\textsuperscript{267}

3.0–HELP WANTED

Besides the lack of a single standing manufacturing industry, del Toro knew from the beginning of his career that he would have to contend with an untrained workforce and an audience that was not familiar with the industrial design profession. In an already cited interview published in October 1942, less than six months after his return from CIT, del Toro acknowledges the need to train the workforce in order to achieve his industrial
goals: “I've thought about it, the task is not easy.” Del Toro devised a system to train his woodworkers in groups of seven, with pay. After the training many of them were qualified to work in the rising furniture industry.

The need for trained workers was shared among all who worked towards industrialization. A 1944 article describes collaboration between the Manual Industry and Design division of PRDCO, directed by Dornbush, and Fine Wood Manufacturing, Inc. to share “technical and expert advice” on the design of tropical furniture and woodwork training for the corporation’s workforce. The article mentions two Americans employed at PRDCO, Henry La Cagnina, who designed pieces for Fine Wood Manufacturing to build, and Joseph Weber, who was in charge of the training. In exchange, Fine Wood Manufacturing allowed PRDCO to use their facilities for conducting experiments with the use of woods for furniture production.

As mentioned in the first chapter, some technical training in woodworking had been available since early in the twentieth century. In his book, Hérnandez Cruz mentions the Agriculture and Mechanical Arts College in Mayagüez, and the Industrial Arts Workshop of the Polytechnic Institute in San Germán, among others.

4.0–A COCKTAIL FOR MODERNITY

After the end of the Depression, the repeal of Prohibition in 1933 in both the United States and Puerto Rico, and later the end of the Second World War, the 1940s offered a new generation of American young adults the chance to redefine themselves in a way befitting the times. In the book *A Guide to Easier Living*, Mary and Russel Wright
described the mid-century generation as one not afraid to embrace change from the ways of the past, to a simpler, more informal, lifestyle. That is why, when looking at del Toro as a son of his time, it comes as no surprise that more than half of his designs found are domestic and commercial bars.

In the 1940s, alcohol consumption was promoted as an act of “freedom […] the right to drink as a fundamentally American right,” as historian Nathan Michael Corzine points out. This is undoubtedly in part due to advertising after the nullification of Prohibition. Historian Lewis A. Erenberg described the rise of nightclubs in the postwar era, especially in New York, as an assertion of “values of a new, consumption-dominated life.” Nightclubs, Erenberg explains, were seen as “one of the elements of American freedom and part of the show business world that symbolized home values.” For a generation seeking to break the predetermined roles of a previous generation in the home, as Mary and Russel Wright described, the nightclub did just that, outside of the home. Erenberg says, “Nightclubs thus became associated with action, experience and possibility as new alternatives to the structured roles of home, job, and college. In the nightclub both sexes enjoyed a playful rebellion against the self-denying traditions of the past.”

A total of ten bars or nightclubs for which del Toro designed the interiors have been identified; they are (in chronological order): Bamboo Bar at the Hotel Condado (1942), El Morocco (1943), Brugal Rum Bar Room (1946), Hotel New Yorker (1946), Arecibo Sports Club (1946), Carlos Vizcarrondo Bar Restaurant (1947), Don Q Bar Room for the Serrallés Destillery (1947), Arecibo Country Club (1947), Navy Beach
Club Bar (1949), and the Grand Stand for Barcelo Marques & Co. (undated). Del Toro’s nightclub designs show features of what Erenberg refers to as “streamlined art modern,” expressed through a combination of curved and angled motifs, and horizontal planes. The style seen in del Toro’s drawings fit Erenberg’s description of the aesthetic adjustments the nightlife industry had to apply to attract a new public:

To recapture audiences on a grand scale, nightclub promoters sought not only new policies, but also a whole new architecture on what they saw as sounder, American principles. Designers stripped away the excess, luxury and class distinctions that many thought had produced the crisis that left those theaters dark. They thus abandoned both the eclecticism of theatrical architecture, modeled after European castles, and the decorative motifs of art deco. Instead they turned to streamlined art moderne, a style that sought to balance the emphasis on luxurious consumption with attention to values of production.

Erenberg’s description of “long horizontal axes rather than vertical ones” can easily be applied to del Toro’s designs, like the intersecting angled planes (fig. 14) in the cornice of the bar for the Carlos Vizcarrondo Bar Restaurant (1947). Del Toro’s use of thin rods—possibly cane—instead of columns to hold up the cornice, make the design lighter and “stripped away [from] excess,” which according to Erenberg, was a typical feature of modern nightclubs. The apron of the bar for Vizcarrondo shows a pattern of juxtaposed vertical lines—a feature found in many of del Toro’s drawings—which he
used to represent striated plywood or a panel textured with canes, but in this case the drawing does not specify.

Figure 14. Floor plan and perspective drawing for a bar restaurant for Carlos Vizcarrondo, Duncan del Toro, undated. Another drawing for Carlos Vizcarrondo, labeled Dancing Lounge is dated August 12, 1947.

A drawing for the bar of the New Yorker Hotel (1946) (fig. 15) also shows the same pattern in the apron that ends with a stone skirt; in that drawing, a small annotation points out that the vertical lines are meant to be cane. Del Toro’s use of cane can be taken as the equivalent of “American technology, embodied in the chrome, steel, glass, and curvilinear electrical motifs” in clubs in New York, Chicago and the like, that according
to Erenberg, were a symbol of modern life.\footnote{280} Del Toro’s use of native materials combined with a technological aesthetic—like the neon lighted cane frieze of the New Yorker bar—resulted in a visual language that was tropical and rustic, yet modern and technological. The modern language is not only present in his use of neon, but also in how he articulated modern motifs like the streamline curve using the tropical lines of cane. The counters on the back of the New Yorker bar, a cocktail table wrapped around a column, and the stage for an orchestra stand (fig. 16) of the same hotel, are good examples of how he accomplished to balance both idioms. The floor of the stage is designed with a whimsical curve that is inverted in the neon lighted ceiling, while a cane grillage adorns the back of the stage. The design for a music stand is also visible in the drawing for the orchestra stand, meant to be made of cane, metal and straw, it matches the rest of the structure with curvilinear motifs, in a smaller scale.

As mentioned before, cane, plywood, Weldtex and stone, are the materials most commonly found in del Toro’s designs. His use of cane is overbearing in the design for the bar and mural for the Arecibo Country Club (1947). The former was established by a group of business and professional leaders of the growing suburbs of the town of Arecibo to stimulate and enjoy the leisure lifestyle of the postwar era.\footnote{281} Architects Henry Klumb and Pedro Luis Amador designed the headquarters of the Country Club whereas del Toro designed the bar and a mural depicting a jíbaro celebration (fig. 17). Architect Juan Marqués Mera’s description of the Country Club mentions a room divider (fig. 18) made of bamboo (or quite possibly cane), although he does not attribute it directly to del Toro, the similarity in style to the design of the bar suggests that it must have been part of del Toro’s design. Marqués Mera
points out that bamboo (or cane) were a functional and aesthetic element used in the look and feel of the Country Club.\textsuperscript{282}

\textbf{Figure 15.} Floor plan and perspective drawing for a bar for New Yorker, Duncan del Toro, April 1, 1947.
Figure 16. Floor plan, roof plan, sections and perspective drawing for an orchestra stand for Hotel New Yorker, Duncan del Toro, undated.

The location of the Country Club in the northern town of Arecibo, away from the metropolitan life of San Juan, is something to note. Arecibo, Marqués Mera explains, became an influential economic center due to the boom in the rum and agriculture industries. The rum industry was one of the main cash generators for the industrialization programs of the government of Puerto Rico through taxes on export. During the War period, rum producers in Puerto Rico took advantage of the gap left in the United States market by the import restrictions on whiskey imported from Great Britain. The boom in the rum industry was a business opportunity for del Toro.

He provided his services for the end users who visited the nightclubs, as well as the manufacturers. Nevertheless, the designs for distilleries found, are, in general, quieter.
in comparison with the designs for commercial bars and nightclubs already described. The use of streamlined features is not as strong, but present to some level. A design for a bar room (fig. 19), and a main office room (fig. 20) for the Serrallés Distillery (1947)—the major rum producers in Puerto Rico then and now—include designs for lamp shades made of hand woven straw, a table wrapped around a column with a built-in sofa, another built-in table, a decorative built-in planter and a bar made out of native hardwood, with a Weldtex apron and a brick skirt.

Figure 19. Floor plan and perspective drawings for a bar, tables, built-in sofa with table and lamp shades for a bar room for Don Q, requested by Iván Serrallés, Duncan del Toro, November 21, 1947.
For the Barcelo Marques distillery, another of the main rum manufacturers on the island at the time, del Toro designed a partly enclosed elevated roofed platform, labeled “Grand Stand” (undated), which seems to be some kind of kiosk or bar stand (fig. 21). Its most notable feature is the design of the neon lighted marquee displaying the words:

*RIONDO TRES ESTRELLAS* (Riondo three stars) and in a second line *EL RON ESTRELLA DE PUERTO RICO* (The star rum of Puerto Rico), all in sans serif typography.
Figure 21. Floorplan, front elevation and side elevation for a grand stand for Barcelo Marques & Co., Duncan del Toro, undated.

Figure 22. Sketches for a bar room for Brugal Rum, Duncan del Toro, January 18, 1946.
A design for a bar room (fig. 22) for Brugal Rum (1946) was also found. The drawings found are a layout diagram, and sketches for a built-in table with overhanging shelves and a small bar. The use of cane dominates this design. The designs for rum manufacturers fit the transition in materials described before. The design for Brugal from 1946 is mostly made out of cane, while Weldtex is prevalent in the 1947 design for Serrallés.

Other commercial bars designed by del Toro cannot be described because of lack of documentation. No evidence was found for the Bamboo Bar and El Morocco, except for the already mentioned ads that credit del Toro as the interior designer. A floorplan for the Arecibo Sports Club was found, however, other than the layout, the design of the interiors is not visible. A perspective drawing for the Navy Beach Club was also found but with so few details that it is not included here.

Rum companies became big sponsors of modern design in the decades following the Second World War. Kathryn E. O'Rourke discusses how Bacardi strategically “commissioned Ludwig Mies van der Rohe to design an office building in Mexico. Bacardi used the commission to shape its image as a sophisticated and cosmopolitan enterprise, as it reinvented itself in the aftermath of the Cuban Revolution,”286 as well as “a bottling plant, cafeteria, and parking canopies designed by the Spanish-born Mexican engineer Félix Candela.”287 Bacardi used the contrasting styles of both modern architects as a metaphor that as cocktails, like the Cuba Libre (rum and Coke), architecture and design principles are fun to mix:
Although it was invented in the nineteenth century and popularized in the 1920s, the cocktail had never been as popular as it was in the 1950s and early 1960s. Cultural anxieties about liquor (and about rum in particular, because of its associations with slavery) before and during Prohibition disappeared at midcentury, as cocktail parties became a means of stylishly doing business at home.\(^{288}\)

The culture of the cocktail party emerged as a marketing strategy to distance consumption of alcohol from the negative image of the urban bar that led previously to Prohibition, “In response to the evils of the old saloon, they offered the American home,” Corzine explains.\(^{289}\) The technology available in mid-century kitchens also contributed to the domestication of drinking.\(^{290}\)

In practice with the values of the time, del Toro designed a number of domestic bars; the del Toro family archive includes seven designs, as well as designs for two serving wagons. Common features shared among del Toro’s domestic bar designs include his use of cane and Weldtex as textured elements, and a native stone skirt. One of the serving wagons—designed in a streamlined style, with an aerodynamic top—is somewhat visible in a poor quality photograph, and it is shown in a sketch for an ad of del Toro’s shop (fig. 6). The del Toro family still preserves the other wagon (fig. 23), which is made of mahogany and cane in typical del Toro fashion, articulating modern shapes through native materials. The cart—also visible in a drawing dated October 29, 1949 (fig. 24)—has a double reed frame that extends beyond the top surface to form a semicircular curve, and under the top a narrow and tall cupboard stands on the side of the curved cane, two
shelves emerge from it on the other side, which are split in two halves along its wider side by an angled panel.

**Figure 23.** Mahogany and cane serving wagon, Duncan del Toro.

**Figure 24.** Serving wagon, Duncan del Toro, October 24, 1949.
In general, the domestic bars differ from the commercial bars described in the choice of materials. Most of the designs found—with one exception—use Weldtex as a primary material instead of cane. The playful curves described in the Carlos Vizcarrondo Bar and the New Yorker Hotel are substituted for simple U and L shaped counter tops with a Weldtex apron and a stone skirt. Although only four of the seven designs labeled as domestic bars are dated, three of them (fig. 25, 26, 27) are from 1948 and 1949. Only one dates to 1947 (fig. 28)—in it, cane covers every vertical surface of the design. The backs of most of the bars are designed with mirrors and shelving units. This reaffirms the theory that after the end of the import restrictions of the war, del Toro’s choice of materials expanded. Cane was still present in the designs for domestic bars, but not as a primary material. All of the examples mentioned show a cane frame around the counter tops (fig. 29, 30, 31), in the same style as the serving cart preserved in the family collection.

Another five designs of bars were found, but the drawings do not specify if their nature is commercial or domestic (fig. 32, 33, 34, 35, 36). The same pattern is repeated in those cases; designs dated from 1946 make extensive use of cane, and those from 1949 and 1950 are dominated by Weldtex.
Figure 25. Floor plan and perspective drawing for a bar for Mrs. Pascual, Duncan del Toro, May 18, 1948.

Figure 26. Floor plan and perspective drawing for a bar for Arturo Bravo, Duncan del Toro, June 14, 1948.
Figure 27. Floor plan and perspective drawing for a bar for Manuel Badrena, Duncan del Toro, March 7, 1949.

Figure 28. Perspective drawing for a bar for Dr. J.S. Pla, Duncan del Toro, January 26, 1947.
Figure 29. Floor plan and perspective drawing for a bar for Alfredo Muñiz, Duncan del Toro, undated.

Figure 30. Floor plan sections and perspective drawing for a bar, and perspective drawings for a tea table and four place sofa, for a bar room for Charlie García de Quevedo, Duncan del Toro, undated.
Figure 31. Floor plan for a bar room for Dr. Torruellas, Duncan del Toro, undated.

Figure 32. Perspective drawing for a bar, Duncan del Toro, June 10, 1946.
Figure 33. Sections and perspective drawing for a bar, Duncan del Toro, October 15, 1946.

Figure 34. Floor plan and perspective drawing for a domestic bar, Duncan del Toro, August 20, 1949.
Figure 35. Floor plan, sections and perspective drawing for a bar, Duncan del Toro, March 15, 1950.

Figure 36. Floor plan, section and perspective drawing for a bar, Duncan del Toro, undated.
5.0–EXPORT, A LAST MISSION

Since early in his career, del Toro expressed his conviction that Puerto Rico possessed the materials and the talent to supply the demand of designed goods and compete with imports. Jeff Markel describes that beyond competing with imported products, del Toro aspired to export goods designed in Puerto Rico. His aspirations were realized when the Bull Insular Line, a cargo and passenger steamship line that traveled between Puerto Rico, Dominican Republic and New York, commissioned del Toro to design the interiors and furniture of their passenger terminals in Brooklyn, New York (1949–1950).

An article in the newspaper *El Mundo* described the line’s plan for decorating the terminal with tropical motifs of the Caribbean, and Spanish style floorings and gates. Two drawings for the Bull Insular Line terminal are preserved in the family archive, one for a rest room (waiting room) (fig. 37), and another for a reception room (fig. 38). The drawings specifically illustrate a ticket desk—which is really a counter—and two different coffee counters. Although the newspaper described the designs as tropical, what the drawings show is better described as simple, clean modern design. The design can be summed up as: L-shaped counter tops with rounded corners, Weldtex apron and stone skirts, with rectilinear shelving units in the back. The style is very similar to the domestic bars described earlier, which share a tone found in most of del Toro’s designs after 1948. Del Toro died while working on the project, but it was taken to completion by his widow, María Teresa Rullán, and the staff of his shop.
Another design found in the family archive—the interior of a shoe store (fig. 39)—indicates it was commissioned by Armando González from Vigo, Spain. There is no evidence that determines if the flowing curvilinear display counters sketched were ever built. Comments on del Toro’s work published after his death only mention the Bull Insular Line as his one export project.

![Figure 37](image.png)

**Figure 37.** Floor plan and perspective drawing for a coffee counter for a rest-room for the Bull Insular Line, Duncan del Toro, July 6, 1949.
Figure 38. Floor plan and perspective drawings for a ticket desk and coffee counter for a reception room for the Bull Insular Line, Duncan del Toro, undated.

Figure 39. Floor plan and perspective drawing for the entrance of a shoe store, requested by Armando González Portela, Duncan del Toro, May 2, 1948.
6.0—TRANSCULTURATION: TRANSFORMATION INSTEAD OF SUBSTITUTION

Until now, I have discussed in this chapter del Toro’s use of native materials as a strategy to move forward during the import restrictions of wartime, his efforts to train a workforce in the processes of industrial manufacturing, and how his portfolio—dominated by designs for nightclubs and bars—is a reflection of the modern values that defined his time, and additionally, how he worked to prove the potential he saw in local industry to design and produce goods for the local market as well as for export. The last design principle visible in del Toro’s work is the process of translation and appropriation of the modernist visual language into the stylistic reality of Puerto Rico. It can best be described with Cuban anthropologist Fernando Ortiz’s theory of transculturation, which refers to the transformation processes that shape a culture. It is different from the “Anglo-American” term acculturation that implies the acquisition of a new culture as replacement of the existing one. Transculturation, in contrast, characterizes a process of transformation instead of substitution. Ortiz understood that the history of the Americas could not be told without talking about transculturation. Ortiz defines how transculturation:

... it is not only about acquiring a different culture, which is what in fact indicates the Anglo-American voice of acculturation, but the process also implies the necessarily loss or uprooting of a previous culture, which could be called a partial deculturation, and also it means the subsequent creation of new cultural phenomena that could be called neo-culturation.
Acculturation, as Ortiz describes it, is a one-way theory while transculturation suggests a transformation where all parties involved are affected, thus making it a two-way process, of unfixed and unresolved circumstances. Diana Taylor, describes transculturation as a collective occurrence that “affects the entire culture; it involves the shifting of socio-political, not just aesthetic, borders; it modifies collective and individual identity; it changes discourse, both verbal and symbolic.” Transculturation, in contrast to acculturation, suggests awareness of a civilization that embraces another. Taylor explains, “The issue in transculturation, then, is not only one of meaning (what do symbols mean in different contexts). It is also one of political positioning and selection: which forms, symbols or aspects of cultural identity become highlighted or confrontational, when and why.” The appropriation of ideas of the colonizers that occurs in transculturation is a protective action of the colonized who seeks to endure their condition, even when it is to remerge as something new.

Transculturation theory can be applied to better understand and situate del Toro’s work. An undated sketch for a lounge chair (fig. 40) found in the family archive is reminiscent of the Corbusier, Jeanneret, Perriand chaise lounge. Much like the translation Perriand made later in Japan, del Toro’s sketch illustrates a body made mostly of cane. The lounge chair has a flat seat with an angled back, a curved elongated cane runs from the front edge of a cane stretcher in the bottom and rises above the seat and extends to the back where it bends downwards while another curved cane supports the angled back in place. Although presumably unfinished, this undated sketch is a good example of how del
Toro reinterpreted the aerodynamic curve of the streamlined idiom in the first years of his career.

**Figure 40.** Sketch for a lounge chair, Duncan del Toro, undated.

While the traditional streamlined curve is heavy and firm like the transportation vehicles it emulates, del Toro’s curved motifs have a softer flow that gives it a Caribbean feel, as if emulating the waves and breeze of the region. His combinations of flowing curves with rectilinear and angled planes—articulated through cane, striated plywood and stone—give his designs a look that can be described as tropical streamlining. His use
of elongated curves can be traced back to the cow horn birds he sculpted to fund his trip to Alaska. Like in his bird sculptures, the curves in his furniture and interiors suggest subtle movement—a more relaxed pace of life, typical of the Caribbean, in contrast with the fast, metropolitan pace that American streamlining evokes. Sheldon and Martha Cheney explain that streamlining acted as a metaphor, "as a valid symbol of contemporary life flow," so it is logical that del Toro’s way to improve Puerto Rican life—as expressed upon his return to Puerto Rico—was by designing objects and interiors that reflected the contemporary values of modernity.

Having said that, del Toro’s own design idiom evolved through the years as he worked with different materials and design trends changed. The style of his later work, which can be described as dry modern lines, is more geometric and static than his interpretation of the streamlined style.

A more traditional streamlined idiom is seen in a dining table designed for his own home (undated)—shaped like a number nine (fig. 41), the top of the table is reminiscent of the streamline fenders found in the automobiles of the period. The facades designed for retail stores and restaurants in Old San Juan—a sixteenth century Spanish colonial city—like Margo Sales Corp. (1947) (fig. 42), the Irizarry store (undated) (fig. 43) and the Aquarium Restaurant (1947) (fig. 44, 45) are also examples of traditional streamlined idiom. The storefronts were overflown with angular showcases and geometric sans serif type that contrasted strongly with the Spanish architecture of the city. The undated design for the storefront of the Naviera store (location unknown) (fig. 46) fits the same description.
Figure 41. Plan and elevation for a dining table, Duncan del Toro, undated.

Figure 42. Perspective drawing for the front of a dress shop, Margo Sales Corp., Duncan del Toro, February 26, 1947.
Figure 43. Perspective drawing for the front of Irizarry Store, Duncan del Toro, undated.

Figure 44. Perspective drawing for the front of Aquarium, Duncan del Toro, undated.
**Figure 45.** Perspective drawing for the front of Aquarium, Duncan del Toro, undated.

**Figure 46.** Perspective drawing for storefront of Naviera, Duncan del Toro, undated.
Nevertheless, the interiors for the Aquarium Restaurant and the Irizarry Store are not traditional at all. The design for the Aquarium (fig. 47) presents a unified design instead of the modular built-in style of the commercial bars described earlier. Del Toro’s tropical curved motifs dominate the interiors, especially in a decorative ceiling panel that sets the design of the counter apart from other examples in his portfolio. The interiors of the Irizarry Store (fig. 48) are only seen in an unfinished floor plan but the sketched layout depicts a large flowing curve that extends throughout the whole space. The almost Nautilus-shaped curve establishes a navigational path uncommon in retail spaces that tend to follow a rectilinear grid.

Figure 47. Perspective drawing for the Aquarium, Duncan del Toro, undated.
An example of transculturation that resonates with designers like del Toro and his contemporaries in Puerto Rico and what they were trying to achieve can be found in Charlotte Perriand’s description of the state of Japanese design and craft industries in 1940. As she describes in her autobiography, Perriand travelled to Japan in 1940 by invitation “to serve, as ‘consultant in industrial art to the Trade Division on the Imperial Ministry of Trade and Industry’.”\textsuperscript{303} She was tasked to advise the Japanese government’s efforts to design and manufacture “furnishings and everyday objects in wood, bamboo, metal and lacquer […] for export.”\textsuperscript{304} She found that Japan faced the obstacle of designing “items for Western use without being familiar with our [Western cultures] way
of life.” As part of her suggestions she translated to native Japanese materials some of the designs she had worked on with Le Corbusier and Pierre Jeanneret, in the former’s “rue de Sèvres atelier,” like the 1928–29 *chaise lounge* (fig. 49). The adaptation of the *chaise lounge* was her response to a bamboo version of an Alvar Aalto bent plywood armchair produced by the Tokyo Institute (fig. 50), which Perriand found to be an unsuccessful attempt since the aesthetic effect of the malleability of the plywood did not translate to bamboo. Her adaptation of the *chaise lounge*, on the other hand, “was magnificent: the new materials produced new sculptural form, while the function—relaxation—remained unchanged […] The design flows from the materials and their use, which determines the remodeled forms and preserves their beauty in time and space.”

“The Japanese were untarnished and could spontaneously create new forms. They had to develop a critical approach to the Western world, not follow it blindly. They had to create in the modern style according to their ethic.”

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In Puerto Rico, an integrated, transculturized, modern design culture evolved as the government understood the former as “postulates of progress.”310 After all, as discussed previously, “our modernist project … was first and foremost, a political project,” as architect Nataniel Fúster put it.311 It was through the work of the Committee on Design of Public Works that a new Puerto Rican architecture, disconnected of historicist trends came to be.312 Richard Neutra, acting as consultant, pushed for modern architecture, whose modesty and cleanliness he deemed perfect for the struggles of Puerto Rico.313 Vivoni Farage explains how modern design was used to “emphasize the aspects of the ‘good old USA’ of the Puerto Rican situation,” citing Teodoro Moscoso,
director of PRDCO, talking about the Caribe Hilton hotel designed by Toro Ferrer & Torregosa architects in 1945. Vivoni Farage credits Henry Klumb with developing a “new cultural paradigm, the culture of the tropic” in architecture that did not deny the past whilst building for the future in the same spirit as the Brazilian architects “Niemeyer, Reidy, Costa and Burle Marx,” after their contact with Corbusean architecture. As Fúster explains, these architects “openly used, the foreign formal and ideological scaffolding, to be used as a launch platform for a new vision of modernity that astonished and offended many.” Argentine anthropologist Nestor García Canclini describes how Latin American vanguard artists found themselves, like del Toro, in a new place or going back to a familiar one, and were asking themselves “how to make their international experience compatible” with their context. For them, continues Canclini, “it is not a question of a transplant […] but rather of re-elaborations eager to contribute to social change.”

As part of that social re-elaboration, the desire of the upper and upper middle classes widened to integrate themselves in the currents of modernity and modernization. It was mostly in these groups that del Toro found patronage. Canclini describes it as the natural course of modernity in Latin America. Canclini sees modernity as “the means by which the elites take charge of the intersection of different historical temporalities and try to elaborate a global project with them.” These groups found a way to maintain the rank bestowed by the old social structure and reaffirm their place in the new system through the coexistence of modernity and tradition.
The evident effects of the transculturation of modern design in Puerto Rico came after del Toro’s death. It is evident already in Jeff Markel’s article, which lists a number of industrial designers working on the island. Even furniture manufacturers like Rafael Maragarida and his brother, who were in the business of Victorian-style furniture since 1892, shifted their offer to more modern, Danish, lines. Nevertheless, the coexistence of styles, sometimes contradictory in nature, described in the first chapter persisted all through the modernization period of Puerto Rico. In a 1944 letter to Governor Tugwell, the architect Neutra—informing the governor of his absence during the hiring process for the Committee on Design of Public Works—reassures the governor that his design and construction agenda will surely provide jobs for a wide range of professionals even if “aesthetical convictions are ‘spanish-colonial’, critical of mine or otherwise.” The existence of one did not cancel the other since transculturation is a dynamic process. Eventually del Toro’s shop, under the administration of his widow after his death, changed from the modern lines of Duncan’s Original Furniture to Isabelino or de medallón style (Victorian) in what became Duncan’s Fine Furniture.

7.0–CONCLUSION

The principles that guided del Toro’s work were part of a cultural phenomenon not limited to Puerto Rico. Nevertheless, del Toro was among the few Puerto Ricans, apart from architects, who ventured into a professional industrial design practice on the island. His achievements took place in an atmosphere that supported his ideas, mainly due to the government agenda of industrialization. Thanks to that atmosphere del Toro
found support in clients that like designers, were ready to embrace the values of modernity. The integration of modernist principles in Puerto Rican society that del Toro advocated saw its climax in the decades following del Toro’s death. Considering these developments, it is ironic but also indicative of a fickle market that his widow should have turned his shop into a production facility for more traditional furniture design.

Jeff Markel, “El diseño industrial en Puerto Rico” [Industrial design in Puerto Rico], Urbe 6 (September 1963): 36.

José Arnaldo Meyners, “La industrialización del país: Duncan del Toro revela lo que puede hacerse con la flora de Puerto Rico” [The industrialization of the country: Duncan del Toro reveals what can be done with the flora of Puerto Rico], El Mundo (Puerto Rico), January 6, 1946, p. 12.

Duncan del Toro (son), phone conversation with the author, February 28, 2014.

Duncan del Toro (son), interview with the author, March 10, 2012, Alexandria, VA.

Meyners, 12.

Lelis Marqués, interview with the author, June 20, 2011, Manhattan, NY.


Frances and María Teresa del Toro, interview with the author, July 19, 2011, Guaynabo, PR.


Dan resultados experimentos con el bambú” [Experiments with bamboo give results], El Mundo (Puerto Rico), October 8, 1944, pp. 1 and 8.


Ibid., 31.


Carmen M. Reyes Padró, “Puerto Rico tiene un diseñador industrial: Duncan del Toro” [Puerto Rico has an industrial designer: Duncan del Toro], El Imparcial (Puerto Rico), October 4, 1942. Translated from the original Spanish.

Meyners, 12.

Antulio Rodríguez, “Compañía de Fomento coopera con las industrias nativas” [Development Company cooperates with native industries], El Mundo (Puerto Rico), December 10, 1944, p. 12.


273 Ibid., 763.
274 Ibid., 770.
275 Ibid.
276 Ibid.
277 Ibid.
278 Ibid.
279 Ibid.
280 Ibid.
282 Ibid., 30.
283 Ibid., 30.
284 Bolívar Fresneda, 71.
285 Ibid., 72.
287 Ibid., 65.
288 Ibid., 68.
289 Ibid., 849.
290 Ibid., 848.
291 Markel, 36.
293 Lesbia Soravilla, “A la memoria de su joven esposo siguió negocio ella no conocía” [In memory of her young husband continued business she did not know], El Mundo (Puerto Rico), March 8, 1968, p. 18.
298 Ibid., 90.
299 Ibid., 91.
Architectural modifications to historical structures in Old San Juan were common during the first half of the twentieth century. In the 1950’s anthropologist Ricardo Alegria—who had been a teacher at the Central High School in Santurce while del Toro was a student—from his position as the head of the Institute of Puerto Rican Culture, worked to establish strict guidelines to any modification work in order to preserve the architecture of the colonial city. Today, Old San Juan is part of the National Register of Historic Places, and a UNESCO World Heritage Site.


Perriand, 156.


Ibid., 15.

Fúster, 2.


Ibid., 51.

Ibid., 46.

Ibid., 46–47.

Richard J. Neutra to Governor Rexford Tugwell, April 3, 1944. Archivo de Arquitectura y Construcción, Universidad de Puerto Rico.

Duncan del Toro (son).
CONCLUSION

I have presented the life and work of the industrial designer Duncan del Toro (1919–1950) and the contextual realities that shaped many of his decisions to illustrate the experience of a modernist designer who was trained in Pittsburgh (1938–1942) but lived and worked in Puerto Rico.

The first chapter presented the tensions that existed in the scenario of his upbringing in Puerto Rico caused by an economy structured mainly around the production of sugarcane for export, fostered by absent capital. The tensions increased with an Americanization program superimposed by the United States government, especially visible in the education system and an extensive architectural program focused on public buildings. In response, the local educated elites clung to Hispanic styles, which resulted in an amalgam of coexistent styles characteristic of peripheral realities. Meanwhile, the import of designed goods from the mainland exposed del Toro to even more aesthetic languages.

The second chapter showed how in his formative years del Toro navigated as a student through both cultures, and discussed the ideas of the center that influenced his work. The austerity of the war years (1939–1945) that coincided with the economical spirit of modern design were crucial for him and allowed him to thrive
within the limitations of wartime and the lack of infrastructure on his return to the island.

The modernization program initiated in Puerto Rico as part of the New Deal led by American designers invited by the government—presented in the third chapter—is an example of the diffusionist trait, as Pratt described it, typical of modernity in the center. Del Toro stood out amongst the imported professionals as one of the few Puerto Ricans committed to the same cause.

Finally, del Toro’s business, addressed in the fourth chapter, provided a space to explore his ideas and commitments. His design principles and design artifacts converge with the ideas he learned in Pittsburgh, the atmosphere of the Puerto Rico he grew up in and the historical moment in which he lived.

The designs found depict del Toro’s unique interpretation of the streamlined style, articulated with tropical materials. His style evolved as he developed different languages fit for different materials. The importance of his work lies in his ability to absorb the values of the time and express them through design within Puerto Rican modernity. Even with only a short eight-year career, del Toro contributed to the professionalization and dissemination of the industrial design practice in Puerto Rico, by demonstrating that it was a feasible venture. Borrowing a line from Pulos’ appreciation of “George Nelson, Elliot Noyes, and Charles Eames,” del Toro, similar to these designers, advanced “the quality and character of the practice of design.”

By leading a practice framed by pragmatic design principles and modern values, del Toro set a standard for future industrial designers on the island.
The tensions del Toro experienced because of the implications of wartime, of an inexistent manufacturing industry, an audience oblivious to modern and industrial design as well as a country on the verge of a complicated process of modernization, in many ways shaped all that he was able to achieve. Those tensions can be explained by Pratt’s exploration of the center/periphery relation—presented in the introduction—as one based on “contradiction, complementarity, and differentiation.” In this concluding section I will examine Pratt’s cultural approach to modernity and show examples of del Toro’s life and context that illustrate the elements that compose it.

CONTRADICTION:

Following Pratt, the modernity that emerged in the center has, as it is, contradictory components. Pratt describes modernity as democratic, progressive and individualistic, but also as expansionist and dependent on the existence of an Other, an interpretation that fits with the Americanization agenda set forth in the early twentieth century in Puerto Rico. More than one generation of humanists focused their work around the rejection of such values and the nostalgic embrace of the previous model. Pratt cites Homi Bhabha on what the periphery reveals about modernity: “freedom and agency are not given by modernity but rather have to be fought for within it.” Pratt goes on to expose modernity as a catalyst, “as an agent that sets in motion certain conflicts and that is itself constituted by those conflicts.”

The contradiction in the democratic values of the center and its expansionist agenda in the periphery is also visible in the import of professionals as part of Puerto
Rico’s modernization program which was part of the New Deal put forth by Governor Tugwell. While there were qualified Puerto Ricans to do the job, the government summoned well known foreign or mainland architects and designers to determine the direction of Puerto Rican design in line with the styles and discourses that dominated the industry in the center—and train locals accordingly.\(^{327}\) Pratt calls this “the condition of *imposed receptivity*” and “the *copresence of modernity’s* ‘selves’ and ‘others.’”\(^{328}\) She describes the former as how “the peripheral social formation has power to determine *how* but not *whether*” imported concepts from the center are accepted. The latter, Pratt explains, is center and periphery working together on “the task of founding a social and spatial order.”\(^{329}\)

Both conditions are evident in Neutra’s letter to Governor Tugwell in which he expressed his frustration with local architects—not so engineers—who showed resistance to his directions on the Committee on Design of Public Works. Neutra writes to the governor that he found great potential in Puerto Rico, provided that architects get behind modern architecture.\(^{330}\) Although architects were hesitant at first about the preaching of modern design, eventually a distinctive Puerto Rican architecture emerged from a generation that found the way to take the model apart and make it their own much like del Toro did with furniture and interior design.

Contrary to the emigration of European designers to the United States, who were seeking refuge and the freedom to further develop their ideas, American imports to Puerto Rico were brought to develop the design principles embodied by the center. Many of those professionals remained deeply committed to Puerto Rico for the rest of
their lives, a place that became their second home. While they were instruments of a bigger systemic agenda, on a personal level their contributions cannot be questioned.

**COMPLEMENTARITY:**

The next element in Pratt’s approach to the center/periphery relation is complementarity. Pratt describes complementarity as the center’s indifference to the effects of what it imports to the periphery, but in the periphery, “far from being unproblematic or inconsequential, [it] constitute reality.”331 Pratt’s complementarity is what drove local designers like del Toro—through the “imposed receptivity” and “the copresence of modernity’s ‘selves’ and ‘others’”—to embrace the modern rhetoric and become instruments of further diffusion.

The effect of complementarity is the process of transculturation visible in del Toro’s work, discussed in the fourth chapter. The transformation that unfolds in transculturation, in the case of del Toro does not answer merely to adaptation of a foreign aesthetic; instead, it is a response to necessity and availability of resources. In the cultural peripheral reality of Puerto Rico transculturation is not a choice, it is part of who we are. It is part of our idiosyncrasy. Before 1898 transculturation happened with Spain; in the twentieth century with the United States.

**DIFFERENTIATION:**

The last element of Pratt’s approach is differentiation. It is important to acknowledge and question how a concept can carry different meaning on each side of
the center/periphery relation. As Pratt puts it, “the center’s [is a] self-endowed interpretive monopoly.” While the center speaks of “progress” as the advancement of humanity, Pratt explains that in the periphery “progress” is measured by how far it lags behind the center. The idea of “catching up” is unrealistic—at the very least—since the system is rigged against the periphery.

_Differentiation_ is the reason that del Toro’s work and achievements cannot be compared to or measured with the work of industrial designers in the United States or Europe. Beyond pointing out aesthetic differences, it would be irresponsible to evaluate del Toro with criteria from the center when his life and work are the result of a different social and cultural paradigm where the center-defined modernity is only one element of its composition.

As long as the periphery is looked at through models based on criteria from the center, the periphery will remain the periphery. Del Toro’s experience teaches us that to successfully design for, and navigate in the so called-periphery, it is imperative to accept the realities of the context, and work for and with them.


Ibid., 33.

Ibid.


Pratt, 35.

Ibid.

Richard J. Neutra to Governor Rexford Tugwell, April 3, 1944. Archivo de Arquitectura y Construcción, Universidad de Puerto Rico.

Pratt, 33.

Ibid., 34.
APPENDIX 1

A timeline of Duncan del Toro’s life, and local and international events. Events in del Toro’s life are underlined for emphasis.

1917  
The United States ratifies the Jones Act, which granted American citizenship to all Puerto Ricans.

1919  
Walter Gropius founds the Bauhaus in Weimar, Germany.

1919–December 30  
Duncan del Toro Duncan is born.

1929–October 29  
Stock market crash—Black Tuesday—mark the beginning of the Great Depression.

1933  
The Bauhaus is shut down by the Nazis. Many European modern designers and artists migrate to the United States to flee the rise of fascist regimes in Europe.

1933–March 4  
Franklin D. Roosevelt is sworn in as President of the United States. His New Deal program was essential to the economic recovery during the Great Depression.

1935  
Creation of the Puerto Rico Reconstruction Administration (PRRA) the second agency created to develop long term implementation of the New Deal reforms in Puerto Rico. It was preceded by the short-term focused Puerto Rico Emergency Relief Administration (PRERA), founded in 1933.

1936–July  
Duncan del Toro travels to Alaska after winning a scholarship for the American millionaire George E. Buchanan’s Trip for Boys and Girls.
1937–March 21
Ponce Massacre—the Insular Police shoot at a peaceful march of the Puerto Rican Nationalist Party in Ponce, Puerto Rico killing 18 Puerto Ricans and wounding over 200 others.

1938
Duncan del Toro begins his undergraduate studies in the Industrial Design program at the Carnegie Institute of Technology in Pittsburgh, Pennsylvania.

1941
President Franklin D. Roosevelt appoints Rexford G. Tugwell as Governor of Puerto Rico.

1941–December 7
The Imperial Japanese Navy attacks the United States naval base on Pearl Harbor, initiating the United States involvement in the Second World War.

1942
The government of Puerto Rico founds the Puerto Rico Development Company to promote the advancement of local industries.

1942–January 26
First American troops arrive in Europe.

1942
Duncan del Toro finishes his studies at Carnegie Institute of Technology, Pittsburgh and returns to Puerto Rico.

1942–September 26–October 10
Exhibition of del Toro’s student work presented at the Ateneo Puertorriqueño.

1942–November 2–7
Del Toro’s art and design exhibition is presented in the vestibule of the theater of the University of Puerto Rico (sponsored by the Phi Eta Mu fraternity).

1942–December 31
Opening of the Bamboo Bar at the Hotel Condado, interiors designed by del Toro.

1943–February 13
Opening of El Morocco Bar and Restaurant, interiors designed by del Toro.

1943–July 1
Del Toro and María Teresa Rullán get married.
1944
Henry Klumb arrives in Puerto Rico.

1945–August 15
Japan surrenders after the bombing of Hiroshima and Nagasaki, putting an end to the Second World War.

1946 (Ca.)
Del Toro’s shop begins operations.

1946–January 2
Jesús T. Piñero becomes the first Puerto Rican to be appointed Governor of Puerto Rico. The first order of his administration was to grant a tax exemption to all industries that established operations on the island.

1947
The government of Puerto Rico launches Operation Bootstrap with the goal of transforming the Puerto Rican economy from an agrarian model to an industrial system.

1948–June 10
The Puerto Rican legislature signs the Gag Law (Law 53), which restrained the rights of the independence and nationalist movements in Puerto Rico. Del Toro’s uncle, Emilio del Toro, Chief Justice of the Supreme Court of Puerto Rico, was among those who signed the law.

1948–November
Luis Muñoz Marín becomes the first governor democratically elected by the people of Puerto Rico.

1950–September 8
Duncan del Toro dies in a clinic in Santurce, San Juan.

1963–October
A selection of del Toro’s work is included in the Premios al mérito (Merit Awards) exhibition, organized by the Centro de Diseño del Departamento de Bellas Artes, presented at the Museum of the University of Puerto Rico.

1970
Del Toro’s shop is forced to close due to a fire. His widow had continued to operate the business after his death under the name Duncan’s Fine Furniture, with a focus on Isabelino or de medallón style (Victorian) furniture.
APPENDIX 2

A list of Duncan del Toro’s work for clients (1942–1950) for which evidence was found.

Corporate and institutional clients:
Bamboo Bar in the Hotel Condado (1942)
El Morocco (1943)
Biascochea Store (1946)
Brugal Rum (1946)
Club Deportivo de Arecibo (1946)
Aquarium Restaurant (1947)
Arecibo Country Club (1947)
Carlos Vizcarrondo Bar Restaurant (1947)
Don Q Bar Room (1947)
Margo Sales Corp (1947)
New Yorker Hotel (1947)
Destilería Serrallés (1947)
Armando González Portela (1948)
Luis and Paul Lavergne (1948)
Navy Beach Club (1949)
Santaella & Bro. Inc. (1949)
Soler & Mascaro Corp. (1948)
Bull Insular Line (1950)
Clubman’s (1950)
Almacenes González (undated)
Destilería Barcelo Marques (undated)
Du-Pont Store (undated)
Irizarry Store (undated)
Naviera Store (undated)
Palm Beach Store Insular Distributors Inc. (undated)

Individuals:
Dr. José Pla (1947)
Arturo Bravo (1948)
Manuel Badrena (1949)
Mrs. Pascual (1948)
Ted R. Lichting (1948)
Alfredo Muñiz (undated)
Charlie García de Quevedo (undated)
Dr. Torruellas (undated)
Lucy Boscana (undated)
Mrs. Vergne Roig (undated)
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BIOGRAPHY

Arthur Asseo is a graphic designer and design historian. In 2009 he received a BFA on Image and Design from the Escuela de Artes Plásticas, Puerto Rico. In 2016 he completed an MA in History of Decorative Arts from the Smithsonian Associates & George Mason University, Washington, DC. From 2008-2015 he worked as founding senior partner and lead designer at Rubberband Design Studio, a transformation design firm specialized in design-led research and user-centered design. He has participated in multiple conferences and publications about design, design history and technology in Puerto Rico, Washington, DC, Finland, Cyprus and Argentina. Currently he works as project manager and graphic designer at the Luis Muñoz Marín Foundation, Puerto Rico.