Disaster Diplomacy:

A Comparative Analysis of the United States' Response to a Collection of Hurricanes that impacted Cuba and Puerto Rico, 1952-2022.

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Introduction

History's habitual tempests and deluges expose not only the cracks in the foundation of one's home but also the cracks in the foundation of entire political systems of international relations. This honours thesis will compare and contrast the United States' responses to a selection of devastating hurricanes that hit Puerto Rico and Cuba between 1952 and 2022. The chosen storms, Hurricanes Fox and Betsy (1952, Cuba and 1956, Puerto Rico), Hurricanes Flora and Hugo (1963, Cuba and 1989, Puerto Rico), Hurricane Georges (hit both islands in 1998) and Hurricanes Ian and Maria (2022, Cuba and 2017, Puerto Rico), were significantly shaped by the politico-economic context of each island and the relief they received from the United States. Focusing on these storms and this period allows for a cross-Caribbean, comparative analysis of aid and politico-economic context in relation to the United States. Cuba and Puerto Rico were selected as points of comparison for a few reasons. They share a history of having Spanish and then American colonial oversight. They both underwent drastic political changes during the 1950s that fundamentally shaped their relationship with the United States for decades—specifically, Cuba's 1959 revolution and Puerto Rico's 1952 declaration of Commonwealth status. Lastly, the hurricanes of the 20th and 21st centuries hit them at consistent rates, which facilitates a chronological comparison. Using these two islands in this period, this thesis argues that American disaster relief was utilized strategically within the context of the foundational changes in the 1950s to exert political and economic influence over Puerto Rico and Cuba and align the islands' political economies with American political and financial agendas between 1952 and 2022.

A history of hurricanes, geopolitics, and relief has contemporary significance because of the increasing rate of Atlantic hurricanes as climate change advances and because the U.S.

maintains the Caribbean in its sphere of influence. This comparative analysis of hurricanes and relief offers new insights into how and why political ideology influenced USAID and FEMA and their functionality after a hurricane. It is critical to explore the historical context surrounding disaster response and the extent of each storm's damage to understand the trends of disaster aid coming out of the United States. The analysis in this thesis also explores the relationship between disaster response and changing political structures. Understanding the interplay of hurricanes and American neo-imperialism relating to Cuba (becoming a hostile nation) and Puerto Rico (establishing U.S. authority) contributes to an understanding of how the U.S. responds to natural disasters.

The thesis engages with a few historical questions. First, what was the relationship between the United States disaster response and changing political structures in Cuba and Puerto Rico? Next, how did the islands' political economies evolve and impact the extent of each storm's damage and the relief allocated? Lastly, what role did the development of U.S. relief legislation and programs, the United States Agency for International Development (USAID), and the Federal Emergency Management Agency (FEMA) play in the decisions and allocation of funds? In the aftermath of a hurricane, the US consistently offers relief using a network of legislation and agencies. As a territory, the US has a legal obligation to assist Puerto Rico, whereas with Cuba, the offer is under the guise of humanitarianism. Considering their respective politico-economic histories and the evolution of disaster relief legislation, American offers are a political tool to maintain economic influence over each island.

The responses to Puerto Rico were sizable and more robust. However, even though more money was allocated to Puerto Rico, the responses failed to meet the territory's needs. The failure comes from Puerto Rico's position in the United States: not a state, not independent,

something lost in the middle. Puerto Rico's political limbo leaves the island vulnerable to recurrent economic crises exacerbated by hurricanes. There were occasional offers of aid in Cuba, though minimal amounts, and it was refused by the Cuban government until 2022.[1] These decisions were made at the discretion of relief legislation, and over time, two aid programs emerged: USAID in 1961 and FEMA in 1979. Both controlled how the U.S. distributed aid to either Puerto Rico (an Unincorporated Territory of the United States under FEMA) or Cuba (a foreign nation under USAID).[2] Despite streamlining the process, systemic issues due to Puerto Rico's unique relationship with the U.S. were exposed in the wake of a storm. They were not considered the priority for allocating funds. Comparatively, Cuba would be offered aid despite the outright exclusionary writing of USAID legislation because of the agency's specific political aims and goals, never being a solely humanitarian endeavour. These aims are the maintenance of geopolitical and economic sway over the Caribbean.

The political change over time in Cuba and Puerto Rico made the decision-making process shorter and the answer to whether or not aid is given faster. For Puerto Rico, little to no deliberation was made to declare a disaster and help for every hurricane. For Cuba, the only two storms with explicit offers of hurricane aid were Hurricane Flora in 1963 and Hurricane Ian in 2022. This thesis will explore the lessons drawn from the historical responses to these hurricanes regarding disaster preparedness, coordination, and international collaboration and how these responses evolved.

[1] Associated Press, "Hurricane Heads Out in Atlantic; At Least 200 Are Dead in Cuba: Rusk 'Surprised' at Rejection," *New York Times*, October 10, 1963; Ned Price, "U.S. Support for Hurricane Ian Recovery Efforts in Cuba," *United States Department of State* (blog), accessed January 24, 2024.
[2] Richard Olson, "Final Report the Office of U.S. Foreign Disaster Assistance (OFDA) of the United States Agency for International Development (USAID): A Critical Juncture Analysis, 1964-2003" (Miami, FL: Florida International University, February 21, 2005), https://pdf.usaid.gov/pdf_docs/Pnadc353.pdf; Saundra K. Schneider, "FEMA, Federalism, Hugo, and 'Frisco," *Publius* 20, no. 3 (1990): 97–115.

These questions guided the research and the methodology developed following them. To fully answer these questions, this thesis's chapters will focus on a single part of this analysis at a time. The 1950s were the pivotal decade for establishing Puerto Rico and Cuba's relationship with the US. In the decades following this, the ramifications of this change became more prevalent. In Cuba, there was the Revolution of 1959; in Puerto Rico, there was the 1952 constitution and Operation Bootstrap (initiated in 1947 but spanned decades).[3] Operation Bootstrap was a U.S. government program focused on industrializing Puerto Rico.[4] Bootstrap had a double effect: increasing industrial/manufacturing production on the island and reaffirming the tradition of colonial import/export economics. The storms struck during one of four periods in Cuban history: the pre-revolution 1950s, the revolutionary period, the 1960s and 1980s, the post-USSR 1990s, and contemporary 2022, with comparable periods in Puerto Rico: immediate post-constitution and Commonwealth status 1950s, decline of Operation Bootstrap 1980s, economic structural adjustment 1990s, and contemporary 2017.

Chapter 1 provides the Cuban and Puerto Rican political economy context in which the storms occurred and argues that the 1950s were the decade of fundamental change to Puerto Rico and Cuba's relations with the US. While this chapter does not discuss the storms, this context is crucial to understanding the political relationships, which, in turn, determines aid allocation. Chapter 2 explores the hurricanes and their impacts. This chapter examines the paths of the storms, the damage they caused, and their political salience. Each selected storm revealed existing or contributed to local systemic issues and shifting geopolitical dynamics. Chapter 2 argues that historical context determines the extent of a storm's damage, not just storm strength.

[3] César J. Ayala, *Puerto Rico in the American Century,* (Chapel Hill: University of North Carolina Press, 2007). 153.
[4] Pedro A. Cabán, "Puerto Rico: State Formation in a Colonial Context," Caribbean Studies 30, no. 2 (2002): 170–215. 188.

This chapter serves as a crucial bridge between this thesis's environmental and political nature, setting the stage for an in-depth exploration of the relief efforts. Chapter 3 focuses on the history of American aid legislation and examines the response and aid allocation over time. This chapter illustrates that relief legislation is a product of American political ideology. While possibly having a vague humanitarian appearance, an offer of relief after a storm is a way for the US to retain economic hegemony over Puerto Rico and Cuba. This chapter examines how politics, the introduction of FEMA/USAID in the 1960s and 1970s, and the changes therein influenced the allocation of disaster response aid.

This research is meticulously crafted, relying on a comprehensive mix of primary and secondary sources to build a narrative not explored in the historiography.[5] The secondary source material often mentions storms in the broader histories of Cuba and Puerto Rico, providing an additional layer of historical context to this analysis. My primary sources are primarily made up of newspapers and legislation, with the occasional other piece (presidential speeches, press releases, and government reports). Many secondary sources proved helpful, but the most useful were those that provided comprehensive histories of Puerto Rico and Cuba, such as Sweig and Duany's books.[6] These provided much of the historical context and touched on themes this thesis explores, occasionally mentioning hurricanes.

The thesis works at the intersection of historiographies on the environment, international relations, and disaster relief, drawing new connections. The thesis provides a comparative history of Puerto Rico and Cuba within their shared imperial context. As historian Daniel Immerwahr

[5] Jorge Duany, *Puerto Rico: What Everyone Needs to Know*, What Everyone Needs to Know (New York, NY: Oxford University Press, 2020); Julia E. Sweig, *Cuba: What Everyone Needs to Know*® (Oxford: Oxford University Press, Incorporated, 2016); Cabán, "Puerto Rico: State Formation in a Colonial Context"; Louis A. Pérez, *Cuba: Between Reform and Revolution*, 2nd ed., Latin American Histories (New York: Oxford University Press, 1995).
[6] Duany *Puerto Rico,* 2020; Sweig *Cuba,* 2016.

explores, Puerto Rico and Cuba's shared history began with their roles in the Spanish-American War. These two islands were the last vestiges of Spain's once immense empire and were handed over to the United States as a part of the treaty that ended the war.[7] The political economies of the two islands diverged during the Cold War, yet never beyond the scope of American geopolitical hegemony. Therefore, while benefitting from the national histories of each place, this thesis demonstrates one way that Puerto Rican and Cuban history can be fruitfully read together.[8]

This thesis further brings political history into dialogue with environmental history. Caribbean Environmental History is a multidisciplinary field that examines the complex interactions between human societies and their natural environments in the Caribbean.[9] The field explores how environmental factors, such as climate, topography, and ecosystems, have influenced human societies and how human activities have shaped the environment. Hurricanes shaped both Cuban and Puerto Rican peoples and economies by severely altering crop output viability as well as through the destruction of property and increasing mosquito population.[10] Each one of these impacts has shaped the economies, politics, societies, and histories of Caribbean nations (and territories).

While exploring the dynamic relationship between human societies and the natural environment, the thesis offers insight into the history of disaster relief, offering lessons for

[7] Daniel Immerwahr, *How to Hide an Empire: A History of the Greater United States* (Picador, 2020). 72.
[8] Duany, *Puerto Rico,* 81-82, Sweig, *Cuba*. 3.
[9] Guillermo Castro Herrera, "The Environmental Crisis and the Tasks of History in Latin America," *Environment and History* 3, no. 1 (1997): 1–18; Mark Carey, "Latin American Environmental History: Current Trends, Interdisciplinary Insights, and Future Directions," *Environmental History* 14, no. 2 (2009): 221–52.
[10] John Soluri, Claudia Leal, and José Augusto Pádua, *A Living Past: Environmental Histories of Modern Latin America* (New York, NY, United States: Berghahn Books, Incorporated, 2018) 12; Céline Charvériat, "Natural Disasters in Latin America and the Caribbean: An Overview of Risk," SSRN Scholarly Paper (Rochester, NY, October 1, 2000), https://doi.org/10.2139/ssrn.1817233; Louis A. Pérez, *Winds of Change Hurricanes, and the Transformation of Nineteenth Century Cuba* (Chapel Hill, N.C: University of North Carolina Press, 2001).

contemporary environmental management and disaster preparedness in the region. The thesis joins recent scholarship that, while appreciating the "natural" part of a natural disaster, pays more attention to the human lens.[11] Through a nuanced assessment of hurricane impacts and disaster responses, it addresses the links between socio-political and environmental processes. In doing so, the thesis also incorporates insights from the extensive historiography on aid. However, unlike histories that address foreign or domestic relief, this thesis explores how the two are related. Drury et al. argue that many aid scholars imply that disaster assistance "is as advertised—nonpolitical."[12] This thesis aligns with critical histories that explore the politically instrumental dimensions of disaster relief, especially those administered by the United States Agency for International Development (USAID) and the Federal Emergency Management Agency (FEMA).[13] Disaster relief was one tool within American efforts to build and preserve geopolitical power.[14] Since scholarship on hurricane impacts and relief tends to focus on a single storm, this thesis reveals larger patterns by putting seven hurricanes impacting - Cuba, Puerto Rico, or both places - in conversation.[15]

[11] David Wallace-Wells, *The Uninhabitable Earth* (Penguin Books, 2019); Alex Julca, "Natural Disasters with Un-Natural Effects: Why?" *Journal of Economic Issues* 46, no. 2 (2012): 499–510.
[12] A. Drury, Richard Olson, and Douglas Van Belle, "The Politics of Humanitarian Aid: U.S. Foreign Disaster Assistance, 1964-1995," *The Journal of Politics* 67, no. 2 (May 2005): 454–73. 454.
[13] Steven Hook, *Foreign Aid Toward the Millenium* (Lynne Rienner Publishers, 1996). 60.
[14] David Strömberg, "Natural Disasters, Economic Development, and Humanitarian Aid," *The Journal of Economic Perspectives* 21, no. 3 (2007): 199–222; Tracey Eaton and Flagler College, "U.S. Government Democracy Projects in Cuba: Following the Money" (Center for Latin American & Latino Studies - American University, n.d.); Mark P. Sullivan, "Cuba: U.S. Policy in the 117th Congress" (Congressional Research Service, December 28, 2022).
[15] D Albalate and G Padró-Rosario, "The Economic Cost of A Hurricane: A Case Study of Puerto Rico and Hurricane Georges 1998 Using Synthetic Control Method" (Institut de Recerca en Economica Aplicada, 2018); National Committee on Property Insurance and Federal Emergency Management Agency, "Learning From Hurricane Hugo" (National Oceanic and Atmospheric Administration, June 1992); Estado Libre Asociado de Puerto Rico Agencia Estatal para el Manejo de Emergencias y Administración de Desastres, "Huracanes y Tormentas Tropicales Que Han Afectado a Puerto Rico," n.d.; United States Government Accountability Office, "2017 Hurricanes and Wildfires: Initial Observations on the Federal Response and Key Recovery Challenges" (United States Government Accountability Office, September 2018).

This thesis aims to bridge these four large bodies of historiography to answer the questions stated above. The United States response to this collection of hurricanes between 1952 and 2022 was strongly influenced by the political relationship between recipient and donor, with minimal changes over time, despite changes in recipients' internal politics. This thesis takes a unique approach of a side-by-side exploration of USAID and FEMA, offering a new perspective on aid history and the appropriate agencies. Studying this topic in the context of the Caribbean, a region considered America's sphere of influence since the Monroe Doctrine in the 1820s, is particularly novel as the frequency and strength of hurricanes are increasing in tandem with vulnerable populations in their paths.[16] Moreover, this thesis bridges several large bodies of historiography to answer and explain how and why the United States responds to hurricanes the way they do. Exploring this history sets the stage for evaluating what may happen the next time a cyclone thrashes across the Greater Antilles and the historical precedence for how and why these agencies respond.

[16] "Monroe Doctrine (1823)," National Archives, June 25, 2021, https://www.archives.gov/milestone-documents/monroe-doctrine.

Chapter 1

The Political Economies of Cuba and Puerto Rico Relating to the United States since the 1950s

Hurricanes are a fixture in Caribbean life. They are embedded into the fabric of life for every society in this region. Part of this is the understanding that natural disasters necessitate relief, which is dictated by the governing body of the area impacted. The connection between disaster response and politics is impossible to divorce from one another. To contextualize the discussion of hurricanes and disaster relief in later chapters, this chapter examines the political histories of Puerto Rico and Cuba from the late 19th century to the early 21st century. This chapter demonstrates that the 1950s were the most significant decade for the political economies of both islands, and the implications of the 1950s dictated each region's relationship with the US until today.

Overview of Cuban Political History

During the 19th century, Spain lost most of its American colonies to independence. In one of Spain's remaining territories, Cubans fought for freedom in a series of wars against Spain (1868-1878, 1879-1880, 1895-1898).[1] By the 1890s, Cuba's political climate and nationalist fervour of Cuba had reached a fever pitch and the political class called for independence in no uncertain terms.[2] However, as Cuba was about to break free of Spanish imperialism, American authorities strove to incorporate the island into the United States' empire. After a few months of fighting, the Spanish surrendered their remaining territories to the Americans, except for Cuba. The Americans occupied Cuba from 1899 – 1902, when a Cuban constitution was passed. However, the Platt Amendment was forced in, which allowed the US to intervene for the

[1] Sergio Guerra Vilaboy and Oscar Vega, *Cuba: A History* (North Melbourne, Australia: Ocean Press, 2010).
[2] Immerwahr, *How to Hide an Empire,* 65.

"preservation of Cuban independence." Cuba endured more periods of American occupation until 1933, when Fulgencio Batista (1901-1973) led a "Sergeants Revolt," placing Ramón Grau San Martín (1887 – 1969) as president. Washington viewed Batista as "preferable to constant intervention" because he sold Cuba to the Americans in bulk. By the mid-1940s, United States businesses controlled most sugar production, heavy industry, telephones, electric, and railroad services.[3] On 10 March 1952, Batista anticipated a loss in the 1952 elections, prompting him to take control of Cuba in a coup.

Batista's rule in Cuba (1952-1958) reaffirmed the corporate control relationship with the United States that he had established behind the scenes under Grau. American business in Cuba was so beneficial that American companies would set up subsidiaries in Cuba just for the write-offs.[4] In Batista's Cuba, the American Embassy was "a 'service' organization for US investors."[5] There was, however, an obstacle to this capitalist daydream. Fidel Castro (1926 – 2016) and a boatful of Anti-Batista, Anti-American radicals made landfall on Cuba's coast in late 1956. Though vehemently opposed to the American influence and Batista's regime, Castro and his followers had not yet affiliated with the communist party. They strove to achieve a genuinely independent and free Cuba. Though only twelve survived the initial confrontation with Batista's military, the survivors fled into the mountains to regroup. Castro and his followers sustained guerilla resistance against Batista's armed forces for several years, and their numbers and strength snowballed as Batista's support dwindled. However, the US Department of Defence provided large amounts of military equipment and arms, costing millions of dollars, and military

[3] Sweig, *Cuba*. *Cuba.* 19.
[4] Morris H. Morley, "The U.S. Imperial State in Cuba 1952-1958: Policymaking and Capitalist Interests," *Journal of Latin American Studies* 14, no. 1 (1982): 143–70. "The U.S. Imperial State in Cuba 1952-1958," 152.
[5] Morley, "The U.S. Imperial State in Cuba 1952-1958" 152.

training in many nearby American military bases.[6] The most significant concern of the Americans was their investments, so when Castro's movement began to pose a threat to American "capital operations," there was an incentive for "confrontation between the US imperial state and the [Castro] nationalist guerrilla movement."[7] However, in the final months of 1958, Castro's forces gained ascendancy on the ground and took Havana.

The revolution decisively shaped a new geopolitical dynamic between the United States and Cuba. After 1959, the revolutionary government under Castro began consolidating its power and aimed to uproot the American stranglehold of the island's economy.[8] Crucial to the programmatic removal of the US influence was expropriating over 300,000 acres of American-owned land to reform the agricultural economy – thus far dominated by foreign investment – for the benefit of rural people.[9] American authorities responded with attempts to destabilize and unseat Castro's government through any means necessary, including the bungled Bay of Pigs Invasion in 1960 and repeated efforts to assassinate Castro.[10] Nonetheless, communist-led Cuba became an entrenched exception to American hegemony in the Caribbean. American authorities were determined to isolate Cuba economically, an ideologically motivated strategy that also informed the lack of provision of disaster relief in the wake of recurrent hurricanes.

Cuban-American relations remained dynamic. In the 1960s, Cold War tensions predominated. American "sabotage and destabilization" efforts continued in earnest. To meet its economic and defence needs, Cuba allied with the Soviet Union. Tensions peaked during the Cuban Missile Crisis in 1962.[11] The cooling relations between Havana and Washington during

[6] Morley. "The U.S. Imperial State in Cuba 1952-1958," 159.
[7] Morley. "The U.S. Imperial State in Cuba 1952-1958," 145.
[8] Thomas, "Cuba: The United States and Batista, 1952-58," 172.
[9] Sweig, *Cuba*. *Cuba.* 77.
[10] Thomas, "Cuba: The United States and Batista, 1952-58," 172.
[11] Sweig, *Cuba*. *Cuba.* 82.

the 1960s are critical to understanding the political nature of relief aid and why the Castro government would reject any offers.

Cold War détente and increased domestic democracy in Cuba led the Carter administration to adopt less severe policies towards Cuba in the 1970s.[12] Crucially, the changes included easing the trade embargo established in the 1960s.[13] Internationally, "the OAS [Organization of American States] — with tacit US support" allowed member states to reinstate relations with Cuba.[14] It was a vital decade for Cuba's development, proving that some headway could be made under the proper leadership in re-establishing diplomacy.

The goal of Washington during the 1980s was a total flip from the Carter years centred around "liberating Cuba from Soviet clutches and purging Castro's communism."[15] Reagan quickly undid the progress made in 1977 by Carter, such as fining subsidiaries of American companies operating in Cuba.[16] From the Cuban perspective, the 1980s were reminiscent of the political isolation of the 1960s.[17] Reagan's hard-line stance was worsened by Cuban involvement in revolutionary causes in other nations that had previously been sympathetic to Castro, like Grenada and Jamaica.[18] The 1980s saw the regression of any progress made in the 1970s and the reestablishment of hostility between Cuba and the United States.

The Soviet Union collapsed between 1989 and 1991, and with it, the Soviet-Cuban alliance. Cuba was left isolated in an entirely new way on the world stage. The economic consequences of this in Cuba were grave. In 1991, the Soviet budget cut Cuba's aid from "3

[12] Pérez, *Cuba,* 422.
[13] Vilaboy and Vega, *Cuba: A History*. 97.
[14] Sweig, *Cuba*. *Cuba.* 91.
[15] Sweig. *Cuba.* 98.
[16] Sweig. *Cuba.* 99.
[17] Pérez, *Cuba,* 381.
[18] Pérez, *Cuba,* 381.

billion rubles per annum to 55.7 million rubles."[19] The rapid decline in Soviet aid and imports resulted in the declaration of a "Special Period in Peacetime."[20] The situation grew so bleak that Cuba could not buy fertilizer for sugar that Russia was still buying.[21] This geopolitical evolution was a massive shift in how the international community would perceive the US's behaviour toward Cuba.

Without the geopolitical climate of the Cold War, it was harder to justify a total blockade and the intense diplomatic hostility re-established by Reagan. A new style of NGO-oriented programs replaced the previous covert operations run by the CIA. Through this new program, USAID supplied grants to NGOs aligned with President Bush's objectives; these grants were "intended to breathe life into a domestic opposition."[22] The 1990s were a time of drastic change for Cuba on the world stage and internally as they faced new economic isolation in one sense and a new form of economic isolation in another.

Since 2000, the Cuban–American relationship has continued to ebb and flow, reaching points of tension and friendship not seen in many decades, but in the end, facilitating groundbreaking changes in their relationship. In 2000, Clinton notably passed a bill that transitioned toward minimizing the most devastating effects of the decades-long embargo. More changes occurred under President Obama in 2008 when he referenced "the 'failed' US - Cuba policies of the past."[23] This recognition of "failed" history was a drastic departure from the meddlesome precedent set by the previous ten presidents.[24] At the same time, the 21st century saw two smooth transitions of power in Cuban leadership. The first was when Fidel Castro

[19] Morley and McGillion, *Cuba, the United States, and the Post-Cold War World.* 60.
[20] Morley and McGillion, *Cuba, the United States, and the Post-Cold War World.* 64.
[21] Morley and McGillion, *Cuba, the United States, and the Post-Cold War World.* 71.
[22] Sweig, *Cuba*, 172.
[23] Sweig, *Cuba*, 274.
[24] Morley and McGillion, *Cuba, the United States, and the Post-Cold War World.* X.

stepped down in July 2006, and his brother Raúl Castro took over. The second time was in 2018 when Raúl Castro stepped down and was succeeded by Miguel Diaz-Canel, the first non-Castro to lead the nation since 1959. However, Cuban-American relations suffered another setback when Donald Trump was elected in 2016 and reverted to the hard-line diplomacy of the Reagan era, reinstituting the travel ban and restrictions on commerce.[25] The staunch anti-Cuban policy of the Trump administration began to be repealed under the Biden administration in May 2022 when Biden once again eased restrictions.[26] The flip in relations facilitated the Cuban government requesting disaster aid from the US for the first time in 2022.[27] The dramatic leadership changes over the last 24 years, as well as the incredible changes in Cuba and internationally, paved the way toward a bilateral relationship that has led to considerable changes in natural disaster response.

Overview of Puerto Rican Political History

As in Cuba, Puerto Rico had been a hotbed for political thought and advocacy of self-governance during the 19th century. During the Spanish-American War, the United States invaded Puerto Rico and occupied the island in the summer of 1898 after the end of the war.[28] The *Insular Cases* (1901-1922) were a series of legal cases that "gave legal sanction to the colonization of islands taken by the United States," except for Cuba.[29] The first of these cases made the new territories (and their inhabitants) "foreign to the United States in a domestic

[25] CFR.org Editors, "U.S.-Cuba Relations," Council on Foreign Relations, accessed January 24, 2024, https://www.cfr.org/backgrounder/us-cuba-relations.
[26] "U.S.-Cuban Relations," Council on Foreign Relations.
[27] Ned Price, "U.S. Support for Hurricane Ian Recovery Efforts in Cuba," *United States Department of State*, accessed January 24, 2024, https://www.state.gov/u-s-support-for-hurricane-ian-recovery-efforts-in-cuba/.
[28] Solsiree del Moral, *Negotiating Empire: The Cultural Politics of Schools in Puerto Rico, 1898–1952*, 1st ed. (Madison: University of Wisconsin Press, 2013). 25.
[29] Burnett, Christina, and Burke Marshall. *Foreign in a Domestic Sense: Puerto Rico, American Expansion, and the Constitution*. Durham, Duke University Press. 1.

sense." These territories belonged to "but were not a part of – the United States.[30] Due to incorporation into the American customs area, Puerto Rican coffee and sugar producers lost their access to European markets, requiring a drastic reshuffling of the island's economic structure.[31] Part of this reshuffling meant the "Americanization" of the island and its people. This process permeated through all aspects of life in the newly American territory. Economics and education were central to this "mission." The educational aspect of "Americanization" was more than just a switch from Spanish to English (unsuccessful to this day): it "suggested the uplift and transformation of a Spanish colonial people into members of the modern US empire."[32] During this initial period of Puerto Rico's history, Americans established a colonial tradition that would last for decades.

Shortly before the United States entered the First World War in 1917, President Woodrow Wilson passed the Jones Act, granting citizenship to Puerto Ricans primarily to quell their upset at the degrading conditions of the island.[33] The act meant that Puerto Ricans, now citizens, were included in the draft, and 17,855 entered the armed forces that year.[34] The Jones Act fundamentally changed Puerto Rico's relationship with the US, reinforcing and complicating the mentality of *Insular Cases* – "foreign in a domestic sense."[35]

Puerto Rico felt the impacts of the Great Depression as much as anywhere else because the economy had already been in trouble, and its economic system had already been integrated into the American system. Despite actions taken, it was insufficient to slow the labour conflicts.[36] Attempts at reform, while not enough for those who needed them, also upset the

[30] Burnett and Marshall, *Foreign in a Domestic sense,* 1.
[31] Cabán, "Puerto Rico," 174-175.
[32] del Moral, *Negotiating Empire,* 27.
[33] Cabán, "Puerto Rico," 180.
[34] Duany, *Puerto Rico.* 48.
[35] Burnett and Marshall, *Foreign in a Domestic sense,* 1.
[36] Cabán, "Puerto Rico," 183.

sugar oligopoly that held much of the island's wealth and power. The intense political climate of the 1930s set the stage for the crucial developments that occurred in the 1940s-50s.

After the rapid changeover of governors in the 1930s (six in ten years), Puerto Rico was on the verge of a huge step forward.[37] Luis Muñoz Marin founded the *Partido Popular Democrático* (PPD) and, in the Senate election of 1940, received 38% of the vote, followed by 65% in 1944. Muñoz intentionally created a slogan of ambiguity: "Bread, Land, Liberty." Liberty, crucially, meant something different to everyone on the island. In 1946, the Philippines was granted independence from the United States, and Muñoz "came out publicly against independence and purged his party of members who favoured it."[38] At this point, the PPD favoured something between independence and statehood. World War Two had an immense impact on Puerto Rico, not only in terms of Puerto Ricans leaving to fight but also due to its position as "the Gibraltar of the Caribbean."[39] The Federal government converted many parts of the island into military enclaves. In line with its increase in perceived "value" in the eyes of the government, it experienced a mild economic boom. However, this money was reinvested in military installments; notably, Roosevelt Roads Naval Base, the largest military installment outside the contiguous forty-eight states and a sizable portion of the island of Vieques (approximately 30 km from Puerto Rico), which served as a testing ground for many US military munitions and weapons.[40] Another aspect of the wartime economy was the expansion of sugar production. The PPD enacted land reform measures to address the landlessness problem plaguing Puerto Ricans, expanding their political base.[41] Across the globe, the Second World War marked

[37] Immerwahr, *How to Hide an Empire,* 244.
[38] Immerwahr, *How to Hide an Empire,* 245.
[39] Duany, *Puerto Rico.* 66.
[40] Duany, *Puerto Rico.* 67.
[41] Cabán, "Puerto Rico," 187.

a critical moment for decolonization movements. This movement saw traction in Puerto Rico as well. In 1943, Muñoz and the PPD "signed a concurrent resolution demanding that at war's end, Puerto Ricans be granted the right to exercise self-determination."[42] On top of this, President Roosevelt amended the Jones Act "to permit Puerto Ricans to elect their governor and to 'redefine the functions and powers' of both governments."[43] This amendment was critical in developing Puerto Rico's relationship with the United States, bringing them closer together and further apart.

The postwar period in Puerto Rico was one of ambitious economic aims and lofty goals for the island. The prime example was the development project, Operation Bootstrap (*Operación Manos a la Obra*). Bootstrap was started by the governor of Puerto Rico, whom Roosevelt appointed. Bootstrap began in earnest shortly after the PPD win in 1940 and would last until the mid-1970s when Section 936 of the tax code was established. Bootstrap's goal was to create a political environment conducive to American investment and attracting American business to Puerto Rico with tax incentives.[44] The goal of Operation Bootstrap was simple: it was "a state-supported program of export-led industrialization—to modernize the economy and improve living standards."[45] There were significant strategic reasons for Bootstrap. The primary reason is the advantage of having a cheap labour source with high production potential. The early success of Bootstrap led to the political dominance of the PPD, which would last for decades to come. Another aspect of the PPD's dominance was the Muñoz Marin's election to the governorship, becoming Puerto Rico's first elected governor.[46]

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[42] Cabán, "Puerto Rico," 187.
[43] Cabán, "Puerto Rico," 187.
[44] Michael Lapp, "The Rise and Fall of Puerto Rico as a Social Laboratory, 1945-1969," *Social Science History* 19, no. 2 (1995): 169–99. "The Rise and Fall of Puerto Rico," 177.
[45] Duany, *Puerto Rico.* 68.
[46] Cabán, "Puerto Rico," 176.

In 1952, a federal initiative was approved by Puerto Rican voters, and a Puerto Rican constitution was passed. This constitution was a big step into the American empire.[47] Puerto Rico's new position was the *Estado Libre Asociado* (ELA or Commonwealth). According to the UN, Puerto Rico was no longer a colony. [48] However, Congress could change or annul the constitution and "veto any insular legislation which it deems unwise or improper."[49] The political changes in the 1950s have dictated the relationship Puerto Rico holds with the United States. Up to this point, the histories of Puerto Rico and Cuba have many shared characteristics, most significantly, the ever-present influence of American politicians and businesses. Since establishing Commonwealth status, Puerto Rico's position within the US has remained unchanged. The imperial relationship was altered by creating an entrenched position in the US, specifically for Puerto Rico. The decisions made in the 1950s were so significant that Puerto Ricans today are still dealing with them.

The effect of the Cuban revolution in Puerto Rico was palpable. Due to its strategic military value and existence as part of the United States, Puerto Rico "became a bastion of anti-Communism in the Caribbean and Latin America." Expanding acceptance of the capitalist system and US imperialism was another aspect central to the development of Puerto Rico as an "anti-Cuba." When Fidel Castro took power in 1959, less than one hundred miles from Florida, Cuban socialism threatened the American hegemony in the Western Hemisphere. This demonstrated an interplay between politics and economics. Bootstrap was still in full swing, and the Cuban Revolution and Operation Bootstrap proved opposites in the eyes of the White House.

[47] "Public Law 81-600 / Chapter 446, 81 Congress, Session 2, An Act: To provide for the organization of a constitutional government by the people of Puerto Rico," U.S. Statutes at Large 64, no. Main Section (1950): 319-320. 319.
[48] Duany, *Puerto Rico.* 73.
[49] Cabán, "Puerto Rico," 189.

With Bootstrap beginning to show success, the model that Puerto Rico represented directly opposed Cuba's socialist development. Bootstrap's development and evolution represented an alternative to Cuba's model of socialist industrialization. The reverberations of the Cuban Revolution were felt worldwide, but being so nearby and a Commonwealth of the US meant that the effects in Puerto Rico were exacerbated.

The parallel relationship between Puerto Rico's Bootstrap and Cuba's socialism shaped the relationship between economics and politics in Puerto Rico in the 1960s. Primarily, this influence perpetuated Puerto Rico's colonial limbo status. In the 1960s, myriad labour problems, including high unemployment and US companies' volatile labour operations, were obstacles to the continued success of Operation Bootstrap. While high (around 10%), the unemployment rate was partly kept from increasing by massive migration to the mainland – another facet of Bootstrap's design.[50] In the years following the Cuban revolution, tourism in Puerto Rico skyrocketed, with American investors wanting to get their share of these potential profits. Between 1958 and 1960, the number of hotel rooms in Puerto Rico almost doubled – the Cuban revolution shaped the economy and politics. [51] With the decline of Bootstrap and the rise of American investments, Puerto Rico was on the verge of a massive economic shake-up.

After 1959, there was an influx of Cuban refugees. Much like the effect of the refugees in Florida, Cuban refugees reinforced "the conservative ideology of Puerto Rico's middle and upper classes."[52] In 1967, there was another island-wide referendum on the island's status, though non-binding.[53] The island voted 60% for enhanced ELA and 40% for statehood,[54] coming

[50] Ayala, *Puerto Rico in the American Century.* 181; Lapp, "The Rise and Fall of Puerto Rico," 189.
[51] A. W. Maldonado, Teodoro Moscoso and Puerto Rico's Operation Bootstrap (Gainesville, FL: University Press of Florida, 1997), 157.
[52] Duany, Puerto Rico. 82.
[53] Cabán, "Puerto Rico," 191.
[54] Ayala, *Puerto Rico in the American Century.* 224.

as a bit of a shock to the PPD, who had expected unequivocal support for their brainchild.[55] The following year's election led to the demise of the PPD's 20-year political hegemony in Puerto Rican politics. The pro-statehood party, the *Partido Nuevo Progresista* (PNP), was elected for the first time. After 20 years of dominating the political landscape of Puerto Rico, a new party was in power. The PNP were statehood proponents (often also referred to as annexation). Puerto Ricans did not need much convincing that change was needed. Operation Bootstrap had reached a point of stagnation and failed to achieve the desired employment level.[56] The 1960s marked an economic transition away from Bootstrap and embedded a dependence on American investment that Bootstrap had initiated. Politically, the 1960s began a schism in Puerto Rican politics that has kept the island divided until today.

The economic conditions of Puerto Rico were exacerbated by the 1973 recession that shook the Western World. The post-war economic expansion that sustained the island through the 1960s slowed as the gross national product (GNP) growth dropped from 7% in the 1960s to 3.3% in the 1970s to 2.1% in the 1980s.[57] With the PNP in power, the solution was to deepen the connection to the US and its markets. On top of a crumbling economy, Governor Hernández Colón (1936 – 2019) was competing with an increase in viable locations across the globe to produce goods for lower costs. Colón's solution was to lobby for an amendment to the US Internal Revenue Code—specifically, section 931, which regulated American corporations in territorial possessions. Lobbying resulted in the new Section 936. This change allowed companies that registered their income in Puerto Rico to be exempt from paying taxes. Untaxed income peaked in 1993 at 5.8 billion dollars.[58] The effects were similar to those of Operation

[55] Cabán, "Puerto Rico," 191.
[56] Cabán, "Puerto Rico," 192.
[57] Ayala, *Puerto Rico in the American Century.* 267.
[58] Ayala, *Puerto Rico in the American Century.* 269.

Bootstrap; there were few "significant industrial linkages" on the island, and the "denationalization" of the Puerto Rican economy continued.[59] This change to the economic structure perpetuated the colonial status of Puerto Rico because little of the investment money came from the island, and in turn, little remained. In a recent report, the United Nations Economic Commission for Latin America and the Caribbean summarized this complicated tax situation: "Puerto Rico is a great exporter, but Puerto Ricans are not."[60] In the wake of the 1973 recession, the Puerto Rican government deliberately strengthened the island's market integration with the US.

The effort to rescind Section 936 began shortly after its implementation once it became clear that it was ineffective. The US Treasury argued that, like 931, 936 had failed to address the employment issues in Puerto Rico.[61] Unsurprisingly, many multinational companies challenged these allegations and threatened the PNP government with an investment strike.[62] Over the years, every political group on the island grew to realize that Puerto Rico's pseudo-colonial status and the intense—and seemingly never-ending—economic troubles of the territory are intimately connected.

The 1980s were a period of continued political stagnation and a drastic turn toward neo-liberal economic practices. The drastic measures taken by Reagan "revealed just how ill-designed the development strategy [Operation Bootstrap] always was."[63] In the late 1980s, there was a push to have another binding plebiscite. However, as the bill moved through the legislative process, politicians of all flavours questioned "the viability and constitutionality of the expanded

[59] Ayala, *Puerto Rico in the American Century.* 269.
[60] Ayala, *Puerto Rico in the American Century.* 269-70.
[61] Cabán, "Puerto Rico," 195.
[62] Cabán, "Puerto Rico," 196.
[63] James Dietz, "Puerto Rico in the 1970s and 1980s: Crisis of the Development Model," *Journal of Economic Issues* 16, no. 2 (1982): 497–506. 503.

ELA," others "would not commit in advance to statehood."[64] By the early 1990s, the bill was rejected. The PNP (pro-statehood candidate), Pedro J. Rosselló, was elected Governor in 1993, quickly revealing a "neoliberal economic agenda."[65] Shortly after the election, Rosselló called for a nonbinding plebiscite, and the political divide remained clear; ELA "received 48.6 percent, statehood 46.3 percent."[66] Still reeling from the Reagan era austerity measures, the signing of the North American Free Trade Agreement (NAFTA) meant that much of the (already limited) production in Puerto Rico moved to Mexico because of the lower wages outside of the US.[67] This industry migration resulted in massive job loss in Puerto Rico and an even stronger dependence on the already minimal tax benefits of Section 936. However, 936 was repealed in the summer of 1996. The Rosselló government signed a ten-year phase-out of 936 into law. In 1997, Rosselló began a privatization initiative that was met with widespread upset, leading to the slogan, *Puerto Rico no se vende*.[68] The slogan translates to "Puerto Rico is not for sale" or "Puerto Rico does not sell out." This slogan combined the collective labour, political, and economic demands at the core of the anti-privatization campaign.[69] The financial problems and the rift in politics continued through the 1990s. The issues facing Puerto Rico up to this point have been more or less consistent since the establishment of ELA status in the 1950s and the colonial economy that predated it.

In the early 21st century, Puerto Rico's status has remained consistent, and its economic situation has worsened. The 2008 financial crash and the growing debt crisis intensified the economic situation. Puerto Ricans responded to deprivation by emigrating. Both economic

[64] Ayala, *Puerto Rico in the American Century.* 288.
[65] Ayala, *Puerto Rico in the American Century.* 291.
[66] Cabán, "Puerto Rico," 201.
[67] Duany, *Puerto Rico.* 98.
[68] Ayala, *Puerto Rico in the American Century.* 297.
[69] Ayala, *Puerto Rico in the American Century.* 297.

viability and outmigration have been problems for Puerto Rico since declaring Commonwealth status, continuing through the 21st century.[70] Instead of restructuring the economy post-936, debt more than doubled "from $17.6 billion in 1996 to almost $40 billion in 2006," and by 2015, it reached $72 billion.[71] Austerity measures were taken during this period, but none were enough to be effective. In June 2016, the US House of Representatives passed the Puerto Rico Oversight, Management, and Economic Act (PROMESA, ironically meaning promise in Spanish) to address the Commonwealth's debt crisis. PROMESA was criticized on the island as it granted the federal government control over its fiscal affairs, and the president appointed the oversight board.[72] The summer of 2019 was marked by island-wide protests against the issues stacking up; "Puerto Ricans repudiated the entrenched and self-perpetuating political class for its unfathomable venality, incompetence, and hubris."[73] The demonstrations against Governor Ricardo Rosselló Nevares (1979 – present), the son of Governor Pedro J. Rosselló (in office 1993-2001), eventually led to Rosselló Nevares becoming the first Puerto Rican Governor to resign.[74] These protests and discontent resulted from decades of subjugation and exploitation to increase the bottom line.

Cuban and Puerto Rican Political Histories in Dialogue

Though complicated, the evolution of Puerto Rican politics is crucial to understanding its position within the US, and the same goes for Cuba. The connections between these two islands are abundant, starting with their shared history in the Spanish Empire, followed by their incorporation into the American sphere of influence. The shared integration shaped the next 50

[70] Amelia Cheatham and Diana Roy, "Puerto Rico: A U.S. Territory in Crisis," Council on Foreign Relations, accessed January 24, 2024, https://www.cfr.org/backgrounder/puerto-rico-us-territory-crisis.
[71] Duany, *Puerto Rico.* 101.
[72] Duany, *Puerto Rico.* 103.
[73] Pedro Cabán, "Puerto Rico's Summer 2019 Uprising and the Crisis of Colonialism," *Latin American Perspectives*, March 3, 2020, https://doi.org/10.1177/0094582X20906509. 1.
[74] Cabán, "Puerto Rico's Summer 2019 Uprising," 1.

years as both islands were under the sway of American businesses and markets. However, as this chapter has illustrated, there was a clear ideological and imperative divergence in the 1950s that determined the trajectory of each island. The islands paralleled again in the 1980s/90s when, despite drastically different geopolitical relationships with the US, both places economic situations reached new levels of fragility. The Cuban revolution mirrored the Puerto Rican Commonwealth status – one pushed away, and one moved closer. These events shaped the political economies of both islands, particularly in the context of the Cold War. While Cuba tightened relations with the Soviet Union, Puerto Rico reinforced its relationship with the United States. The politics of the 1950s dictated what the next 70 years would be: one country in perpetual colonial limbo, the other a hostile nation that would be the subject of several military campaigns (not that Puerto Rico was free of American military presence). The economic and political patterns established in the 1950s revealed a continuation of coercion, exploitation, and neo-colonial policies designed to maintain American authority in the Greater Antilles. The comparison of these two islands illustrates an inversion of the concept of political economy. In Puerto Rico, the economy is more important and consistently the critical point of the relationship with the US due to its political position with the US. For Cuba, however, because of political alignment opposed to the US, the economic aspect is less connected, and politics have a more substantial influence.

Chapter 2

Placing the Hurricanes into Context: Why Storm Category Does Not Determine a Storm's Impact.

The interrelation of extreme weather and compounding social, political, and economic effects shape the consequences of a hurricane. Environmental historian Shawn Miller posits that "natural phenomena do not become natural disasters until they run into humans or their esteemed property."[1] This chapter explores the interaction of natural and social processes by considering the impacts of seven hurricanes: Hurricane Fox (1952), Hurricane Betsy (1956), Hurricane Flora (1963), Hurricane Hugo (1989), Hurricane Georges (1998), Hurricane Maria (2017), and Hurricane Ian (2022) — three made landfall on Cuba, three on Puerto Rico, one on both. The analysis of these storms illustrates that a storm's strength is not the sole determining factor in the damage's extent and that the political economy's context is as much a factor as the wind speed and storm surge. The analysis takes a storm-by-storm approach, setting each hurricane within the politico-socio-economic context initially laid out in Chapter 1. Additionally, this chapter will link the costs of the storms to the economic policy, financial situations, and geopolitical positions over time.

Hurricanes are tropical cyclones with a minimum sustained windspeed of 74 m/h (119 km/h). Hurricanes (sometimes called cyclones or typhoons, depending on the region) occur in several places globally where ocean temperatures are warm – one such region is the Caribbean. These storms are classified using the Saffir-Simpson Hurricane Wind Scale, rated 1 to 5.[2] Hurricanes require a complicated and complex network of conditions to form their spinning

[1] Shawn Miller, *An Environmental History of Latin America* (Cambridge University Press, 2007). 124.
[2] National Oceanic and Atmospheric Administration US Department of Commerce, "What Is a Hurricane?" accessed April 5, 2024, https://oceanservice.noaa.gov/facts/hurricane.html.

walls of thunderstorms and rain, and once formed, they can travel for hundreds of kilometres. Hurricanes are one of the most destructive and deadly natural disasters, if only due to their frequency.[3] The Caribbean basin experiences roughly twelve hurricanes yearly, typically between June and November when the ocean is the warmest.[4] Given their recurring and devastating nature, it is unsurprising that hurricanes have left a lasting impact on the land and the people who live their path. Figure 4 illustrates that over 300 hurricanes have landed in Puerto Rico and/or Cuba since 1851. The path and intensity of the storms are principal factors in shaping their impact on human societies.[5] The seven selected storms were all among the strongest to land in the Caribbean. Their paths are illustrated in Figure 2.

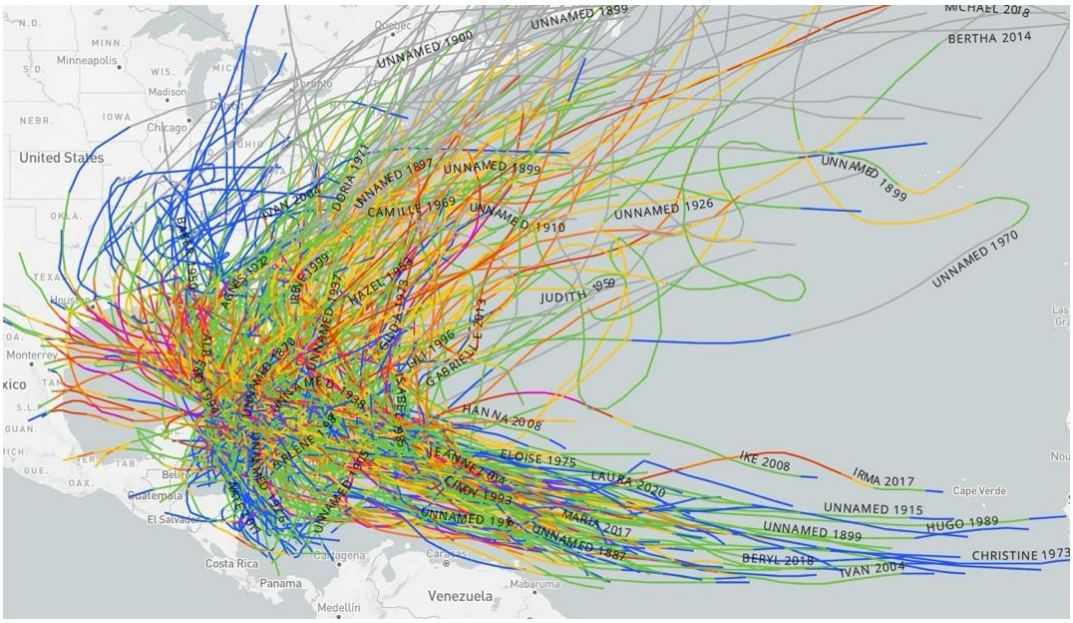

Figure 4: NOAA Historic Storm Paths Database—every storm that has landed on Puerto Rico and/or Cuba since 1851.

[3] Miller, *An Environmental History of Latin America*. 124.
[4] National Oceanic and Atmospheric Administration US Department of Commerce, "What Is a Hurricane?"
[5] National Oceanic and Atmospheric Administration, "Historical Hurricane Tracks," accessed March 1, 2024.

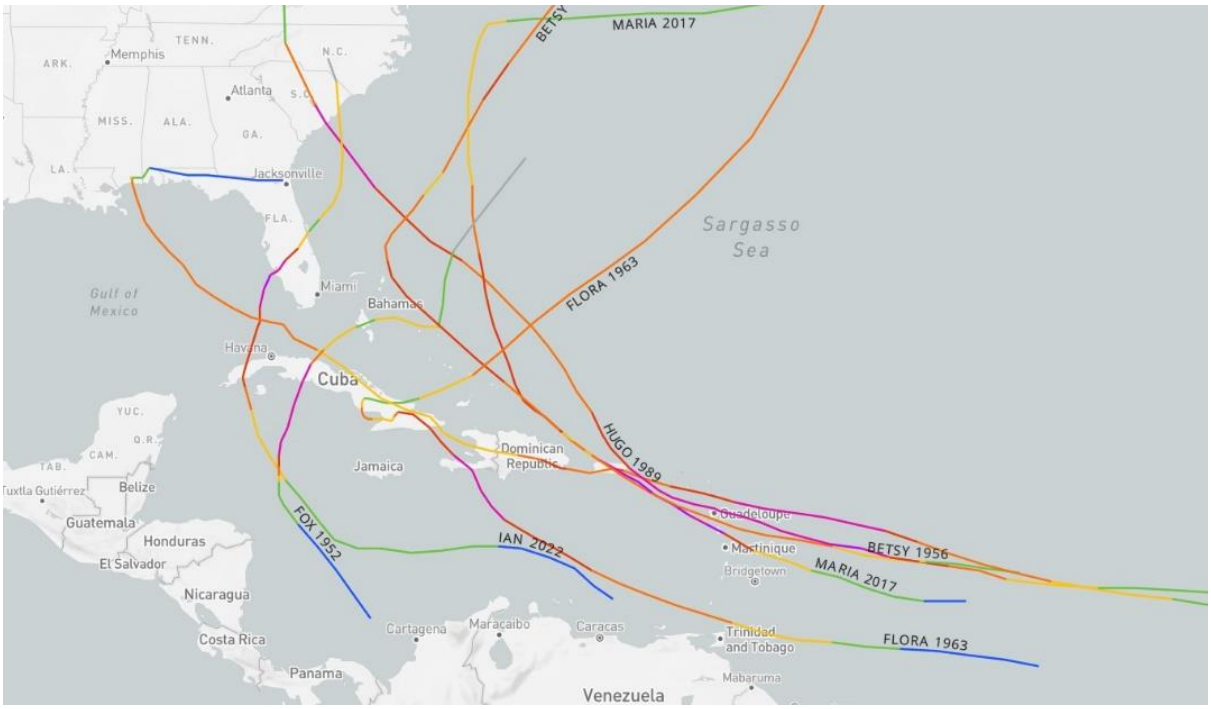

Figure 5: NOAA Historic Storm Paths Database – Fox, Betsy, Flora, Hugo, Georges, Ian, and Maria.

From a political economy perspective, the timing of the landfalls influences the broader consequences of each hurricane. Each of the storms chosen occurred during a critical historical moment, as mentioned in the introduction. For Cuban history: the pre-revolution 1950s, the revolutionary period, the 1960s and 1980s, the post-USSR 1990s, and contemporary 2022, with comparable periods in Puerto Rico: the development of the Commonwealth 1950s, decline of industrialization projects in the 1980s, economic restructuring 1990s, and contemporary 2017. These two factors were used to select the storms for this analysis.

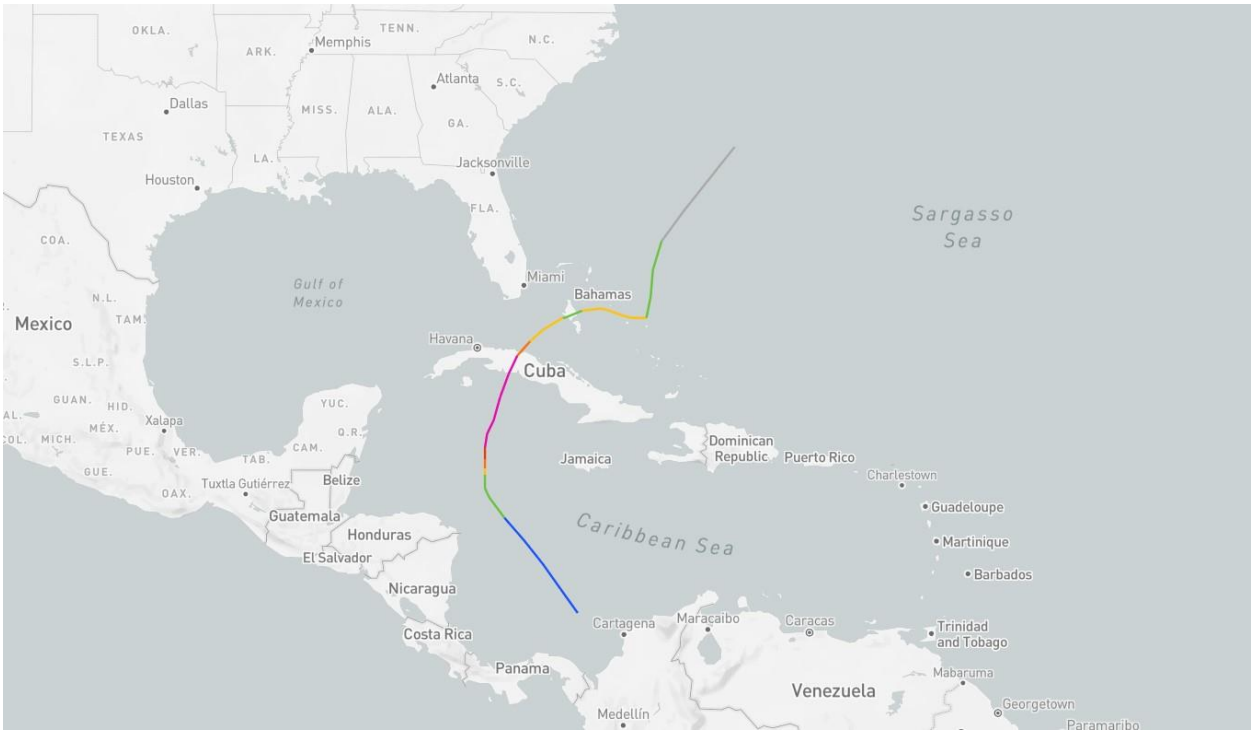

Figure 6: Hurricane Fox (1952). NOAA Historical Hurricane Tracks. https://coast.noaa.gov/hurricanes/#map=4/32/-80

Although receiving little scholarly attention, Hurricane Fox was a major hurricane that struck Cuba in the pre-revolutionary period. It moved north across Western Cuba on 24 October 1952 as a Category 4 storm with winds of up to 125 knots (231.5 km/h).[6] Fox swept over the central Caribbean, avoiding Puerto Rico and everything to its east. Fox heavily impacted Cuba's largely rural, sugar-producing area. Roughly 36 out of Cuba's 161 sugar mills were damaged by Fox. Rural Cuba in the 1950s was incredibly vulnerable, and any infrastructure or housing would likely have been severely damaged if not destroyed by Fox's strong winds.[7] The human effects of this hurricane were substantial. The largest municipality impacted was Aguada de Pasajeros. More than 600 homes were destroyed, and at least 1000 more were damaged in the town of

[6] National Oceanic and Atmospheric Administration.
[7] Grady Norton, "Hurricanes of 1952," Monthly Weather Review (National Oceanic and Atmospheric Administration, January 1953). 14.

25,000.[8] The total damage has been estimated at around USD 10 million (around USD 109 million in 2024[9]).[10] The death toll[11] from Hurricane Fox was between 40[12] and 600.[13]

News stories were uncertain about the number of deaths and injuries. However, the intensity of the winds was emphasized. One report indicated that Hurricane Fox was strong enough to blow a 10,000-ton freighter aground on Cuba's southern coast and rip the hull off of another one, although the crews were reported to be safe.[14] The Chief Storm Forecaster at the Miami Weather Bureau called Fox a "real stinker," downplaying the damage done by the hurricane.[15] American newspapers offered brief appraisals of the storm, focusing more on the impact on Florida and less on the devastation and possibly aggravated political tensions in Cuba.

Just seven months before Fox made landfall, in March 1952, Fulgencio Batista staged a *coup d'état* and took control of the Cuban government. Another nine months later, on 26 July 1953, Fidel Castro launched his first attempt against Batista's regime.[16] With the arrival of Castro and his supporters, Batista's regime quickly lost legitimacy. Relief to damaged parts of the country would have been a straightforward way to garner rural support. However, there is no evidence of that. Instead, as explored in Chapter 1, Batista continued allowing American

[8] Norton. "Hurricanes of 1952," 14.
[9] "Inflation Calculator," Bank of Canada, accessed March 2, 2024, https://www.bankofcanada.ca/rates/related/inflation-calculator/.
[10] Roger A. Pielke et al., "Hurricane Vulnerability in Latin America and The Caribbean: Normalized Damage and Loss Potentials," *Natural Hazards Review* 4, no. 3 (August 2003): 101–14, https://doi.org/10.1061/(ASCE)1527-6988(2003)4:3(101). 108.
[11] The extensive range of deaths comes from a lack of analysis of this storm. The initial death toll released in NOAA's weather review was zero, though more recent analyses have challenged this.
[12] Pielke et al., "Hurricane Vulnerability in Latin America and The Caribbean." "Hurricane Vulnerability in Latin America and The Caribbean," 108.
[13] National Oceanic and Atmospheric Administration, "The Deadliest Atlantic Tropical Cyclones, 1492-1996," accessed February 27, 2024, https://www.nhc.noaa.gov/pastdeadlyapp1.shtml?
[14] Associated Press, "Hurricane Veers Off Florida Coast Toward Bimini," *Fort Meyers News Press*, October 25, 1952, Newspapers by Ancestry.com. 1.
[15] Ibid. 1.
[16] Federico G Gil, "Antecedents of the Cuban Revolution," *The Centennial Review* 6, no. 3 (Summer 1962): 373–93. 382.

Business to grow. The combination of political disruption twice and the damage caused by Hurricane Fox appears like a perfect storm of events for potential research, particularly when considering the economic impact of losing one-fifth of the island's sugar mills. This is an under-researched topic, with minimal evidence available. However, Fox was incredibly disruptive to Cuba's sugar production and likely harmed the island's revenues and American business interests. With all this damage significantly impacting financial output, it is surprising that there is no evidence of a disaster relief effort, mainly because it would benefit the Batista regime's interests. There are no reports from President Eisenhower about the storm, even with the close political relationship between the two nations. Hurricane Fox is not the only storm that the American government ignored. However, the lack of response before the revolution poses an interesting point of comparison. It can be assumed that Fox's fiscal impact would have taken a long time to recover from, given the scale of damage, a further reason for the Americans to offer relief. Hurricane Fox highlighted the compounding effects of political turmoil and American business influence in Cuba. Placing Hurricane Fox in its historical context explains that the damage caused by natural disasters is determined by more than the category of the hurricane.

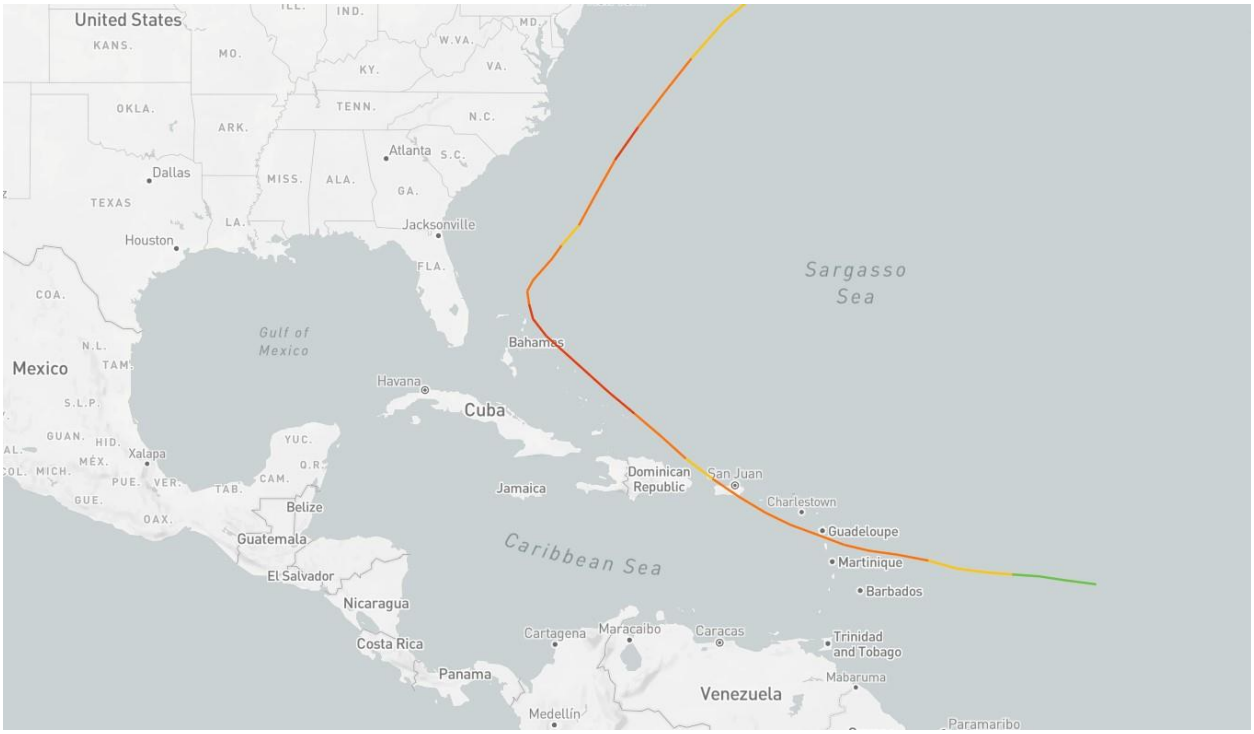

Figure 7: Hurricane Betsy (1956). NOAA Historical Hurricane Tracks. https://coast.noaa.gov/hurricanes/#map=4/32/-80

Within a few years of Hurricane Fox, Hurricane Betsy became the first major hurricane to strike Puerto Rico after the Constitution and Commonwealth status. Known locally as Hurricane Santa Clara, the storm made landfall as Puerto Rico adjusted to its new constitutional order within the American Empire. Santa Clara moved across the island from the southeast to the northwest in one day on 12 August 1956. Santa Clara's path followed north of the Greater Antilles, turning east to hit The Bahamas before turning away from Cuba's coast. Santa Clara was unique because this was the first storm that the warnings were issued on television: an initial hurricane watch on 10 August was followed by a warning on 11 August.[17] Despite only being a category two storm, with wind speeds maxing at roughly 85 knots (~155 km/h), Santa Clara destroyed over 15,000 homes in the 3 hours it took to cross the island.[18] This number accounted

[17] Sandy Delgado, "Reanalysis of the 1954-1963 Atlantic Hurricane Seasons" (Master of Science Geosciences, Florida International University, 2014), https://doi.org/10.25148/etd.FI14071185. 33.
[18] Estado Libre Asociado de Puerto Rico Agencia Estatal para el Manejo de Emergencias y Administración de Desastres, "Huracanes y Tormentas Tropicales Que Han Afectado a Puerto Rico." 14.

for roughly "3 percent of the island's entire housing stock in 1950."[19] According to an initial estimate, the monetary value of damage in Puerto Rico totalled USD 25.5 million in 1956 (~ USD 280 million today[20]).[21] However, more recently, the number was closer to USD 40 million (~ USD 445 million today[22]).[23] Governor of Puerto Rico, Luis Muñoz Marin, claimed on 13 August that there had been no fatalities.[24] The announcement downplayed a more severe situation that gradually emerged as the death toll was revised: by 15 August, it was up to four; [25] by December 1956, it was up to nine.[26] Estimates put the total fatalities between eleven and sixteen.[27]

The hurricane struck people and property amid concerted efforts to modernize the economy. During his tenure from 1948 to 1965, Marin oversaw the establishment of Puerto Rico's ELA status, defining their relationship with the United States. He was also heavily involved with Operation Bootstrap. This program was designed to turn Puerto Rico's economy into a productive part of American industry and aimed at industrialization, reaching its height at the end of the 1950s. Part of this project was the gradual decline of the sugar industry, which peaked in 1952.[28] A consequence of the loss of jobs was a drop in male labour participation from 70% to 65%, as industrial manufacturing jobs failed to make up the difference, with a total loss

[19] John Christopher Bluedorn, "Essays in International Economics and Development," Fall 2003. 67.
[20] "Inflation Calculator."
[21] Dunn, Davis, and Moore, "Hurricane Season of 1956." 438
[22] "Inflation Calculator."
[23] Estado Libre Asociado de Puerto Rico Agencia Estatal para el Manejo de Emergencias y Administración de Desastres, "Huracanes y Tormentas Tropicales Que Han Afectado a Puerto Rico," n.d. 14.
[24] Rafael Santiago Sosa et al., "El Mundo: Diario de La Mañana," *El Mundo*, August 13, 1956.
[25] Associated Press, "Betsy Veers Out to Sea, New Hurricane Feared," *Evening Star*, August 15, 1956, Library of Congress - National Endowment for the Humanities: Chronicling America, https://chroniclingamerica.loc.gov/lccn/sn83045462/1956-08-15/ed-1/seq-1/. 1.
[26] Gordon E Dunn, R Davis, and Paul L Moore, "Hurricane Season of 1956," *Monthly Weather Review*, December 1956. 438.
[27] John Christopher Bluedorn, "Essays in International Economics and Development," 2003. 67.
[28] Benjamin Bridgman et al., "What Ever Happened to the Puerto Rican Sugar Manufacturing Industry?" preprint (Staff Report, December 27, 2012), https://doi.org/10.21034/sr.477.7.

of around 60,000 jobs.[29] The transition induced the mass migration of Puerto Ricans to the mainland continued, with over 60,000 leaving the island in 1956.[30]

However, the hurricane also mattered. In a report published in *The Americas Daily,* a newspaper based in Miami, FL, government experts called attention to the compounding effects of "drought, Hurricane 'Betsy,' and labour inefficiency."[31] Indeed, although outmigration was part and parcel of modernization, the movement in 1956 was higher than the two years prior and each of the ten years that followed.[32] There was a strong correlation between the migration in 1956 and the combined drought and hurricanes. Amid an already bleak economic situation for Puerto Ricans, Santa Clara destroyed many homes, swept away infrastructure, and interrupted economic activity. Most emergency shelters were schools, paralyzing the semester for over 150,000 students.[33] This combination of factors worked together to create devastation in rural Puerto Rico, something that appears to have motivated impoverished people to depart the island in increased numbers. Santa Clara exacerbated the already tenuous economic situation in Puerto Rico amid an intense political overhaul.

[29] César J. Ayala, *Puerto Rico in the American Century* (Chapel Hill: University of North Carolina Press, 2007). 193-4.
[30] Ayala. *Puerto Rico in the American Century.* 195.
[31] United Press International, "Puerto Rico to Aid Sugar Cane Growers," *The Americas Daily*, May 21, 1957, Library of Congress - National Endowment for the Humanities: Chronicling America, https://chroniclingamerica.loc.gov/lccn/sn82001257/1957-05-21/ed-1/seq-10/. 10.
[32] Ayala, *Puerto Rico in the American Century*. 195.
[33] Bluedorn, "Essays in International Economics and Development." 67.

Figure 8: Hurricane Flora (1963). NOAA Historical Hurricane Tracks. https://coast.noaa.gov/hurricanes/#map=4/32/-80

Hurricane Flora was the first major natural disaster to impact revolutionary Cuba. The Category 3 storm, with windspeeds reaching 105 knots (~190 km/h), moved into the Caribbean just north of Venezuela and stayed south until a turn north had it heading toward Haiti, having missed Puerto Rico by a large margin. It made landfall in Cuba just beyond Guantanamo Bay on 4 October 1963.[34] Heavy rains continued from October 4 to 8: Flora brought more precipitation than all the rainfall from the entire year in 1962.[35] At the time, Flora was the second deadliest Atlantic hurricane in recorded history, with total deaths exceeding 7000 from several Caribbean nations. However, the worst of the damage was in Haiti and Cuba.[36]

The track of Flora is a critical factor in understanding the devastation. As shown in Figure 5, Flora began moving east after the impact. However, after three days of moving west,

[34] National Oceanic and Atmospheric Administration, "Historical Hurricane Tracks."
[35] Gordon E. Dunn, "The Hurricane Season of 1963," Monthly Weather Review (National Oceanic and Atmospheric Administration, March 1965). 136.
[36] Dunn., "The Hurricane Season of 1963," 136.

the storm started to move north and then returned east, doubling back on regions it had just moved on from, giving no reprieve to the Oriente region of the country.[37] Flora's death toll in Cuba is wide-ranging due to the difficulty of determining deaths associated with the storm. However, estimates for the deaths in Cuba are between 1100[38] and 4200.[39]

After Flora had left Cuba, Fidel Castro toured the damaged region. He reported that "crops and cattle were obliterated in that region, and highways, roads, and railways were destroyed."[40] The total value of the damage inflicted by Hurricane Flora is estimated to be between $300[41]-500 million[42] USD (~$3-5 billion USD today[43]). Many initial reports of crop damage estimated devastating losses between 15 – 60% of the sugar crop and 25 – 75% of rice. Though an American intelligence estimate published in November 1963 put most crop losses around 10% of the total potential harvest (corn, sugar, and coffee), rice was the most impacted, with 25% of the crop lost. Tobacco remained largely unaffected because it is primarily grown in Western Cuba.[44] Regardless of the exact number, the 1963 sugar production was significantly lower than the preceding seven years.[45] Dr. Jaques Fourcand, the president of the Haitian Red Cross, announced that "Nobody suffers too much from hunger the first week because there is food in the marketplaces … but two weeks later if there is no more produce coming from the

[37] Dunn, "The Hurricane Season of 1963." 134.
[38] Pielke et al., "Hurricane Vulnerability in Latin America and The Caribbean." 108.
[39] Pérez, *Cuba*. 8.
[40] Associated Press, "Castro Reports 1,000 Dead in Cuba," *Globe and Mail*, October 14, 1963, https://www.proquest.com/docview/1282784458?parentSessionId=i8c9XOjY6hOCv9ma2nFQ%2F9lzuWcwYXL1n1O2gqZQC3E%3D&sourcetype=Historical%20Newspapers. 1.
[41] Pielke et al., "Hurricane Vulnerability in Latin America and The Caribbean." 106.
[42] Pérez, *Cuba*. 8.
[43] "Inflation Calculator."
[44] Office of Research and Reports, "Hurricane Flora Damage to the Cuban Transportation System Repaired Rapidly" (Central Intelligence Agency, November 29, 1963). 4-5.
[45] Mikael Wolfe, ""A Revolution Is a Force More Powerful Than Nature": Extreme Weather and the Cuban Revolution, 1959–64," *Environmental History* 25, no. 3 (July 1, 2020): 469–91, https://doi.org/10.1093/envhis/emaa004. 473.

fields, we feel our disaster all the more."[46] This statement referred to the damage in Haiti, but the sentiment also rings true for Cuba. In the wake of Flora's destruction, the Cuban Agrarian Reform Institute, the group in charge of food distribution in Cuba, cut rations in half.[47]

The devastation of Flora was bad enough on its own, yet it was made worse by the recently established American trade embargo and drought. Moreover, as mentioned in Chapter 1, the United States government favoured anything that may undermine Castro's government. One CIA program, Operation Mongoose, proposed to pursue "sabotage actions" extending as far as "inducing failures in food crops."[48] Though natural in origin, Hurricane Flora had the potential to produce a comparable economic and humanitarian crisis because of the destruction it produced. The Castro government had limited resources to provide relief and stimulate recovery.

In 1961-62, the years leading up to Hurricane Flora, Cuba suffered a severe drought that undercut the sugar harvest and associated government revenues.[49] Sugar remained vital to the Cuban economy immediately following the revolution. Between 1959 and 1963, the Castro government began implementing land reform policies to sever the dependency on private industry. It was hoped that Cuban farmers could earn a year-round living that would improve their living standard alongside the extension of "health, education, sport and culture, social safety and social assistance" to rural communities.[50] However, land reforms and agrarian restructuring became longer-term projects because drought and Flora had such sizable short-term effects. Both

[46] "Hurricane Heads Out in Atlantic; At Least 200 Are Dead in Cuba: Rusk 'Surprised' at Rejection," October 10, 1963. 15.
[47] Associated Press, "Island Hit Hard by Flora: Cuban Food Rations Cut in Half by Gov't," *The Daily News of the Virgin Islands*, October 9, 1963, Library of Congress - National Endowment for the Humanities: Chronicling America. 2.
[48] Lars Schoultz, *That Infernal Little Cuban Republic: The United States and the Cuban Revolution*, 1st ed. (Chapel Hill: The University of North Carolina Press, 2009), https://doi.org/10.5149/9780807888605_schoultz. "*That Infernal Little Cuban Republic."* 178.
[49] Wolfe, "A Revolution Is a Force More Powerful Than Nature." 473.
[50] Juan Valdés Paz, "The Cuban Agrarian Revolution: Achievements and Challenges," *Estudos Avançados,* 2011.

the revolutionary newspaper *Revolución* and the Central Intelligence Agency (CIA) "put extreme weather events on equal footing with socioeconomic policy and geopolitical challenges when assessing Cuba's prospect."[51] In the months following the 1963 sugar harvest, Ernesto "Che" Guevara (Minister of Industry 1961-1965) considered the combined effects of Flora, drought, and the sugar policy of the time (which was comparable to the policy under Batista – sugar monoculture for export) as reasons for the stunting industrial production.[52] Only in the late 1960s, after post-disaster economic recovery, did the government move ahead with the envisioned nationalization of land and farms.[53] Therefore, the damage produced by Hurricane Flora delayed the implementation of the revolutionary program in the Cuban countryside.

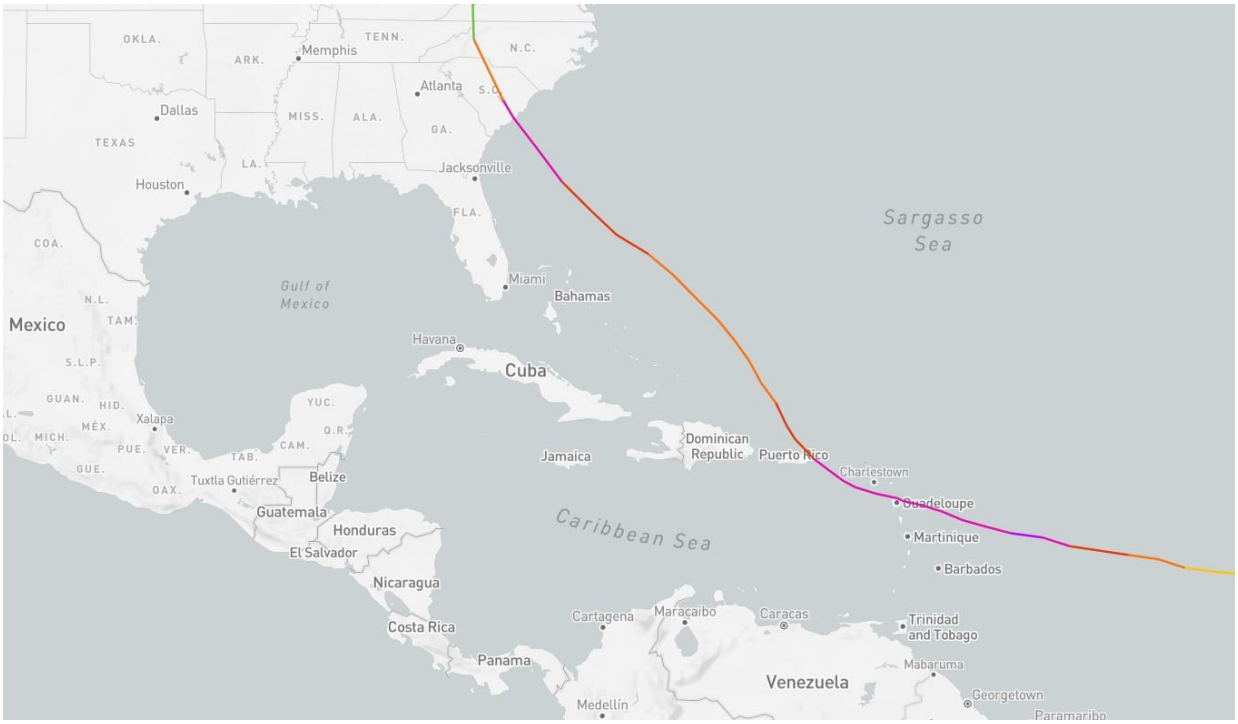

Figure 9: Hurricane Hugo (1989). NOAA Historical Hurricane Tracks. https://coast.noaa.gov/hurricanes/#map=4/32/-80

[51] Wolfe, "'A Revolution Is a Force More Powerful Than Nature.'" "A Revolution Is a Force More Powerful Than Nature." 474.
[52] Ibid. 474.
[53] Paz, "The Cuban Agrarian Revolution: Achievements and Challenges." "The Cuban Agrarian Revolution." 84.

Although several hurricanes struck Puerto Rico between 1963 and 1989, Hurricane Hugo was a record-breaking storm and approached the scale of the economic damage experienced in Cuba in 1963. Puerto Rico first saw the rain of Hurricane Hugo on the island of Vieques, roughly 30 km off the east coast, on 18 September 1989. Hugo moved quickly across Puerto Rico's Northeast corner, returning to the Atlantic later that day. Hurricane Hugo first hit Puerto Rico as a category three with maximum wind speeds of 110 knots (~200 km/h).[54] After crossing north of the Greater Antilles for a few days, Hugo made a second landfall in South Carolina, leaving a second trail of destruction in its wake. Due to the massive amount of American territory impacted by Hugo, it became the costliest hurricane to land in the United States, with total dollar estimates of around USD 9 billion (~ USD 19.5 billion today[55]). Puerto Rico and the US Virgin Islands made up almost USD 2 billion (~ USD 4 billion today[56]). Despite striking a small portion of Puerto Rico's territory, the extreme weather produced significant impacts because San Juan, the largest city in Puerto Rico, was in the storm's path. About 85% of electricity customers lost power. Some 30,000 people were left homeless.[57] Over 10,000 people left their homes for shelters, predominantly schools, as in earlier storms.[58] Nonetheless, there were few deaths, with estimates ranging between 9[59] and 22.[60]

[54] National Oceanic and Atmospheric Administration, "Historical Hurricane Tracks."
[55] "Inflation Calculator."
[56] "Inflation Calculator."
[57] Coastal and Marine Geology Program, "High-Energy Storms Shape Puerto Rico," USGS Fact Sheet, United States Geological Survey, accessed March 2, 2024, https://pubs.usgs.gov/fs/high-energy-storms/.
[58] "Epidemiologic Notes and Reports Surveillance of Shelters after Hurricane Hugo - Puerto Rico," Center for Disease Control - Morbidity and Mortality Weekly Report, January 26, 1990, https://www.cdc.gov/mmwr/preview/mmwrhtml/00001545.htm.
[59] Federal Emergency Management Agency Federal Insurance Administration, "Learning from Hurricane Hugo: Implications for Public Policy," June 1992. 9.
[60] Office of Climate, Water, and Weather Services, "Service Assessment Report Hurricane Hugo September 10-22, 1989," March 30, 2007. 7.

Hurricane Hugo devastated the built environment. As federal agencies began publishing reports on the damage, a common observation was that "Hugo demonstrated that what is needed in Puerto Rico is not a revision of the building code but rather enforcement of it."[61] Nevertheless, widespread poverty, rather than a simple failure of building regulation, shaped the situation. Chapter 1 explained that the Puerto Rican economy was restructured in the 1980s. Tax concessions to American corporations and steep social cuts compelled by the Reagan government occurred amidst deepening social stratification.[62] Ordinary Puerto Ricans emigrated or increasingly relied on federal social assistance. From 1970 to 1990, "federal transfers to individuals in Puerto Rico—through food stamps and other programs—rose from $500 million to $6 billion."[63] The economic instability of the 1980s "hit the island with the impact of a hurricane," two economists have quipped.[64] A literal hurricane, Hugo, also struck a vital part of the island in 1989. The damage aggravated the situation of citizens and, amid state retrenchment, could only worsen the condition of housing and infrastructure.

[61] Federal Insurance Administration, "Learning from Hurricane Hugo: Implications for Public Policy." 29.
[62] Ayala, *Puerto Rico in the American Century*. 269; Glenn Jenkins and J. Thomas Hexner, "Puerto Rico: The Economics of Status," *The Citizens Educational Foundation*, 1994. 7; Digby A. Solomon, "Puerto Rico Economy Crippled; Reagan Blamed," UPI, November 13, 1982, https://www.upi.com/Archives/1982/11/13/Puerto-Rico-economy-crippled-Reagan-blamed/6397406011600/.
[63] Ayala, *Puerto Rico in the American Century*. 267.
[64] Francisco L. Rivera-Batiz and Carlos E. Santiago, *Island Paradox: Puerto Rico in the 1990s* (Russell Sage Foundation, 1996), 12.

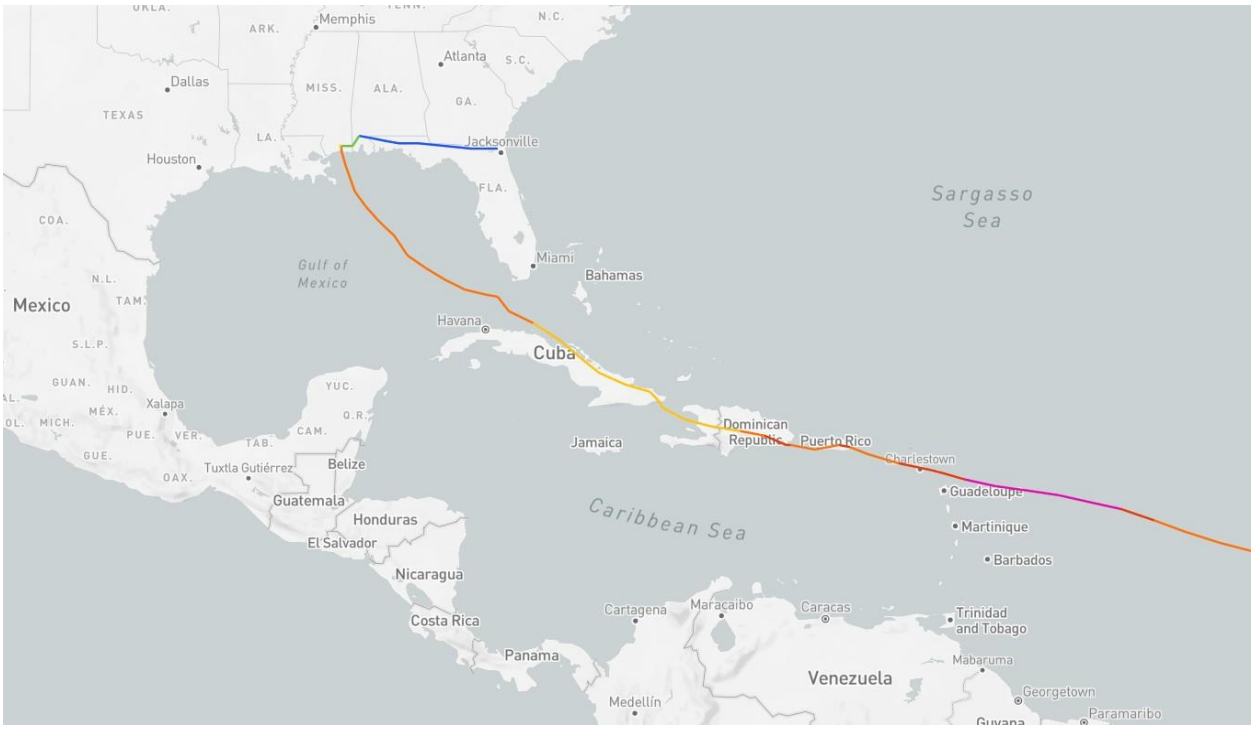

Figure 10: Hurricane Georges (1998). NOAA Historical Hurricane Tracks. https://coast.noaa.gov/hurricanes/#map=4/32/-80

In 1998, both island economies were strained in the post-Cold War period when Hurricane Georges hit. This storm was unique because it hit Puerto Rico and Cuba. Georges landed in Puerto Rico on 21 September 1998 and moved across the entire island from east to west, leaving the western coast the next day.[65] Georges' maximum wind speeds in Puerto Rico reached 100 knots (~185 km/h). Hurricane Georges was the strongest storm to strike Puerto Rico since the San Ciprian Hurricane of 1932.[66] Due to the storm's path, all 78 municipalities were impacted by Georges, and roughly half saw severe floods.[67] The damage from Georges was extensive, with "45,000 homes destroyed and another 45,000 with severe damage."[68] Georges directly impacted 1.7 million people (roughly one-third of the island's population). Hurricane

[65] National Oceanic and Atmospheric Administration, "Historical Hurricane Tracks."
[66] Heriberto Torres-Sierra, "Flood of September 22, 1998, in Arecibo and Utuado, Puerto Rico," 2002. 2.
[67] Torres-Sierra. "Flood of September 22, 1998" 23.
[68] "Expanded Emergency Appeal: Hurricane Georges - Cuba," October 6, 1998, https://reliefweb.int/report/cuba/expanded-emergency-appeal-hurricane-georges.

Georges caused over USD 3.5 billion in damages (~ USD 6 billion today[69]), leaving 96% of the island without power and 75% without water.[70] On top of the extensive infrastructure damage, Georges hit the agricultural industry extremely hard, with 95% of the plantain/banana crop destroyed and 75% of coffee.[71] It was often seen after Georges that shelters experienced issues like a lack of beds, poor water access, power loss, communication loss, or flooding. In the weeks and months following Georges, official shelters began closing, and evacuees were "moved to abandoned buildings that can serve as shelters managed under the Puerto Rico Department of Housing."[72] The Army Corps of Engineers refers to this group that moved to abandoned buildings as refugees. As with previous storms, exact death tolls are difficult to ascertain. For Georges, between "819 and up to 945 deaths can be classified as excess following Hurricane Georges in Puerto Rico,"[73] though the official count was 7-8.[74] This excess occurred due to the "interruption in basic services such as electricity, drinkable water, and exposure to atypical circumstances following climate disasters."[75]

After moving on from Puerto Rico and passing over Hispaniola, Hurricane Georges made landfall in Cuba on 23 September 1998 as a Category 1 hurricane. Its wind speeds peaked at 65 knots (~120 km/h). It moved northwest, along a large chunk of Cuba's northern coast, exiting

[69] "Inflation Calculator."
[70] Skip J. Van Bloem, this link will open in a new tab Link to external site, and Patrick H. Martin, "Socio-ecological Lessons from the Multiple Landfalls of Hurricane Georges," *Ecosphere* 12, no. 2 (February 2021), https://doi.org/10.1002/ecs2.3373. 11.
[71] John Guiney, "Preliminary Report Hurricane Georges" (National Hurricane Centre, January 5, 1999). 8.
[72] US Army Corps of Engineers, National Oceanic and Atmospheric Administration, and Federal Emergency Management Agency, "Hurricane Georges Assessment: Review of Hurricane Evacuation Studies Utilization and Information Dissemination," August 1999. 4-12.
[73] Alexis R. Santos-Lozada, "In Puerto Rico, Excess Deaths Following Hurricane Georges Persisted for Three Months," June 4, 2018, https://doi.org/10.31235/osf.io/d9va6. 7.
[74] Pan American Health Organization, "Disaster Preparedness and Emergency Relief: PAHO's Response to Hurricanes Georges and Mitch" (Pan American Health Organization, May 5, 1999). 4.
[75] Santos-Lozada, "Excess Deaths Following Hurricane Georges." "Excess Deaths Following Hurricane Georges," 1.

toward the Florida Keys, followed by a turn further west and north, moving up through the Gulf of Mexico and making another landfall on the American Gulf Coast. The damage in Cuba was not at the same level that Puerto Rico saw, but it was still a devastating blow to the island. Somewhere between 40,000[76] and 90,000[77] homes were damaged or destroyed by Georges, and in the town of Sagua de Tanamo on Cuba's northeast coast, "2,000 houses were reported under four feet of water."[78] Up to 800,000 people were evacuated from the areas under a hurricane warning, and with enough lead time, Georges caused only six deaths in Cuba.[79] Georges caused around USD 306 million in damages (~ USD 350 million today[80]). On top of the mass mobilization of hundreds of thousands of Cubans, at least 90,000 animals (primarily cattle) were evacuated.[81] However, crops cannot be evacuated like livestock, and Cuba suffered tremendous agricultural losses. One of Cuba's largest plantain plantations reported losing about 70% of its crop. More than just plantains were impacted; coffee, cocoa, and sugar had significant losses.[82] One account stated that "Georges had ruined more than half of the coffee crop, which brings in

[76] Martha Thompson and Izaskun Gaviria, "Cuba Weathering the Storm: Lessons in Risk Reduction from Cuba" (Oxfam, 2004).
[77] "Hurricane Georges Batters Cuba, Kills Two," *Reuters*, September 25, 1998, Internet Archive: Wayback Machine, https://web.archive.org/web/20110616114000/http://www.cubanet.org/CNews/y98/sep98/25e5.htm.
[78] Juan O. Tamayo, "Eastern Cuba Hit Hard; Flooding Widespread," *The Miami Herald*, September 25, 1998, Internet Archive: Wayback Machine, https://web.archive.org/web/20110616114056/http://www.cubanet.org/CNews/y98/sep98/25e8.htm.
[79] Pan American Health Organization, "Disaster Preparedness and Emergency Relief: PAHO's Response to Hurricane Georges and Hurricane Mitch," May 5, 1999, https://iris.paho.org/bitstream/handle/10665.2/21058/doc686.pdf?sequence=1&isAllowed=y. 3.
[80] "Inflation Calculator."
[81] Pablo Alfonso, "Evacuan a 300,000 En El Este de Cuba," *El Nuevo Herald*, September 24, 1998, Internet Archive: Wayback Machine, https://web.archive.org/web/20140103082954/http://www.cubanet.org/CNews/y98/sep98/24o3.htm.
[82] "Hurricane 'Georges' Causes Extensive Crop Damage in Caribbean Countries," Special Alert (The Caribbean: Food and Agriculture Organization of the United Nations, October 13, 1998), https://www.fao.org/3/x0058e/x0058e00.htm.

USD 50 million a year in export earnings."[83] Similarly to Hurricane Flora in 1963, Hurricane Georges was preceded by an intense drought, already impacting Cuba's food supply.

The situation in Puerto Rico at the time of Hurricane Georges was a continuation of the same ongoing issues from the 1980s: economic crisis, outmigration, and poor building infrastructure. Encouraged by the North American Free Trade Agreement (NAFTA) in 1994, Puerto Rico's small textile industry relocated to Mexico. Foreign investment in Puerto fell by as much as 90%, and manufacturing jobs were reduced by 22% in 2006.[84] Public disinvestment in Puerto Rico continued, with the government notably privatizing telephone utility.[85] The island's economic fiscal situation was dire in 1998, even before Hurricane Georges whipped across the island, leaving a trail of damage.

In Cuba, hurricane damage, drought, and the loss of the Soviets as a trade partner combined to undermine the country's ability to provide food for its citizens. Hurricane Georges struck during what was known as the "Special Period," an economic transition that followed the collapse of the Soviet Union and continued until 2004. The period was marked by economic deprivation since Soviet assistance corresponded to about 15% of Cuba's GDP.[86] The dissolution of the Soviet Union also meant the demise of the Council for Mutual Economic Assistance (COMECON), a trade organization in which the Soviet Union and Cuba were both involved, along with much of the rest of the Communist Bloc. Several former COMECON nations entered into new trade agreements with Cuba but only made up part of the difference. COMECON

[83] "Cuba: 4 Dead; Thousands Left without Homes," January 3, 2014, https://web.archive.org/web/20140103081316/http://www.cubanet.org/CNews/y98/sep98/28e9.htm.
[84] Duany, *Puerto Rico*. 98; Ayala, *Puerto Rico in the American Century*. 312-313,
[85] Ibid. 299.
[86] Suzanne Leigh Wilson, "When Disorder is the Order: Cuba During the Special Period," 2011. 2; Ernesto Hernández-Catá, "The Fall and Recovery of the Cuban Economy in the 1990's: Mirage or Reality?" *IMF Working Papers* 2001, no. 048 (May 1, 2001), https://doi.org/10.5089/9781451846744.001.A001.

imports peaked in 1989; the new deals comprised only 7% of that total in 1992.[87] The agricultural sector, vital to Cuban livelihoods, was especially vulnerable without the imports of fertilizer that COMECON offered.

Hurricane Georges exacerbated the already complex economic and supply issues on the island. In a 1997 wet season shaped by El Niño, Cuba received 50-75 percent of the precipitation it usually did.[88] The drought wiped out "42 percent of crops in five of Cuba's 14 provinces."[89] Then, in the weeks after the storm, Castro was forced to swap cows' milk for powdered milk in the rations distributed, a setback to his goal of providing "a half gallon of milk a day to every child under 7 years old."[90] The complex and struggling economic situation Cuba was in when Georges struck hugely influenced the extent of the storm damage.

The impact of Georges intensified the parallel economic crises of Puerto Rico and Cuba. This period marked an interesting realignment of the histories of these two islands. Despite their drastically different geopolitical situations, they faced intense economic hardship through the 1980s/1990s. The impacts of Georges exacerbated these economic struggles and deepened their respective relations with the US. Puerto Rico's increasing reliance on federal financing and Cuba's reaffirming its distance from the US.

[87] Wilson, "Suzanne Leigh Wilson, "When Disorder is the Order: Cuba During the Special Period" 2011. 17.
[88] UN Office for the Coordination of Humanitarian Affairs, "Drought OCHA Situation Report No. 1 - Cuba," Relief Web, August 26, 1998, https://reliefweb.int/report/cuba/cuba-drought-ocha-situation-report-no-1.
[89] Associated Press, "Cuba's Drought Over, but Hunger Remains in Island's East," *The Yale Daily News*, October 1, 1998, https://ydnhistorical.library.yale.edu/?a=d&d=YDN19981002-01.2.36&e=-------en-20--1--txt-txIN-------. 10.
[90] Associated Press, "Cuba's Drought Over," *The Yale Daily News*, October 1, 1998. 10.

Figure 11: Hurricane Maria (2017). NOAA Historical Hurricane Tracks. https://coast.noaa.gov/hurricanes/#map=4/32/-80

Hurricane Maria caused damage and underscored ongoing politico-economic dynamics. The storm arrived on the southeast coast of Puerto Rico on 20 September 2017 near the Yabucoa barrio. Maria's max wind speeds were 134 knots (~250km/h), and in some east coast barrios, storm surge swells were up to 9 feet high. Maria was the strongest storm to impact Puerto Rico since the Segundo San Felipe hurricane in 1928. It became the third costliest hurricane in American history (as of 2017), surpassing Georges as the costliest Puerto Rican hurricane several times over. Total damages caused by Hurricane Maria were estimated at USD 90 billion.[91] The rainfall from Maria was heaviest in the northeast, with "over one-fourth of the average total annual rainfall at the wettest location on the island."[92] The inundation was widespread. In the north, near Toa Baja, hundreds of families needed to be rescued from rooftops due to the

[91] Pasch, Berg, and Penny, "Hurricane Maria" Jan 2023. 7.
[92] David Keellings and José J. Hernández Ayala, "Extreme Rainfall Associated with Hurricane Maria Over Puerto Rico and Its Connections to Climate Variability and Change," *Geophysical Research Letters* 46, no. 5 (2019): 2964–73, https://doi.org/10.1029/2019GL082077. 2968.

flooding.[93] Over 300,000 homes were damaged or destroyed during Maria's passage over the island, one-third of Puerto Rico's housing stock.[94] Puerto Rico's power grid crumbled under the strength of Maria's winds and rains. Around 80% of the whole grid was damaged or destroyed.[95] Due to the extent of the damage to the electrical infrastructure, Maria caused the largest blackout in American history, with the last residents getting power back on in August 2018.[96] That same month, the government updated the death toll from 64 to 2975.[97] However, one group of scholars calculated the excessive number of deaths at over 4000, primarily attributed to the damage to the healthcare systems.[98] The damage Maria did to Puerto Rico was unimaginable. However, like every other storm examined, the storm is never an isolated event.

Puerto Rico's economic vulnerability was made evident when not one, but two devastating hurricanes washed across the island during a brutal budgetary crisis. Just weeks before Maria came ashore on 6 September 2017, Hurricane Irma moved across Puerto Rico's Northeast corner, causing massive damage, and weakening already fragile power and healthcare systems as a Category 5 hurricane. Indeed, the impact of the dual storms was most noticeable in sustained power outages. However, even without the hurricanes, Puerto Rico's privatized power grid – previously impacted by Hugo and Georges, was in shambles.[99] The health and power

[93] Pasch, Berg, and Penny, "Hurricane Maria" Jan 2023. 7.
[94] Chenyi Ma and Tony Smith, "Vulnerability of Renters and Low-Income Households to Storm Damage: Evidence from Hurricane Maria in Puerto Rico," *American Journal of Public Health* 110, no. 2 (February 2020): 196–202, https://doi.org/10.2105/AJPH.2019.305438. 196.
[95] Pasch, Berg, and Penny, "Hurricane Maria" Jan 2023. 7-8.
[96] United States Army Corps of Engineers, "The Longest Blackout in U.S. History: Hurricane Maria," U.S. Army Corp of Engineers, September 2022, https://www.usace.army.mil/About/History/Historical-Vignettes/Relief-and-Recovery/154-Hurricane-Maria/.
[97] Amanda Holpuch, "Hurricane Maria: Puerto Rico Raises Official Death Toll from 64 to 2,975," *The Guardian*, August 28, 2018, sec. World news, https://www.theguardian.com/world/2018/aug/28/hurricane-maria-new-death-toll-estimate-is-close-to-3000.
[98] Nishant Kishore et al., "Mortality in Puerto Rico after Hurricane Maria," *New England Journal of Medicine* 379, no. 2 (July 12, 2018): 162–70, https://doi.org/10.1056/NEJMsa1803972. 166.
[99] Gianpaolo Pietri, "Neglect, Corruption Left Puerto Rico's Power Grid Ripe for Failure, Observers Say," Voice of America, November 30, 2017, https://www.voanews.com/a/experts-say-neglect-corruption-left-puerto-rico-power-grid-ripe-for-failure/4144129.html.

systems had been some of the first to be affected by the neo-liberal austerity measures of the 1980s/1990s. Instead of working on getting to the root of the problems, debt accumulated, leading to the implementation of PROMESA. The economic chain of events led to San Juan looking like a hurricane hit it before Maria wrought destruction unseen in 90 years.[100] The interplay between Maria and the debt crisis illustrates that the storm both accentuated and exacerbated the deplorable economic conditions on the island.

During these storms, Puerto Rico's power grid was run by the government-owned Puerto Rico Electric Power Authority (PREPA). The grid's fragility is predicated on the reliance on imported fossil fuels; "Puerto Rico consumes almost 70 times more energy than it produces."[101] Another aspect of the fragility is PREPA's logistical layout. Most of the population (and therefore PREPA customers) are located in and around San Juan, the capital on the northern coast. PREPA's generators are located mainly on the southern coast, "making the system dependent on its 2,600 miles of transmission and about 32,000 miles of distribution lines."[102] When Irma and Maria ripped across the island, almost all the transmission lines that carried the power from generators to customers were wiped out.[103] Puerto Rico's power system was a house of cards, and Maria's 250 km/h winds were more than enough to cause the whole thing to crumble.

Beyond a systemically plagued power grid, the damages done during Hurricanes Irma and Maria exacerbated the already struggling economy. One estimate suggested that between 2006 and 2013, a period punctuated by the 2008 global recession, "Puerto Rico lost 230,000 jobs

[100] Klein, "The Battle for Paradise," 50-51.
[101] "Puerto Rico Territory Energy Profile," United States Energy Information Administration, February 15, 2024, https://www.eia.gov/state/print.php?sid=RQ.
[102] "Puerto Rico Territory Energy Profile."
[103] Ibid.

in a workforce that numbered only 1.2 million."[104] Keeping with a longstanding pattern, the unemployed often emigrate - 44% of those who remained earned incomes below the poverty line. A debt-saddled government could do little to support people, nor was it politically inclined to do much more than incentivize foreign investment given neoliberal austerity.[105] Hurricane Maria was a massively powerful storm that aggravated decades of negligence and highlighted the island's economic precariousness.

Figure 12: Hurricane Ian (2022). NOAA Historical Hurricane Tracks. https://coast.noaa.gov/hurricanes/#map=4/32/-80

This final storm is vital to the overall narrative because, in the wake of Hurricane Ian, the Cuban government specifically requested aid from the United States, a moment that up until that point was unfathomable. On 27 September 2022, Hurricane Ian landed in western Cuba in the Pinar del Río province. In its trek across Cuba, Ian's winds reached maximum speeds of 110

[104] Pedro Cabán, "PROMESA, Puerto Rico and the American Empire," *Latino Studies* 16, no. 2 (July 2018): 161–84, https://doi.org/10.1057/s41276-018-0125-z. 10.
[105] Ibid. 1.

knots (~200 km/h).[106] After crossing Cuba in six hours, Ian made its way north, gaining strength and moved across south/central Florida, causing enough damage to replace Maria as the third costliest hurricane in American history. In Cuba, the storm surge caused by Ian brought the ocean inland between 300 and 5000 meters, depending on the region, with water levels between eight and ten feet.[107] Hurricane Ian damaged or destroyed at least 100,000 homes, which accounts for "60% of all the homes in the Pinar del Río province."[108] Ian also knocked out the power to the whole island for a few days, with some regions going weeks in the dark. 3.2 million people were directly affected by Ian across Cuba, and roughly 70,000 evacuated to government-operated shelters. This number did not account for anyone sheltering with family or friends.[109] Industry, particularly lobster and tobacco processing, and agriculture were heavily impacted.[110] The Ministry of Agriculture estimated that 8,583 hectares (21,210 acres) in the three provinces were damaged, impacting food crops such as bananas, cassava, sweet potatoes, corn, rice and tomatoes.[111] Damage was also reported by 700 schools, about 400 of which were in Pinar del Río.[112] Despite the massive damage to infrastructure, Ian only caused five deaths in Cuba, three direct and two indirect, "due to accidents that occurred during clean up."[113]

Hurricane Ian caused vast amounts of damage to an island with a housing shortage and ongoing economic limitations, made worse by the temporary collapse of international tourism

[106] National Oceanic and Atmospheric Administration, "Historical Hurricane Tracks."
[107] Lisa Bucci et al., "National Hurricane Center Tropical Cyclone Report: Hurricane Ian," *Weather and Forecasting* 36, no. 6 (December 2021): 2161–86, https://doi.org/10.1175/WAF-D-20-0234.1. 8.
[108] Lisa Bucci et al., "National Hurricane Center Tropical Cyclone Report: Hurricane Ian," 14.
[109] Andrea Rodríguez, "10 Days Later, Cubans Still Recovering from Hurricane Ian," *AP News*, October 7, 2022, https://apnews.com/article/hurricanes-health-caribbean-covid-storms-848c52622a1e03a50b93a5013be0df72.
[110] Rodríguez. "10 Days Later," *AP News*, October 7, 2022.
[111] Ibid.
[112] Tania Muñoz, "Hurricane Ian: UNICEF Cuba Ready to Support the Country's Response to Care for Children, Adolescents and Families," UNICEF, September 29, 2022, https://www.unicef.org/cuba/en/hurricane-ian-response-unicef-cuba.
[113] Bucci et al., "National Hurricane Center Tropical Cyclone Report: Hurricane Ian." 13

during the COVID-19 pandemic. [114] In an interview with the Associated Press, Ricardo Torres, a researcher at the Center for Latin American Studies at the American University in Washington, painted the picture clearly: "In Cuba, with what little there is, what is lost is very bad news."[115]

Although the Cold War was long over, the American embargo on Cuba remained in place. In early 2021, "the United States added Cuba to the list of State sponsors of terrorism,"[116] further limiting the Cuban government's chances of receiving assistance and curtailing familial remittances. Cuban diplomats lobbied for the United States to ease the restrictions.[117] Still, they remained in place as efforts to respond to the devastation of Hurricane Ian on Cuba's economy unfolded in fall 2022.

Reflections

These storms had much in common. They were all between Categories 3 and 5, made landfall on either Puerto Rico and/or Cuba, caused deaths ranging from 7 to over 4000, devastated agriculture and housing and cost between $100 million and $90 billion. While the ranges between the storms are significant, there was a relatively even distribution of cost and damage across the two islands. What differed was the effect of the storms once placed in their political-economic history. This chapter outlined seven distinct claims about each hurricane's political and economic significance within Cuba and Puerto Rico. These claims follow a consistent trend similar to the one outlined in Chapter 1. The impacts of storms in Cuba were primarily political, whereas, for Puerto Rico, they were mainly economic. Hurricane Fox stands

[114] "BTI 2022 Cuba Country Report," BTI Transformation Index, accessed March 6, 2024, https://bti-project.org/en/reports/country-report/CUB.
[115] Rodríguez, "10 Days Later, Cubans Still Recovering from Hurricane Ian."
[116] Economic Commission for Latin America and the Caribbean, "Economic Survey of Latin America and the Caribbean," 2023. 1.
[117] Rafael Bernal, "Cuba Seeks to Thaw Biden Administration's Cold Shoulder," Text, *The Hill* (blog), October 15, 2023, https://thehill.com/latino/4255015-cuba-seeks-thaw-biden-administrations/.

out, having had both political and economic impacts, and Flora stands out for directly being the cause of delayed policy change. Georges intensified Cuba's geopolitical isolation, and Ian highlighted the significance of political change. In Puerto Rico, Santa Clara, Hugo, Georges, and Maria all exacerbated the economic crises that plagued the island. While Cuba displayed distinct change over time, Puerto Rico's systemic problems remained relatively consistent. Collectively, these seven storms show that hurricane damage is not an isolated event. Through this analysis, it is clear that each storm's effects were a product of the political economies of the island impacted.

Hurricanes have etched their regularity into the landscape of the Caribbean and, even more so, into the psyche of the residents.[118] Anyone who has lived through a hurricane will always carry that experience. When studying natural phenomena such as hurricanes, the personal element of the analysis is critical. After every storm, there are more survivors than victims, and the survivors rely on whatever government they live under to support them. Keeping that in mind, hurricanes do not cause any political processes; what hurricanes do is reveal and deepen the situation that one is living in.

This chapter outlined the damage done by each storm and explained the context surrounding the storm, why the damage was as bad as it was, and what was happening in each place. Each storm analyzed: Fox, Betsy, Flora, Hugo, Georges, Maria, and Ian needs to be considered and analyzed in their historical and political context. Hurricanes are never isolated events that happen in a vacuum. The situation surrounding the storm can answer many questions about how and why the aftermath was what it was. The analysis of these hurricanes unveils a

[118] Shawn Miller, *An Environmental History of Latin America* (Cambridge University Press, 2007). 123.

complex interplay of environmental, socio-political, and economic factors that directly cause extensive infrastructure damage and kill thousands regularly. These myriad factors shaped the impact and recovery of these natural disasters on Cuba and Puerto Rico. These hurricanes, each with their distinct characteristics, left lasting scars on the islands and their residents, highlighting, or exacerbating economic vulnerabilities and systemic political issues that transcend the immediate devastation of the storms with origins in early 20th century American occupation. These hurricanes are potent reminders of the relationship between natural disasters and social, political, and economic decisions in each case.

Chapter 3

American Humanitarian Aid Through the Decades, Differences between Cuba and Puerto Rico as a Recipient.

The United States sphere of influence included the entirety of the Caribbean after the Monroe Doctrine was established in the 1820s and even more directly after the defeat of the Spanish in 1898. As such, its government often responded to hurricanes by assisting the affected areas. The American government and some scholars have presented disaster relief as "non-political." However, as Drury et al. observe, this was not so.[1] Assistance was delivered based on humanitarian, economic, and political motives. The US offered Puerto Rico and Cuba various levels of assistance multiple times, often freezing Cuba out completely or offering little amounts, knowing Cuba would refuse. That changed recently, however, with an allocation made in 2022, breaking the tradition. This chapter provides an overview of American relief legislation and then considers how or if relief was allocated in the wake of the selected seven hurricanes.

The connections between politics and disaster responses are innumerable and intertwined. For example, FEMA (established in 1979) has a list of "Historic Disasters" that is limited solely to the agency's lifetime, the oldest of which is Hurricane Hugo (1989), with minimal records for storms that happened before their inception.[2] The history of disaster response legislation is long. However, the story in the United States generally began in the 1950s, coinciding with the intense political change in Puerto Rico and Cuba, which makes for a fascinating analysis. There is an inherent connection between politics and disaster response, mainly due to the legislation related to administering aid after a disaster.

[1] A. Drury, Richard Olson, and Douglas Van Belle, "The Politics of Humanitarian Aid: U.S. Foreign Disaster Assistance, 1964-1995," *The Journal of Politics* 67, no. 2 (May 2005): 454–73. 454.
[2] "Historic Disasters," Federal Emergency Management Agency, January 4, 2022, https://www.fema.gov/disaster/historic.

The allocation of relief grew out of parallel, though complementary domestic and foreign aid legislation. Bringing together the histories of American domestic and international relief policies allows for a comparative analysis of how providing relief, or not providing it, served American interests in Puerto Rico and Cuba. Notably, Puerto Rico, as neither a domestic nor foreign territory, was legally entitled to hurricane relief yet was typically provided with fewer resources than a state might have received. Consistently through the 20th and 21st centuries, the United States has utilized aid and relief as a tool to achieve economic control over Puerto Rico and political influence over Cuba. Despite the legal obligation of the US to assist Puerto Rico after a disaster, the position that Puerto Rico holds within the US economy is perpetuated by the federal loans distributed as disaster relief. Maintaining this economic dominance and the tax benefits that go along with it are the underlying motives behind the legislation put in place. Assistance was a political policy that addressed the financial consequences of hurricanes. The policy was applied differently in Cuba and Puerto Rico because of the difference in the political ideology. The nature of aid to Puerto Rico and Cuba is to maintain control over the political economy. The difference is that in Cuba, there was an emphasis on politics; in Puerto Rico, it was the economy. Comparing the two paints a picture of a modern colonial empire clinging to the systems of failure that it designed. The complex nature of Cuba's and Puerto Rico's relationship with the United States preserves in perpetuity a history of exploitation, influence, and coloniality.

Before 1950, United States disaster legislation was ad hoc rather than a cohesive body of policy. For much of the 18th and 19th centuries, the United States government responded to disasters one at a time, producing new legislation with each disaster. Congress passed 128

disaster relief acts, with some granting up to millions of dollars to American states or citizens.[3] Following World War II, the US government also improvised to extend large-scale international aid to Western Europe through the Marshall Plan (or European Recovery Program). Historian Micheal Hogan describes this change in American foreign policy as a trend that "fundamentally altered the shape of American diplomacy, which for all practical purposes sought to restructure the world economy along lines similar to the corporative order that was emerging in the United States"[4] The liberal aims of the Marshall Plan to facilitate creating new markets for American goods and investment worked alongside the consolidation of relief legislation to set the tone for American disaster aid moving forward in the US and overseas.

The first comprehensive relief aid legislation was the Disaster Relief Act in 1950, which authorized "the President to provide supplementary Federal assistance when a Governor requested help and the President approved the request by declaring a major disaster."[5] Congress included Puerto Rico by name, though deliberately not as a state; the legislation applies to states, territories, and Puerto Rico. The distinction that Puerto Rico is not listed under the territory category and not as a state even before the declaration of Commonwealth status exemplifies the American attitude toward the island.[6] The Relief Act of 1950 originated partly from the logistical nightmare after a river flood when there was no "appropriate coordination of activities." Beyond

[3] Michele Landis Dauber, *The Sympathetic State: Disaster Relief and the Origins of the American Welfare State* (University of Chicago Press, 2013). 25; Barry Barnett, "U.S. Government Natural Disaster Assistance: Historical Analysis and a Proposal for the Future," *Disasters* 23, no. 2 (1999): 139–55. 144.
[4] Michael J. Hogan, *The Marshall Plan: America, Britain, and the Reconstruction of Western Europe, 1947-1952* (Cambridge University Press, 1987). 3.
[5] Federal Emergency Management Agency, "Unit Three: A Citizen's Guide to Disaster Assistance," in *A Citizen's Guide to Disaster Assistance*, n.d. 3-2.
[6] "Public Law 81-875 / Chapter 1125, 81 Congress, Session 2, An Act: To authorize Federal assistance to States and local governments in major disasters, and for other purposes," U.S. Statutes at Large 64, no. Main Section (1950): 1109-1112.

logistics, the act was adopted to create a permanent disaster fund.[7] The Civil Defense Act in 1951, like the Relief Act, granted emergency disaster powers to the government to respond to crises. Although the Civil Defence Act also established "a nationwide system of civil defense agencies." The act paralleled much of what disaster preparedness looks like for natural disasters.[8] Replacing the word "attack" with "disaster" in the Civil Defence Act's definition of disaster makes it almost indistinguishable from what could be found on FEMA's website.[9] These two pieces of legislation ensured that disaster relief was a standard, rather than exceptional, function of government.

Despite the Cold War context, domestic relief provisions were developed and applied earlier than comparable imperial and foreign policy instruments. A US-supported Batista coup had recently taken place and provoked intense political turmoil when Hurricane Fox struck Cuba in 1952. Fox damaged the rural areas of Cuba, an economically important region for Cuba and the United States. Approximately 80% of Cuba's exports in the 1950s were sugar, with half of sugar exports dispatched to the United States.[10] Moreover, American-owned infrastructure dominated the agricultural industry in Cuba, with one-third of American direct investments in Cuba going to agriculture (~300 million/~900 million in 1959).[11] The Assistant Secretary of State for Inter-American Affairs and Assistant Secretary of State for Inter-American Affairs under President Truman, Edward G. Miller Jr., recommended the continuation of diplomatic

[7] Gareth Davies, "Pre-Modern Disaster Politics: Combating Catastrophe in the 1950s," *Publius: The Journal of Federalism* 47, no. 2 (2017): 260–81, https://doi.org/10.1093/publius/pjx016. 263.
[8] Federal Emergency Management Agency, "Emergency Management Authorities Review," accessed March 17, 2024, https://emilms.fema.gov/is_0230e/groups/356.html.
[9] "Public Law 81-920 / Chapter 1228, 81 Congress, Session 2, An Act: To authorize a Federal civil defense program, and for other purposes.," U.S. Statutes at Large 64, no. Main Section (1951): 1245-1257.
[10] Alan Dye and Richard Sicotte, "The U.S. Sugar Program and the Cuban Revolution," *The Journal of Economic History* 64, no. 3 (2004): 673–704. 676.
[11] Leland L. Johnson, "U.S. Business Interests in Cuba and the Rise of Castro" (RAND Corporation, June 1964). 4.

relations after Batista's March 1952 *coup d'état* because of the US's "very special position in Cuba which includes heavy capital investment, enormous international trade, the Nicaro nickel plant operation, the Guantánamo Naval Base, three armed services missions and the recent signing of a bilateral military assistance agreement."[12] Despite American economic dominance and political hegemony over Cuba, the US government was reluctant to provide relief because doing so had not been established as a foreign political tool until the 1960s.

In addition to the US control in Cuba, there was drastic income inequality. In the 1950s, Cuba ranked among the top in Latin America for income per capita, had the lowest infant mortality rate, and was tied for the second-highest literacy rate.[13] However, these statistics are a matter of perspective. The case in rural Cuba is entirely different: "Two-thirds of rural dwellings had dirt floors; 9 percent had electricity; 2 percent had running water."[14] The conditions of rural Cuba resulted from Batista's negligence and American condescension. The US commercial attaché said: "The average non-land-owning Cuban farmer and ranch hand is an indolent, ignorant, unambitious individual who is content with his apparently sad lot because he is too stupid and shiftless to try to improve it."[15] Even though a significant amount of Cuba was American property at the time of Fox, there was no presidential announcement, no expression of sympathy, and, importantly, no offer of support. In the absence of government relief, those

[12] "Foreign Relations of the United States, 1952–1954, The American Republics, Volume IV - Office of the Historian," accessed February 28, 2024, https://history.state.gov/historicaldocuments/frus1952-54v04/d327.
[13] Lars Schoultz, *That Infernal Little Cuban Republic: The United States and the Cuban Revolution*, 1st ed. (Chapel Hill: The University of North Carolina Press, 2009). 52.
[14] Schoultz. *That Infernal Little Cuban Republic,* 53.
[15] Schoultz. *That Infernal Little Cuban Republic,* 54.

sympathetic to the Cuban situation called for donations for victims of Fox in a small local Florida newspaper, *The Key West Citizen*.[16]

By contrast, developments in domestic relief legislation made relief to Puerto Rico more probable. On 7 August 1956, five days before Hurricane Betsy/Santa Clara struck the island, President Eisenhower passed the Federal Flood Insurance Act (FFIA). While explicitly referenced as a Commonwealth in the Act, there is no evidence that it was utilized in the recovery after Santa Clara. The FFIA was a critical piece of legislation for Americans because it brought security to the enormous number of people who lived in zones prone to flooding but could not afford or did not qualify for private insurance coverage. Despite the significance of the FFIA, Eisenhower still maintained some of the long-standing tradition of sharing responsibility. In a radio broadcast after Hurricane Diane in 1955, Eisenhower made a plea to the American public: "In my opinion, everybody within the sounds of my voice will sleep better tonight if he turns in everything that he can spare to meet this great disaster. [Donations to the Red Cross go to] human beings, not just to cleaning roads and rebuilding schools but to people that are hungry, or cold, or have no place to go."[17] The divide of work that Eisenhower sought was developed after Diane. Ike established a "stipulated minimum contribution" that required states (and Commonwealths) to pay into before funds would be released. The goal of this was to strengthen the local and state-level responses.[18]

Though the FFIA was an essential step in developing the scope of aid available to Americans, it was poorly organized, and the Federal Flood Indemnity Administration created to

[16] Dorothy Raymer, "Weather Bureau Indicates Hurricane 'Fox' Will Not Strike in Key West," *The Key West Citizen*, October 24, 1952, Library of Congress - National Endowment for the Humanities: Chronicling America, https://chroniclingamerica.loc.gov/lccn/sn83016244/1952-10-24/ed-1/seq-1/. 2.
[17] Davies, "Pre-Modern Disaster Politics." 266.
[18] Ibid. 267.

oversee the act folded the following year, in 1957.[19] The FFIA was reinvigorated in 1968 under the name National Flood Insurance Act, and its crucial addition was the National Flood Insurance Program (NFIP). Under their new purview, the legislation offered insurance beyond what was privately available. The most meaningful change in these two acts was that the 1968 redo created the Federal Insurance Administration (FIA) to oversee the administration; both were under the purview of the Department of Housing and Urban Development (HUD). The federal government's choice to fill a gap left by private insurance companies was a groundbreaking change in disaster assistance. Though still maintained a somewhat piecemeal tradition, with multiple tries spanning a decade.

Despite American disaster relief and flood legislation, Puerto Rico received only discretionary assistance after Hurricane Betsy (or Santa Clara) in 1956. Governor Muñoz Marin appealed directly to Eisenhower for recovery funds.[20] The Disaster Relief Act, relief required the Governor to declare the island an "emergency zone." Doing so allowed Governor Muñoz Marin to access $6,700,00 (~$75 million today[21]) from the "Emergency State Fund."[22] Interestingly, there is some conflicting information. In an article written on 15 August 1956 (three days after the one quoted above), Muñoz Marin announced there was no possibility of a request for federal assistance and that Puerto Rico's Emergency State Fund has $10,000,000 (~$111 million today) for recovery. [23] In either case, by 1956, a state (or Commonwealth) could not declare itself a disaster zone according to the most recent legislation. In FEMA's records, Puerto Rico did have

[19] National Research Council, "Affordability of National Flood Insurance Program Premiums: Report 1" (Washington, D.C.: The National Academies Press, August 6, 2015), https://doi.org/10.17226/21709. 24.
[20] Sosa et al., "El Mundo: Diario de La Mañana." 8. Translated by author.
[21] "Inflation Calculator," Bank of Canada, accessed March 2, 2024, https://www.bankofcanada.ca/rates/related/inflation-calculator/.
[22] Sosa et al.
[23] Dr. Luis A. Salivia, "Recordando Huracán Santa Clara," *El Mundo*, August 12, 1956. 1.

an official declaration.[24] Muñoz Marin had $6.7-10 million for recovery, less than a quarter of the reported losses. Making up for the gap in funding was every emergency agency on the island – from firefighters to phone companies and everyone in between.[25] The federal government, at most, declared a disaster so that Puerto Ricans could access the limited relief funds available to them.

The differences between how the US responded to these storms (though slight) reflect each island's different status concerning the US. For Cuba, the government did nothing, not even so much as a message of condolences. Meanwhile, for Puerto Rico, the government declared an official disaster for the Commonwealth to access its relief funds, which was only a tiny fraction of the total damage. The power dynamic between the US, Puerto Rico, and Cuba explains the somewhat improvisational response – or lack thereof. There was no impetus for the federal government to do anything despite both islands being extremely useful to the United States. There is no documentation that the federal government, under different administrations, had anything to say about the massive amount of damage done to either Puerto Rico or Cuba.

In the 1960s, the United States extended its legislative framework into the realm of foreign policy—disaster relief aligned with development aid. The Kennedy Administration's New Frontier Program took a more direct approach to disaster response at home and overseas. This program focused on tackling issues plaguing Americans, from healthcare to civil rights to agriculture. This program's most significant foreign affairs aspect happened in 1961 when Kennedy signed the Foreign Assistance Act, establishing the United States Agency for

[24] "Puerto Rico Hurricane: DR-62-PR," Federal Emergency Management Agency, December 20, 2022, https://www.fema.gov/disaster/62.
[25] Salivia, "Recordando Huracán Santa Clara." 2.

International Development (USAID). Despite Puerto Rico's limbo state, the commonwealth falls under "domestic" regarding aid. USAID created "a new contingency fund, making available millions of dollars annually for global disaster response."[26] Not long after the implementation of USAID, the agency restructured and appointed a Foreign Disaster Relief Coordinator (FDRC) in 1964 "to improve the management of United States Government (USG) disaster assistance overseas."[27] USAID functions under the United States Department of State, and within USAID, the FDRC works in the Office of Foreign Disaster Assistance, also created in 1964. This web of offices and agencies determines all aspects of "declaring" overseas disasters.

Revolutionary Cuba, however, was excluded from American relief consideration. The Foreign Assistance Act included a section emphasizing "Prohibitions Against Furnishing Assistance to Cuba and Certain Other Countries." The section's first subparagraph gave legal force to an American embargo of Cuba by stating that "the President is authorized to establish and maintain a total embargo upon all trade between the United States and Cuba."[28] Many amendments to this act were made throughout the following several decades, though it was not until a 2023 amendment that Cuba was removed from the list of nations barred from receiving aid.[29] The list of nations barred from aid has changed a few times since being written in 1961, clearly displaying the political agenda behind American foreign aid. The pattern of exclusion,

[26] Julia F. Irwin, "The Origins of U.S. Foreign Disaster Assistance," Organization of American Historians, accessed March 17, 2024, https://www.oah.org/tah/february-4/the-origins-of-u-s-foreign-disaster-assistance/.
[27] Richard Stuart Olson, "The Office of U.S. Foreign Disaster Assistance (OFDA) of the United States Agency for International Development (USAID): A Critical Juncture Analysis, 1964-2003" (Miami, FL, Florida International University, 2005). 1.
[28] "Public Law 87-195, 87 Congress, Session 1, An Act: To promote the foreign policy, security, and general welfare of the United States by assisting peoples of the world in their efforts toward economic development and internal and external security, and for other purposes," U.S. Statutes at Large 75, no. Main Section (1961): 424-465. 444-445.
[29] "Public Law 87-195, 87 Congress, Session 1, An Act: To promote the foreign policy, security, and general welfare of the United States by assisting peoples of the world in their efforts toward economic development and internal and external security, and for other purposes," U.S. Statutes at Large 75, no. Main Section (1961) [As Amended Through P.L. 118–31, Enacted December 22, 2023]

until the most recent amendments, listed specifically each "Communist country."[30] Since its inception under Kennedy, the Foreign Assistance Act has been applied exclusively along ideological lines. Only countries aligned with the West's capitalist model were eligible for assistance. Foreign assistance was not a purely humanitarian decision.

When Hurricane Flora hit Cuba in 1963, Cuban-American relations were tense. In Flora's wake, report after report was published by various American agencies attempting to estimate the impact on Cuba, economic and human. It was not a secret that the United States believed Flora would play to their advantage. An article from the Wall Street Journal published while Flora was still battering Cuba on 8 October 1961 reported that the authorities from the Kennedy administration "suspect [Flora] may be the most effective weapon yet for undermining Fidel Castro." The article goes on with a section about Cuban exiles who referred to Flora as an "act of divine justice." Despite the overt hostility and lack of compassion expressed by the United States government in press and legislation, the American Red Cross offered "relief supplies." [31]

However, in keeping with the geopolitical and ideological tensions of the moment, the Cuban government refused such assistance. Castro declared: "We reject the hypocritical offer for assistance at this time of disaster caused by nature from those who constantly mean to aggravate with their blockades and aggression the misery and ruin of the Cuban nation."[32] On the same Radio Havana broadcast, the Cuban Red Cross thanked the League of Red Cross Societies in

[30] "Public Law 87-565, 87 Congress, Session 2, An Act: To amend further the Foreign Assistance Act of 1961, as amended, and for other purposes," U.S. Statutes at Large 76, no. Main Section (1962): 255-264.
[31] JFKPOF-061-004-p0072 Hurricane Damage to Cuba May Complicate Castro's Economic Woes, Russia's Aid Plan. Papers of John F. Kennedy, Box 061, 9 October 1963: Background materials. John F. Kennedy Presidential Library and Museum.
[32] JFKPOF-061-004-p0091 Department of State Agency for International Development. Papers of John F. Kennedy, Box 061, 9 October 1963: Background materials. John F. Kennedy Presidential Library and Museum.

Geneva.[33] The Cuban UN delegate Carlos Lechuga Hevia stated that Cuba will not accept aid from any "official or semi-official organization of the United States" but will "accept any offer from U.S. citizens who, in solidarity with the people of Cuba, want to do good."[34] The Kennedy administration was prepared not to enforce the embargo if the Cuban government requested assistance and to allow Cuba to purchase "food and other relief material from the U.S., providing such purchases conform to existing regulations governing sale of goods to Cuba."[35] In all, the federal response to Hurricane Flora was empty words and, as Castro put it, a "hypocritical offer" when considering the extent to which Washington was actively working towards Castro's downfall.[36]

Cold War tensions receded, however, and the US government accordingly civilianized its disaster relief framework during the 1970s period known as "*détente*." The Federal Emergency Management Agency (FEMA) creation in 1979 marked a considerable step in routinizing and bureaucratizing domestic relief. President Jimmy Carter established FEMA by executive order. He aimed to consolidate the 1956 and 1968 flood insurance acts, among several others, under the new agency's authority.[37] The creation of FEMA marked an essential transition from a military-oriented "Civil Defence." When Carter created FEMA, he fundamentally changed the domestic natural disaster response.

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[33] JFKPOF-061-004-p0173-0178 Briefing Paper for the President's Press Conference. Papers of John F. Kennedy, Box 061, 9 October 1963: Background materials. John F. Kennedy Presidential Library and Museum. 1.
[34] JFKPOF-061-004-p0173-0178 Briefing Paper for the President's Press Conference. Papers of John F. Kennedy, Box 061, 9 October 1963: Background materials. John F. Kennedy Presidential Library and Museum. 2.
[35] JFKPOF-061-004-p0070 Presidential Press Conference Material - 10/09/93. Papers of John F. Kennedy, Box 061, 9 October 1963: Background materials. John F. Kennedy Presidential Library and Museum.
[36] JFKPOF-061-004-p0173-0178 Briefing Paper for the President's Press Conference. Papers of John F. Kennedy, Box 061, 9 October 1963: Background materials. John F. Kennedy Presidential Library and Museum. 2.
[37] Jimmy Carter, Executive Order 12127—Federal Emergency Management Agency Online by Gerhard Peters and John T. Woolley, The American Presidency Project https://www.presidency.ucsb.edu/node/249484

Initially written in 1950, the Disaster Relief Act had two major rewrites: 1974 and 1988. In 1974, the most significant alteration was changing how a disaster was defined for incidents that did not rise to the "major disaster" threshold."[38] In 1988, the act was renamed The Robert T. Stafford Disaster Relief and Emergency Act or The Stafford Act.[39] In this redo, emergency now meant anything the president deemed worthy and established the disaster response framework that would remain unchanged until today.[40] This series of amendments continued the established tradition of disaster response versus preparedness.

It is important to note that at no point since its inception was FEMA expected to be the sole agency involved. When a municipality's resources are exhausted, it calls on the state when the resources of a state are exhausted; it can declare a state of disaster, which is sent to FEMA as per the Stafford Disaster Relief and Emergency Assistance Act of 1988.[41] This request is assessed, and FEMA makes their assessment, which is then handed to the president, who determines if a disaster is too much for municipal and state resources. The president appoints a Federal Coordinating Officer (FCO) if a formal disaster is declared.[42] Working under the FCO, FEMA coordinates the recovery.

The FEMA administrative and legislative framework covered Puerto Rico, a fully-fledged Commonwealth of the United States when Hugo struck in 1989. In light of the storm's damage, municipal and territorial resources were exhausted quickly, and federal assistance was

[38] William L Painter, "The Disaster Relief Fund: Overview and Issues" (Congressional Research Council, January 22, 2024). 12.
[39] "Public Law 100-707, 100 Congress, Session 2, An Act: To amend the Disaster Relief Act of 1974 to provide for more effective assistance in response to major disasters and emergencies, and for other purposes.," U.S. Statutes at Large 102, no. Main Section (1988): 4689-4717. 4689.
[40] "History of FEMA," Federal Emergency Management Agency, January 4, 2021, https://www.fema.gov/about/history.
[41] Schneider, "FEMA, Federalism, Hugo, and 'Frisco." 99.
[42] Schneider. "FEMA, Federalism, Hugo, and 'Frisco," 99.

needed. FEMA faced many difficulties while administering aid to Puerto Rico (and the US Virgin Islands). Despite these challenges, within four months of Hugo, FEMA distributed over $750 million to individuals or families through grants and provided $200 million in public assistance funds.[43] While this effort was immense and helped many of those impacted by Hugo, many still fell through the cracks. Hugo's hardest-hit areas were "the most densely populated, economically depressed, and racially tense areas of the island."[44] For weeks after Hugo hit, thousands were left homeless and without water and power.

The American response to Hurricane Hugo was complicated. FEMA was able to, after significant difficulties, administer aid to the majority of those in need; however, the territorial-level issues that have plagued Puerto Rico since its incorporation into the United States were still ever–present. A significant problem faced was staffing shortages.[45] The mid-level issues were so systemic that FEMA's 1988 report on state and local exercise requirements considered "state" level performance inadequate and "local governments were better prepared to respond during Hurricane Hugo than the state government."[46] Roughly 1 out of every 3 "county-level emergency managers" reported lacking resources, particularly staff.[47] FEMA also suffered from staffing shortages. After sending fifteen out of its eighteen Caribbean disaster assistance staff, it still required more staff and brought in staff from other regions.[48] On top of the staffing issues, one recommendation from the myriad reports in the years following Hugo was clarification on FEMA's role in systemic housing issues. The suggestions were to either clarify whether the

[43] Schneider, "FEMA, Federalism, Hugo, and 'Frisco." 104.
[44] Schneider. "FEMA, Federalism, Hugo, and 'Frisco," 104.
[45] Government Accountability Office, "Disaster Assistance: Federal, State, and Local Responses to Natural Disasters Need Improvement," March 1991. 19.
[46] Government Accountability Office, "Disaster Assistance," 24.
[47] Government Accountability Office, "Disaster Assistance," 29.
[48] Government Accountability Office, "Disaster Assistance," 38.

Stafford Act permits FEMA to direct the U.S. Department of Housing and Urban Development (HUD) in the reconstruction of housing for disaster victims or to amend the legislation to "provide for appropriations directly to HUD to fund housing assistance for disaster victims."[49] The comparison between the American response to Flora versus Hugo is not surprising. The relief effort after Hugo was significantly more robust. However, it is noteworthy that Puerto Rico remained ill-prepared on a "state" level despite getting at least one hurricane per year that caused damage to the island's infrastructure.

Both the domestic and foreign dimensions of American relief policy were tested by Hurricane Georges, which impacted Puerto Rico, Cuba, and the mainland of the United States in September 1998. In advance of the storm's impact, FEMA established emergency teams in the Caribbean, which aided the immediate response, particularly when compared to Hugo. Nonetheless, the immediate need was immense, as tens of thousands were left homeless, and hundreds of thousands were left without water or power.

Acting relatively swiftly to the situation in Puerto Rico, President Clinton declared the island a disaster zone.[50] In the few weeks following Georges, Puerto Ricans who lost their homes in the storm were eligible for USD 25,000 for home rebuilding and another USD 13,500 for appliances, for a total of USD 38,500 (~USD 67,000 today).[51] This FEMA program was not advised by authorities, who believed this would "leave new homes as vulnerable to hurricanes as the old ones."[52] On 15 October 1998, then Governor of Puerto Rico, Pedro Rosselló established

[49] Government Accountability Office, "Disaster Assistance," 68.
[50] William J. Clinton, "Statement on Hurricane Georges," The American Presidency Project, September 25, 1998, https://www.presidency.ucsb.edu/documents/statement-hurricane-georges.
[51] L. A. Times Archives, "Georges' Puerto Rican Ravages Will Cost U.S.," Los Angeles Times, October 5, 1998, https://www.latimes.com/archives/la-xpm-1998-oct-05-mn-29523-story.html.
[52] Archives.

"a mitigation project to rebuild or replace homes the disaster damaged."[53] This program was named the New Secure Housing Program (NSHP). The program was specifically designed to replace or rebuild low-income housing while working to mitigate future damage to the housing stock. The focus on low-income housing was due to "a prevalence of informally constructed buildings" and, in turn, many homes that are not "up to code."[54] Hurricane Georges was why the Puerto Rican government adopted the 1997 Uniform Building Code (UBC). This joint initiative "built 1,647 housing units that were designed to the 1997 UBC," which was a remarkable feat.[55] However, it was still far from housing the roughly 30,000 homeless after the storm.

Despite the tremendous effort put into general disaster relief legislation and consolidation with FEMA, disaster-specific relief efforts continued. By February of 1999, FEMA had coordinated the creation of the President's Long-Term Recovery Task Force to work with Governor Rosselló, focusing on "housing, mitigation, economic revitalization and sustainability, transportation, and infrastructure."[56] FEMA's Hazard Mitigation Grant Program (HMGP) granted Rosselló "funding equal to 15 percent of FEMA's estimated total disaster costs for Hurricane Georges," and the Governor focused this in his NSHP to the tune of almost USD 190 million (~USD 330 million today). Like Hurricane Hugo, disaster response issues began to creep through the cracks of local and state governments, though they were much more severe in this case. Four years after Hurricane Georges, five mayors across Puerto Rico were accused of fraud

[53] Office of Inspector General, "The Puerto Rico Department of Housing Did Not Properly Administer $90.79 Million of FEMA Grant Funds Awarded for the New Secure Housing Program" (Department of Homeland Security, September 9, 2015), https://www.oversight.gov/sites/default/files/oig-reports/OIG-15-142-D-Sep15.pdf. 2.
[54] Mitigation Assessment Team, "Hurricanes Irma and Maria in Puerto Rico: Building Performance, Observations, Recommendations, and Technical Guidance," Mitigation Assessment Team Report (Federal Emergency Management Agency, October 2018). ii.
[55] Mitigation Assessment Team, "Hurricanes Irma and Maria in Puerto Rico." iii.
[56] Federal Emergency Management Agency, "FEMA Issues Federal Action Plan for Puerto Rico Hurricane Georges Recovery," ReliefWeb, September 23, 1999, https://reliefweb.int/report/puerto-rico-united-states-america/fema-issues-federal-action-plan-puerto-rico-hurricane.

and extortion related to the "misappropriation of relief funds" for hurricane cleanup.[57] The response to Hurricane Georges in Puerto was sizable. Nevertheless, the systemic issues of informal and inadequate housing, governmental corruption, and mismanagement plagued the relief effort for over a decade. In this way, the disaster relief effort reflected broader economic and political turmoil. This turmoil manifested in social issues, such as a housing crisis and widespread informal housing. The turmoil also manifested in the political realm, with corruption going from mayoral to gubernatorial positions.

Proactive, if eventually troubled, American efforts to support relief in Puerto Rico were in stark contrast to the American response to Cuban damage, despite less contentious Cuban-American relations following the end of the Cold War. American officials no longer envisioned that storm damage would destabilize and bring down Castro's regime. On the other hand, when the US government made a small offer of food assistance during the drought that preceded Georges, Castro remained steadfast in rejecting it.[58] When Clinton addressed the hurricane's regional impacts, he did not mention Cuba.[59] USAID delivered foreign relief in the Dominican Republic, Haiti, and the Eastern Caribbean. A USAID report mentioned Cuba only once, in passing.[60] While USAID was not in Cuba after Georges for humanitarian relief, the agency had been operating in Cuba for a few years, supporting pro-democracy groups financially. Between 1996 and 2008, USAID "distributed over $65 million in grants since 1996 to US-based NGOs

[57] Duany, *Puerto Rico,* 88.
[58] James P. Rubin, "Cuba: Emergency Food Relief," U.S. Department of State Archive, October 1, 1998, https://1997-2001.state.gov/briefings/statements/1998/ps981001.html.
[59] Clinton, "Statement on Hurricane Georges."
[60] United States Agency for International Development, "Mission Accomplished: The United States Completes a $1 Billion Hurricane Relief and Reconstruction Program in Central America and the Caribbean," n.d. 3.

and Universities for democracy promotion in Cuba."[61] While still in the depths of recovery from the drought and the storm, almost as if to prove to the United States that his nation is one capable of great things, Castro sent a plane of doctors and medical supplies to the Dominican Republic and said, "we are not preaching simply with words, but with acts." Castro ended that speech by announcing that "it would be against Cuba's "honour" to receive aid from the United States."[62] It is a fascinating comparison, examining the US response to the same storm that hit a Caribbean island deeply enmeshed in their empire and one that they so vehemently oppose, particularly when looking back to the 1960s and the response to Hurricane Flora. Many changes during the 30-year gap between them could have warranted a wholly different reaction, such as the end of the Cold War. While the responses are not entirely surprising, the analysis of placing them into their political contexts and exploring how little the response changes over time. It seemed to not at all matter to Washington that Puerto Ricans are consistently failed by systemic issues, social and political, mainly due to the colonial limbo in which the US trapped the island. It also seemed to not matter to Washington that the Cold War had ended, and relief aid should be precisely that, aid for relief, not a ploy under the name of "development" aid.

In the aftermath of the terrorist attacks on New York City's Twin Towers on September 11, 2001, the American government re-established a link between disaster relief and national security. President George W Bush signed the Homeland Security Act into law in 2002, bringing FEMA and many other agencies into the Department of Homeland Security (DHS). This transition marked a return to emergency response, falling under the authority of an agency that

[61] Cuban American National Foundation, "Findings and Recommendations on the Most Effective Use of USAID-CUBA Funds Authorized by Section 109(a) of the Cuban Liberty and Democratic Solidarity (Helms-Burton) Act of 1996" (Miami, FL: Cuban American National Foundation, March 2008). 8.
[62] Andrew Cawthorne, "Cuba Offers People, Neighbors Aid After Hurricane," Reuters, September 29, 1998, Internet Archive: Wayback Machine, https://web.archive.org/web/20110616112706/http://www.cubanet.org/CNews/y98/sep98/29e1.htm.

follows a different mission statement. The DHS is primarily a law-enforcement agency, and FEMA has nothing to do with law enforcement. After Hurricane Katrina in 2005, FEMA established The National Preparedness Goal, which "defines the target level of preparedness to ensure the Nation's ability to prevent, respond to, recover from, and mitigate against natural disasters, acts of terrorism, and other man-made disasters."[63] The specific mention of "terrorism and man-made disasters" harkens back to the previous legislation written in the Cold War and the mission of civil defence, not just a humanitarian objective. Moreover, this series of legislation continues the pattern of on-the-fly policy for disasters – no one piece of law appears to be enough.

Aid and relief have a large body of domestic and foreign legislation. Both of these branches serve means beyond humanitarianism. The two are connected in how the federal government employs them to achieve dominance and control over the political economies of Puerto Rico and Cuba. However, as established, the balance of politics and economics differs between the islands. USAID, encompassing foreign aid, excluding Cuba, has overt political intentions written into it. FEMA, the domestic counterpart, explicitly including Puerto Rico, continues to perpetuate the island's economic crises and fails the Commonwealth due to the political relationship that Puerto Rico has maintained since the consolidation of relief legislation began.

Despite its motivations, relief in response to Hurricane Maria can only be described as a failure. What this analysis has explored so far remains accurate: FEMA can successfully allocate funds with relative speed and efficiency. However, disaster response is not just throwing money

[63] "Public Law 109-295, 109 Congress Session 2, Department of Homeland Security Appropriations Act, 2007," United States Statutes at Large 120, no. Main Section (2006): 1355-1464.

at a problem. When Hurricane Maria struck Puerto Rico the same month as Hurricane Irma, FEMA's weaknesses were exposed to a previously unseen extent. Before the hurricane season started in 2017, FEMA faced the same systematic issues as Puerto Rico. They reported being understaffed and noted that "an undisclosed number of employees were lacking what it called certification."[64] The immediate problem that FEMA faced on the island was the double impact of Irma and Maria. When Maria struck, FEMA's "emergency supply warehouses were nearly empty" because most of the supplies were sent to the US Virgin Islands after Irma tore through them.[65] The first thing Puerto Rico needed was generators because the island lost power, but FEMA only had 31 for over three million without power.[66] The United States Army Corps of Engineers (USACE) acted as "FEMA's Engineer" in the wake of Maria. It filled a role it had not before: repairing Puerto Rico's power grid.[67] By April 2018, FEMA had granted over USD 2 billion across the island; by November 2022, that amount had jumped to USD 28 billion.[68] The issue with this massive expenditure is that by 2022, only $5.3 billion had been spent (19%), and the majority of this 19% was spent on "emergency work projects, such as debris removal."[69] The issues with how FEMA handled the Maria response continued mounting as time went on. One year after the storm, with power returning to the last areas left in the dark only the month prior, roughly 20,000 pallets of bottled water were discovered on an airplane runway intended for

[64] Michel Martin and Laura Sullivan, "FEMA Internal Report Cites Problems with Agency's Response to Hurricane Maria," *NPR*, July 14, 2018, sec. National, https://www.npr.org/2018/07/14/629131912/fema-internal-report-cites-problems-with-agencys-response-to-hurricane-maria.
[65] Martin and Sullivan.
[66] Martin and Sullivan.
[67] United States Army Corps of Engineers, "The Longest Blackout in U.S. History."
[68] U. S. Government Accountability Office, "Hurricane Recovery Can Take Years—But for Puerto Rico, 5 Years Show Its Unique Challenges | U.S. GAO," United States Government Accountability Office, June 7, 2023, https://www.gao.gov/blog/hurricane-recovery-can-take-years-puerto-rico-5-years-show-its-unique-challenges.
[69] U. S. Government Accountability Office.

Maria survivors.[70] Audits were conducted to evaluate Maria's response. These reports found that "FEMA lost visibility of approximately $257 million in life-sustaining commodities."[71] What they did not lose was typically delayed quite a while, with goods sitting in FEMA's custody for an average of 48 days; "water and food […] experienced average shipping delays of 71 and 59 days, respectively."[72] Out of all the water shipped to Puerto Rico, only 37% reached points of distribution.[73] FEMA experienced immense issues with its shipping and distribution, and despite having deep pockets, millions were left lacking "life-sustaining commodities" because of them.

On top of the failures in resource distribution, the prevalence of inadequate housing proved difficult for FEMA. What was needed was something akin to the housing initiative after Hurricane Georges, though a much larger version. As discussed, after Georges, the building codes were updated. However, in 2011, Puerto Rico adopted the 2009 edition of the International Building Code. There was a problem, though, "the majority of legally built homes on the island were built prior to 2011" using the codes from the 1990s, with a different requirement for windspeed (1990s required withstanding up to 125 m/h, whereas the 2011 one required withstanding up to 140 m/p). Maria's winds topped 175 m/h.[74] While FEMA was able to grant funds for home repairs through their Individuals and Households Program (IHP), roughly 60% of those who applied were "deemed ineligible."[75] There are many reasons for this, one of which is

[70] David Begnaud, "Water Bottles – Possibly Millions – Meant for Hurricane Maria Victims Discovered Piled on a Tarmac Days Before Trump Tweets 3,000 People Didn't Die from Storm," *CBS News*, September 13, 2018, https://www.cbsnews.com/news/puerto-rico-water-bottles-possibly-millions-for-hurricane-maria-victims-sitting-on-tarmac/.
[71] Joseph V. Cuffari, "FEMA Mismanaged the Commodity Distribution Process in Response to Hurricanes Irma and Maria" (Office of the Inspector General, September 25, 2020). 5.
[72] Cuffari. "FEMA Mismanaged the Commodity Distribution Process" 8.
[73] Ibid. 8.
[74] Tara Lukasik, "Puerto Rico Reconstruction Efforts Underway," Building Safety Journal, October 1, 2018, https://www.iccsafe.org/building-safety-journal/bsj-hits/puerto-rico-reconstruction-efforts-underway/.
[75] Ivis García, "Deemed Ineligible: Reasons Homeowners in Puerto Rico Were Denied Aid After Hurricane María," *Housing Policy Debate* 32, no. 1 (January 2, 2022): 14–34, https://doi.org/10.1080/10511482.2021.1890633. 14.

that "about 50% of housing construction in Puerto Rico is considered informal or not built to code, whereas about 20% does not have a property title."[76] The intersection of informal housing and social vulnerability in the wake of Hurricane Maria meant that a large number of Puerto Ricans did not get the help they needed. The list of issues with the response to FEMA goes on and on. The United States has one of the world's most sizable federal budgets and cannot follow the recommendations made repeatedly to invest in disaster preparedness. Two factors contributed to the massive amount of money available after Maria. The first was the scale of the damage; the second was the institutions of FEMA and PROMESA continuing Puerto Rico's colonial status – the response to Maria was a part of the broader history of Puerto Rico and its colonial history.

The final layer to the complex analysis of the response to Hurricane Maria is the Puerto Rico Oversight, Management and Economic Stability Act (PROMESA). The Obama Administration established PROMESA in 2016 when Puerto Rico had defaulted on its debt payments. The debt had reached $74 billion by 2016, with no hope of ever being repaid.[77] PROMESA established a Financial Oversight and Management Board (FOMB) in Spanish, referred to as *La Junta*. *La Junta* is appointed, not elected, and has "broad powers over the local government's fiscal and economic policies."[78] PROMESA has removed the mask of "modernity" and exposed the truly colonial nature of Puerto Rico's relationship with the United States, made all the clearer in the wake of Maria. The Commonwealth has been forced into a position where it cannot exist without a continued influx of cash from its imperial owner. *La Junta* implemented austerity measures one year after Maria with plans to "downsize the public bureaucracy, close and consolidate hospitals, privatize public corporations, eliminate worker-protection legislation,"

[76] García. "Deemed Ineligible" 17.
[77] Pedro Cabán, "Hurricane Maria's Aftermath: Redefining Puerto Rico's Colonial Status," *Current History* 118, no. 805 (February 2019): 43–49. 44.
[78] Cabán. "Hurricane Maria's Aftermath" 44.

among other things.[79] One of the most drastic changes after Maria was the rapid and extensive privatization of government-owned enterprises, most notably the power grid. The austerity measures and privatizations were part of the opportunistic structural adjustment that scholar Naomi Klein has termed "disaster capitalism."[80]

Hurricane Ian in 2022 showed that positive change was possible for Cuba. Ian was the first massive storm since Hurricane Fox in 1952 without a Castro at the helm. Ian was also the first time that the leader of a Communist Cuba specifically requested aid from the United States. The aid, totalling $2 million, was administered through the USAID and was hotly contested within the US Senate.[81] Senator of Florida, Rick Scott (in office 2019 – present), made a big deal about overseeing this money to ensure it was administered "to Cuban people in need."[82] There is no evidence that Senator Scott had these concerns about the many millions lost between Washington and San Juan. The $2 million was not given to the Cuban government but was distributed through the Cuban Red Cross and other International Federation of Red Cross Red Crescent Societies (IFRC) teams deployed on the island. Despite a newfound willingness to provide relief to Cuba, there was still reluctance from the federal level, albeit not enough to stop the money from being delivered. This storm was a watershed moment for US-Cuban relations, despite those who disagreed.

American relief legislation is a complex web of promises and mutual agreements between the states (or territories) and the American federal government. On the one hand, this

[79] Ibid. 46.
[80] Naomi Klein, *The Battle for Paradise: Puerto Rico Takes on the Disaster Capitalists* (Haymarket Books, 2018).
[81] "Sen. Rick Scott Urges Oversight from USAID to Ensure Hurricane Disaster Relief Goes to Cuban People in Need," U.S. Senator Rick Scott, November 1, 2022, https://www.rickscott.senate.gov/2022/11/sen-rick-scott-urges-oversight-from-usaid-to-ensure-hurricane-disaster-relief-goes-to-cuban-people-in-need.
[82] "Sen. Rick Scott Urges Oversight from USAID to Ensure Hurricane Disaster Relief Goes to Cuban People in Need."

analysis indicates that legislative and administrative developments ensured that domestic and foreign disasters became more standard/routine elements of the US government, though much more developed for domestic aid than it is for foreign. However, relief was still haphazard. Chapter 2 categorized the storms as exacerbating and highlighting the recipient's politico-economic issues. This is crucial to understanding how relief was supposed to meet the recipient's needs. The damage of the storms was consistently more significant than any response effort was.

This chapter has interpreted the history of relief legislation and its practical applications in the aftermath of these seven storms. Since 1952, the US's relations with Puerto Rico and Cuba have ebbed and flowed, constantly evolving. Despite the changes over the years, it was not until recently that Cuba requested and was granted American aid after a storm. Puerto Rico took steps in a different direction when the federal government implemented a financial oversight board, retaking control over the island's economy. The evolution of aid legislation since the 1950s has created layers of bureaucracy that are equally as complicated as they are essential. The agencies responsible for the allocation of relief are the epitome of this crossover. Aid has been used to influence and manipulate the political economy of aid recipients. The political purpose of relief has been to maintain control over the distinct aspects of the political economy of Puerto Rico and Cuba. Comparing the federal government responses to these storms leads to some unsurprising results; Puerto Rico (a territory the US is legally obligated to assist) received billions more in relief money than Cuba. However, examining these islands side-by-side and analyzing the repeated patterns of systemic failures is the primary goal of this chapter.

Aid was used as a political tool to perpetuate a system that started in 1898 but was disrupted in the 1950s, and it was effective in Puerto Rico's case, though not in Cuba's. Puerto Rico, after being beaten down storm after storm, was manipulated into a decades-long financial

crisis, which resulted in an unelected oversight board taking the island's economy into their hands. Cuba, despite being subject to military campaigns, subterfuge, trade embargos, and political interference, has maintained autonomy and self-governance. Relief was indeed provided for Puerto Rico and Cuba by FEMA and USAID, respectively. However, the channels through which that aid was administered to Cuba were, in spirit, true to the mission of USAID in the original law – to undermine the Cuban government through any means necessary. The object of the aid was not ever to aid but for the federal government to further a political agenda. Relief implied that American policymakers were responsive to damage in the Caribbean, but relief was rejected or generally insufficient to meet the need for assistance. Relief was used to legitimate American economic priorities, whether modernization in the 1960s or neoliberal structural adjustment in the 1990s and 2010s. The history of relief legislation and allocation reveals that ulterior motives were at play regardless of the presentation of humanitarianism. Despite legislation facilitating domestic and foreign relief, the allocation and distribution of relief was still politically contested and administratively improvised after each storm.

Conclusion

This thesis outlines the trajectory of politico-economic context, storm damage, and the nature of American disaster response in Puerto Rico and Cuba over the last 70 years as each island solidified its relationship with the United States. The political and economic changes of the 1950s were instrumental in moulding the socio-economic landscapes of Puerto Rico and Cuba while also significantly impacting their susceptibility to environmental disasters and the dynamics of United States intrusion. This pivotal era laid the groundwork for enduring economic structures and political relationships, profoundly shaping the influence that American disaster aid has over each region's political economy. Between the 1950s and 2020s, American disaster relief was strategically utilized within the transformative landscape shaped by the 1950s; this strategic application aimed to exert influence over the political economies of Puerto Rico and Cuba, progressively aligning them with American political and financial agendas.

By bringing these three chapters together, a comprehensive comparison of how geopolitical relations and aid (foreign and domestic) worked as two parts of the same system. A historical approach to the politico-economic context builds the foundation for analyzing storms and their damage – placing them into their respective context. On top of these two layers is the story of aid legislation and implementation and the political utility of both to align Puerto Rico and Cuba to American ideals of political economy. Though the manifestation differed in each island – Puerto Rico being manipulated economically, and Cuba being manipulated politically – the method was the same.

The American response to this series of hurricanes, starting in 1952 and ending in 2022, was entirely guided by the desire to maintain political and economic influence. While the size of

the response to each recipient differed significantly, that was secondary to the result, which for both places was the perpetuation of an imbalanced power dynamic, leaving the US in a position of power over the other. For Cuba, this manifested in a continuation of a brutal trade embargo and harsh isolation in global politics. For Puerto Rico, this manifested in an unwillingness to make significant strides toward self-determination.

Looking to the future, there are clear and straightforward answers to the questions brought up in this thesis. However, they would be overhauling the current political and economic systems. Considering the repeating nature of hurricanes, the lack of significant work to mitigate, instead of responding to, hurricane damage is alarming. As this thesis has proven, change is possible, though it is noteworthy that change to a repeating pattern is not the only thing needed. More than anything, genuine concern for the well-being of those most directly and repeatedly impacted by devastating hurricanes is needed.

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