EMOTIONAL APPRAISALS IN THE WAKE OF HURRICANES HARVEY AND MARIA

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Hurricanes Harvey and Maria—which both struck the United States in 2017—left vastly different reactions in their wake. The federal government's response to Hurricane Harvey elicited praise and gratitude from survivors in Texas. However, the federal response to Hurricane Maria is still a source of disappointment and resentment among storm survivors in Puerto Rico.

The Federal Emergency Management Agency ("FEMA") had vastly different responses to the communities struggling with the hurricanes. And the President of the United States had drastically different responses towards the different communities after their respective storms. The federal government's response to Hurricane Harvey was faster, greater, and more compassionate than its response to Hurricane Maria. The imbalance in the recovery effort can be measured by objective indicators and inferred through subjective interpretations of comments made by White House officials. It is hard to imagine the source of the disparate treatment.

One possible theory is that government officials—despite the longstanding presumption that legal and political processes are rooted in reason—were influenced by emotions following the storms. Their emotions impacted their decision-making. The framework for evaluating the impact of emotion on cognition has been labeled "emotional appraisals."[1] An

1. Klaus R. Scherer, *Evidence for Both Universality and Cultural Specificity of Emotion Elicitation, in* THE NATURE OF EMOTION: FUNDAMENTAL QUESTIONS 172–75 (Paul Ekman & Richard J. Davison eds., 1994).

understanding of emotional appraisal helps concretize the impact of emotions on cognition and provide some insight to disparate treatment among Hurricane Harvey and Maria survivors. Most importantly, it may provide some guidance in improving government accountability in future natural disasters.

This Article highlights the enormous gap in the federal response to Hurricanes Harvey and Maria. It examines measurable data, comments, and actions to demonstrate the different responses to very similar storms. It discusses the dimensions of emotional appraisals advanced by psychologist Klaus R. Scherer as a means to explain the elicitation of emotion and reaction patterns. Examining the federal responses to Hurricanes Harvey and Maria under the emotional appraisal framework offers a cogent explanation for why the storms' survivors received such disparate treatment from the Trump administration.

A better consideration of the emotional appraisals and cognition can minimize disparate treatment in disaster recovery efforts. These discussions could help to prevent similar disparate treatment in response to future storms. Like most emotionally charged responses, awareness is the first step toward regulating our responses. Understanding the ways in which emotion and cognition influence judgments may improve the government's treatment of all citizens following natural disasters.

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I. INTRODUCTION

"I thank FEMA and the administration for their commitment to helping Texans and the churches that have helped their communities throughout the recovery and rebuilding process."

—Texas Governor Greg Abbott[2]

"We are dying here -- and I cannot fathom the thought that the greatest nation in the world cannot figure out logistics for a small island. . . ."

—San Juan, Puerto Rico Mayor Carmen Yulín Cruz[3]

In many ways, it is a tale of two storms. Hurricanes Harvey and Maria—which both struck the United States in 2017[4]—left vastly different reactions in their wake. The federal government's response to Hurricane Harvey elicited praise and gratitude from survivors in Texas.[5] Eighteen months after the storm, the federal response to Hurricane Maria is still a source of disappointment and resentment among storm survivors in Puerto Rico.[6]

And while no two storms are ever the same, Hurricanes Harvey and Maria actually had much in common. There were many similarities: both were Category 4 storms[7] with winds in excess of 130

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2. John C. Moritz, *FEMA Changes Policy to Allow Churches to Get Disaster Relief*, CALLER TIMES (Jan. 3, 2018, 3:51 PM), http://www.caller.com/story/news /local/texas/state-bureau/2018/01/03/fema-changes-policy-allow-churches-get-disaster-aid/1001343001/.   Governor Abbott is recognizing the federal government for its responsiveness to survivors of Hurricane Harvey. *See id.*

3. *Puerto Rico Mayor: We are Dying Here*, BBC NEWS (Sept. 30, 2017), http://www.bbc.com/news/av/world-us-canada-41453367/puerto-rico-mayor-we-are-dying-here. Mayor Cruz is calling on the federal government to provide aid to the survivors of Hurricane Maria. *See id.*

4. Hurricane Harvey made landfall on August 25, 2017. ERIC S. BLAKE & DAVID A. ZELINSKY, NATIONAL HURRICANE CENTER TROPICAL CYCLONE REPORT: HURRICANE HARVEY 3 (2018), https://www.nhc.noaa.gov/data/tcr/AL092017 _Harvey.pdf. Hurricane Maria made landfall on September 20, 2017. Michon Scott, *Hurricane Maria's Devastation of Puerto Rico*, CLIMATE.GOV (Aug. 1, 2018), https://www.climate.gov/news-features/understanding-climate/hurricane-marias-devastation-puerto-rico.

5. *See* Moritz, *supra* note 2.

6. Camilo Montoya-Galvez, *Puerto Rico Governor Slams Trump for Relief Funds Comments: "We are your citizens,"* CBS NEWS (Mar. 27, 2019, 2:11 PM), https://www.cbsnews.com/news/trump-puerto-rico-aid-governor-slams-president -for-relief-funds-comments/.   In sharp contrast to the praise offered by the Governor of Texas, the Governor of Puerto Rico publicly rebuked President Donald Trump for opposing disaster relief to the island. *Id.* Ricardo Rosselló, Puerto Rico's then-governor, wrote, "Mr. President: Enough with the insults and demeaning mischaracterizations. We are not your political adversaries; we are your citizens." *Id.*

7. *Saffir-Simpson Hurricane Wind Scale*, NAT'L HURRICANE CTR., http://www.nhc.noaa.gov/aboutsshws.php (last visited Nov. 3, 2019). According to the Saffir-Simpson Hurricane Wind Scale, Category 4 storms have winds in

miles per hour;[8] both hit the United States in the fall of 2017;[9] both had remarkable amounts of rainfall;[10] and both left a trail of destruction in the impacted communities.[11] Harvey devastated Houston,[12] and Maria demolished much of Puerto Rico.[13]

However, the federal response to Hurricanes Harvey and Maria, which struck within weeks of each other, truly cemented the narrative of Harvey and Maria as a tale of two storms. The Federal Emergency Management Agency ("FEMA") had vastly different responses to the communities struggling with the hurricanes.[14] And the President had drastically different responses towards the different communities after their respective storms.[15] By any measure, the federal response to Hurricane Harvey was faster, greater, and more compassionate than the response to Hurricane Maria.[16] The imbalance in the recovery effort—measured by objective indicators and inferred through subjective interpretations of comments made by White House officials—is hard to explain.[17]

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excess of 130 miles per hour. *Id.* The scale runs from a low of Category 1 to a high of Category 5 based on a hurricane's sustained wind speed. *Id.*

8. Nicole Einbinder, *Blackout in Puerto Rico: How the Response to Hurricane Maria Compared to Irma and Harvey*, FRONTLINE (May 1, 2018), https://www.pbs.org/wgbh/frontline/article/how-the-response-to-hurricane-maria-compared-to-harvey-and-irma/.

9. *Id.*

10. *See* Laris Karklis et al., *Maria's Deluge on Puerto Rico*, WASH. POST (Sept. 26, 2017, 8:00 PM), https://www.washingtonpost.com/graphics/2017/national/maria-puerto-rico/; Merrit Kennedy, *Harvey The 'Most Significant Tropical Cyclone Event in U.S. History'*, NPR (Jan. 25, 2018, 5:32 PM), https://www.npr.org/sections/thetwo-way/2018/01/25/580689546/harvey-the-most-significant-tropical-cyclone-rainfall-event-in-u-s-history.

11. *See* Angela Fritz, *Hurricanes Harvey, Irma, Maria and Nate Were so Destructive, Their Names Have Been Retired*, WASH. POST (Apr. 12, 2018), http://www.washingtonpost.com/news/capital-weather-gang/wp/2018/04/12/hurricanes-harvey-irma-maria-and-nate-were-so-destructive-their-names-have-been-retired/ (discussing the "record-shattering" nature of the 2017 hurricane season).

12. *See* Elaina Plott, *Hurricane Harvey is Houston's Unending Nightmare*, ATLANTIC (Aug. 26, 2018), https://www.theatlantic.com/politics/archive/2018/08/hurricane-harvey-is-houstons-unending-nightmare/568579/.

13. Scott, *supra* note 4 ("The storm caused structural damage to an unknown number of buildings and destroyed nearly all road signs and traffic lights. It wiped out roads, leaving less than 8 percent of them open a month after the hurricane. Five months after the storm, a quarter of the island's residents still lacked electricity.").

14. *See infra* Part II.

15. *See infra* Subpart II.C.

16. *See infra* Part II.

17. It is too simplistic to merely dismiss the disparate treatment of survivors in Texas and Puerto Rico as the result of prejudice, incompetence, or geographic challenges. Even some of the more significant disparities between the federal responses to Hurricanes Harvey and Maria—including appropriations, federal staffing rates, and the disdain displayed for Puerto Rican survivors by the

One possible theory is that government officials—despite the longstanding presumption that legal and political processes are rooted in reason—were influenced by emotions following the storms. Their emotions impacted their decision-making. As appraisal theorists who work on the interplay between emotion and reason suggest: "Thinking and feeling are inextricably interrelated most of the time: Certain ways of interpreting one's environment are inherently emotional, few thoughts are entirely free of feelings, and emotions influence thinking."[18] These theorists call the framework for evaluating the impact of emotion on cognition "emotional appraisals."[19] An understanding of emotional appraisal helps concretize the impact of emotions on cognition and provide some insight to disparate treatment among Hurricane Harvey and Maria survivors. Most importantly, it may provide some guidance in improving government accountability in future natural disasters.

Part II of this Article will highlight the enormous gap in the federal response to Hurricanes Harvey and Maria. This Part will use measurable data, comments, and actions to demonstrate the different responses to very similar storms. Part III will discuss the dimensions of emotional appraisals advanced by psychologist Klaus R. Scherer[20] as a means to explain the elicitation of emotion and reaction patterns.[21] In Part IV, this Article will apply the emotional appraisals framework to the federal government response to Hurricanes Harvey and Maria as a means to explain the different reaction levels. Finally, Part V of this Article concludes that a better consideration of the emotional appraisals and cognition can minimize disparate treatment in disaster recovery efforts. This Part will also suggest legal solutions that may be used to minimize the negative impact of these emotional appraisals.

II. A TALE OF TWO STORMS

Though they were less than a month apart, Hurricanes Harvey and Maria shared many similar patterns and traits during a very busy 2017 hurricane season.[22] The storms did considerable damage

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President—require a more probing examination to account for the imbalance. *See* discussion *infra* Parts IV and V and accompanying notes.

18. Phoebe C. Ellsworth & Klaus R. Scherer, *Appraisal Process in Emotion*, *in* HANDBOOK OF AFFECTIVE SCIENCES 572, 572 (Richard J. Davidson et al. eds., 2003).

19. Scherer, *supra* note 1, at 172–75.

20. *See infra* Part III. Klaus R. Scherer is a Professor Emeritus at the University of Geneva. *See* UNIVERSITÉ DE GENÈVE: SWISS CTR. FOR AFFECTIVE SCI., https://www.unige.ch/cisa/members/scherer-klaus/ (last visited Nov. 3, 2019).

21. Scherer, *supra* note 1, at 172–75.

22. Einbinder, *supra* note 8.

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to communities in Texas and Puerto Rico, respectively, and both put extraordinary strain on the federal government.[23]   The different government response to each of the storms, however, was a study in contrasts.

A.   Hurricane Harvey

Harvey made landfall August 25, 2017, as a Category 4 hurricane.[24] With sustaining winds as high as 132 miles per hour,[25] Harvey struck the middle of the Texas coast.[26] According to the National Hurricane Center, Harvey is responsible for at least sixty-eight direct deaths in Texas.[27] "Direct deaths" are those that occur as a direct result of the tropical cyclone; these include people who lost their lives in storm surges, rough seas, rip currents, floods, lightening, and collapsed structures from wind.[28] Most of Houston's fifty deaths were by drowning.[29] Thirty-five additional deaths were due to indirect causes, including electrocution and isolation from required medical services.[30]

Harvey is most notable as a "rain event."[31] The storm essentially stalled over South and Southeast Texas for days, producing devastating flash floods and river flooding.[32] Some areas of Southeast Texas received more than forty inches of rain in under two days[33]; one neighborhood in Houston (Cedar Bayou) received more than 51.88 inches of rainfall.[34] The precipitation triggered catastrophic flooding in the Houston metropolitan area and Southeast Texas.[35] The storm

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    23. *Id.*
    24. BLAKE & ZELINSKY, *supra* note 4, at 3.
    25. Einbinder, *supra* note 8.
    26. *Major Hurricane Harvey – August 25-29, 2017*, NAT'L WEATHER SERV., https://www.weather.gov/crp/hurricane_harvey (last visited Nov. 3, 2019). Though the focus of this Article is on Harvey's damage in Texas, the hurricane also struck parts of Louisiana. Bill Chappel et al., *Harvey Weakens over Louisiana as Houston Copes With Record Landfall*, NPR (Aug. 30, 2017, 5:52 AM), https://www.npr.org/sections/thetwo-way/2017/08/30/547227788/harvey-makes-landfall-again-in-louisiana. According to the National Hurricane Center, "Louisiana received relatively minor damage compared to Texas." *See* BLAKE & ZELINSKY, *supra* note 4, at 3. Nevertheless, everything is relative—about 2,000 homes flooded in Louisiana. *Id.*
    27. BLAKE & ZELINSKY, *supra* note 4, at 1.
    28. *Id.* at 8.
    29. *See* Plott, *supra* note 12.
    30. BLAKE & ZELINSKY, *supra* note 4, at 8.
    31. Kennedy, *supra* note 9.
    32. NAT'L WEATHER SERV., *supra* note 26.
    33. *Id.*
    34. *Id.*
    35. *Costliest U.S. Tropical Cyclones Tables Updated*, NAT'L HURRICANE CTR. (Jan. 26, 2018), https://www.nhc.noaa.gov/news/UpdatedCostliest.pdf.

"dumped an estimated 27 trillion gallons of rain over Texas."[36] Approximately 39,000 people were driven from their homes and into shelters because of flooding.[37]

The historic storm is second only to Hurricane Katrina[38] as the costliest hurricane on record.[39] Storm damage for Hurricane Harvey is estimated at $125 billion.[40] In all, the storm affected more than 13 million people across Texas and Louisiana.[41] The storm damaged more than 200,000 homes and apartments in Harris County, Texas.[42]

The federal response to Hurricane Harvey was swift and expansive.[43] After the storm, first responders rescued 122,331 people and 5,234 pets.[44] Just four days after Hurricane Harvey hit Texas, the President traveled to Texas.[45] Within nine days of the storm hitting Texas, 30,000 federal workers were deployed.[46] Supply delivery was also extensive: nine days after the storm, FEMA had delivered 5.1 million meals, 4.5 million liters of water, and 20,000 tarps to Hurricane Harvey survivors.[47] Within that same timeframe, survivors received nearly $100 million from FEMA.[48] In September 2017, federal lawmakers also approved $15.25 billion in disaster aid grants for Texas and Florida.[49]

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36. Brandon Griggs, *Harvey's Devastating Impact by the Numbers*, CNN, (Sept. 1, 2017, 9:02 AM), https://www.cnn.com/2017/08/27/us/harvey-impact-by-the-numbers-trnd/index.html.

37. Kimberly Amadeo, *Hurricane Harvey Facts, Damages and Costs: What Made Harvey So Devastating*, BALANCE (last updated June 25, 2019), https://www.thebalance.com/hurricane-harvey-facts-damage-costs-4150087.

38. *Id.* Hurricane Katrina made its second landfall in August 2005 in Southeast Louisiana as a Category 3 storm. *Facts for Features: Hurricane Katrina 10th Anniversary: Aug. 29, 2015*, U.S. CENSUS BUREAU (July 29, 2015), https://www.census.gov/newsroom/facts-for-features/2015/cb15-ff16.html.

39. Amadeo, *supra* note 37.

40. *Id.*; *see also* NAT'L HURRICANE CTR, *supra* note 35.

41. Amadeo, *supra* note 37.

42. David Hunn et al., *Harvey's Floods*, HOUS. CHRON. (Mar. 30, 2018), https://www.houstonchronicle.com/news/article/In-Harvey-s-deluge-most-damaged-homes-were-12794820.php. Almost three-quarter of the homes damaged during Hurricane Harvey were outside of the federally regulated flood plain. *Id.*

43. *See generally* News Release, FEMA, *Historic Disaster Response to Hurricane Harvey in Texas* (Sept. 22, 2017), https://www.fema.gov/news-release /2017/09/22/historic-disaster-response-hurricane-harvey-texas (discussing each federal agency's response to Harvey).

44. *Id.*

45. Einbinder, *supra* note 8.

46. *Id.*

47. *Id.*

48. Monivette Cordeiro, *Puerto Rico Received Less Hurricane Aid Than Florida and Texas after Major Storms*, ORLANDO WKLY.: BLOGGYTOWN (Jan. 24, 2019, 2:06 PM), https://www.orlandoweekly.com/Blogs/archives/2019/01/24 /puerto-rico-received-less-hurricane-aid-than-florida-texas-after-major-storms.

49. *Id.*

B.   Hurricane Maria

On September 20, 2017, just twenty-six days after Hurricane Harvey hit Texas—and on the heels of Hurricane Irma[50]—Hurricane Maria made landfall in Puerto Rico.[51] Hurricane Maria sustained winds as high as 155 miles per hour[52] and struck Puerto Rico on the southeast shore.[53] The storm damage from Maria is an estimated at $90 billion, making it the third costliest storm in United States' history.[54]

The storm made landfall near Yabucoa, home to more than 34,000 people.[55] "The storm's hurricane-force winds spanned the island, and all residents lost electricity."[56] In fact, power was knocked out throughout Puerto Rico, which is a United States territory that is home to over 3.3 million U.S. Citizens.[57] Maria was also the rainiest storm to ever hit Puerto Rico, dropping nearly a quarter of the average annual rainfall in just one day.[58] The severe rain caused

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50. Hurricane Irma was a Category 5 storm that cut a path through the Caribbean and skirted Puerto Rico. It left more than 1 million residents of Puerto Rico without power. Alex Johnson et al., *Hurricane Irma Skirts Puerto Rico, Leaves 1 Million Without Power*, NBC NEWS (Sept. 7, 2017, 11:02 PM), https://www.nbcnews.com/storyline/hurricane-irma/hurricane-irma-skirts-puerto-rico-lashing-it-powerful-winds-flooding-n799086. Many people were still struggling with the aftermath of Hurricane Irma as Hurricane Maria barreled toward Puerto Rico. *See* Brian K. Sullivan & Ezra Fieser, *Maria Latest Threat to Puerto Rico After $1 Billion Irma Hit*, BLOOMBERG (Sept. 20, 2017, 6:11 AM), https://www.bloomberg.com/news/articles/2017-09-19/hurricane-maria-heads-for-puerto-rico-after-dominica-strike.

51. Einbinder, *supra* note 8.

52. *Id.*

53. Sarah Almukhtar et al., *Maps: Hurricane Maria's Path Across Puerto Rico*, N.Y. TIMES (Sept. 26, 2017, 2:00 PM), https://www.nytimes.com/interactive/2017/09/18/world/americas/hurricane-maria-tracking-map.html.

54. RICHARD J. PASCH ET AL., NATIONAL HURRICANE CENTER TROPICAL CYCLONE REPORT: HURRICANE MARIA 1, (2019), https://www.nhc.noaa.gov/data/tcr/AL152017_Maria.pdf.

55. Almukhtar et al., *supra* note 53.

56. *Id.*

57. *See* David Brindley, *Months After Hurricane Maria, Puerto Rico Still Struggling*, NAT'L GEOGRAPHIC, https://www.nationalgeographic.com/magazine/2018/03/puerto-rico-after-hurricane-maria-dispatches/ (last updated Aug. 30, 2018); Luis Ferré-Sadurní & Anemona Hartocollis, *Maria Strikes, and Puerto Rico Goes Dark*, N.Y. TIMES (Sept. 20, 2017), https://www.nytimes.com/2017/09/20/us/hurricane-maria-puerto-rico-power.html.

58. Rebecca Hersher, *Climate Change Was the Engine that Powered Maria's Devastating Rains*, NPR (Apr. 17, 2019, 10:41 AM), https://www.npr.org/2019/04/17/714098828/climate-change-was-the-engine-that-powered-hurricane-marias-devastating-rains. A study suggests that the severe rain is partly attributable to climate change. *See id.* The storm dropped about fifteen inches of rain in one day on the island. *Id.* Experts say that climate change also aggravated Hurricane Harvey. Rory Carroll & Julian Borger, *Trump Visits Houston to Meet Harvey Survivors: "Things are Working Out Well,"* GUARDIAN, (Sept. 2, 2017),

widespread flooding, destroyed dams, and knocked out drinking water "to nearly the entire island."[59]

As the storm moved across the island, it wreaked havoc, causing more than $90 billion in damage.[60] Hurricane Maria was the strongest storm to hit Puerto Rico in eighty-nine years.[61] Puerto Rico's already damaged infrastructure was decimated by "tornado-force winds," "massive rains," and "catastrophic flooding."[62] Entire neighborhoods were virtually washed away.[63] As a result, Puerto Rico experienced the longest power outage in United States' history.[64] Many communities had no running water for months.[65] Puerto Ricans were stripped of most of the conveniences of modern life for weeks or months after Hurricane Maria.[66] According to one study, the average household went "approximately 41 days without cellphone service, 68 days without water, and 84 days without electricity following the storm."[67]

A year after the storm, the Governor of Puerto Rico raised the storm's official death toll from 64 to 2975 people.[68] The figure was increased significantly following an extensive interdisciplinary study published in the *New England Journal of Medicine* and conducted in part by researchers at Harvard.[69] A second study conducted by the George Washington University Milken Institute School of Public Health and administered in conjunction with the University of Puerto Rico confirmed the excess death toll attributable to Maria.[70] About

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https://www.theguardian.com/us-news/2017/sep/02/donald-trump-to-visit-houston-to-meet-storm-harvey-survivors.

59. Hersher, *supra* note 58.

60. *Study Estimates Prolonged Increase in Puerto Rican Death Rate After Hurricane Maria*, HARVARDFXB, (May 29, 2018), https://fxb.harvard.edu/2018/05/29/study-estimates-prolonged-increase-in-puerto-rican-death-rate-after-hurricane-maria/.

61. Brindley, *supra* note 57.

62. *Id.*

63. *Id.*

64. *Id.*

65. *Id.*

66. HARVARDFXB, *supra* note 60.

67. *Id.*

68. Brindley, *supra* note 57.

69. HARVARDFXB, *supra* note 60 (citing Nishant Kishore et al., *Mortality Rate in Puerto Rico After Maria*, 379 NEW ENG. J. MED. 162, 163 (2018)). The study expanded the ways in which the death toll is calculated. *See* Kishore et al., *supra* ("According to the Centers for Disease Control and Prevention, deaths can be directly attributed to a tropical cyclone if they are caused by forces related to the event, such as flying debris, or if they are caused by unsafe or unhealthy conditions resulting in injury, illness, or loss of necessary medical services.").

70. Vann R. Newkirk II, *A Year After Hurricane Maria, Puerto Rico Finally Knows How Many People Died*, ATLANTIC (Aug. 28, 2018), https://www.theatlantic.com/politics/archive/2018/08/puerto-rico-death-toll-

one-third of the additional deaths were attributed to delayed access to healthcare or lack of access to healthcare triggered by infrastructure failures.[71]

As one writer noted, even the need to count and recount the death toll highlights the governmental failures surrounding Hurricane Maria:

> [The mortality studies] underscored the collapse of official systems and the disastrous response by multiple levels of government. The very act of counting the dead has transformed from a tragic, but standard, task of government to a months-long bureaucratic nightmare that has indicted deficiencies in both Puerto Rico and Washington.[72]

A storm that left more than 3.4 million Americans in the dark[73] and triggered a staggering domino effect of hardships—such as spoiled food, insulin going bad, and a leptospirosis outbreak[74]—did not garner the swift and expansive response from the federal government that Harvey earned. Compared to FEMA's response to Hurricane Harvey, the response to Hurricane Maria was slower and initially more limited.[75]

More than 1.1 million Puerto Ricans requested help from FEMA,[76] but FEMA's resources were already depleted, and the work in Puerto Rico would stretch on for a very long time. The agency's work in Puerto Rico was the "longest sustained domestic airborne food and water mission in the nation's history."[77] But the immediate supply delivery to Puerto Rico was not as rapid as it was following Hurricane Harvey.[78] Within nine days of Hurricane Maria, FEMA

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hurricane-maria/568822/. The George Washington study was completed at the request of Puerto Rico's then-Governor Ricardo Rosselló. *Id.*

71. HARVARDFXB, *supra* note 60.

72. Newkirk, *supra* note 70.

73. PASCH ET AL., *supra* note 54.

74. Eliza Barclay et al., *Hurricane Maria: 4 ways the storm changed Puerto Rico—and the rest of America*, VOX (Sept. 20, 2018, 12:40 PM), https://www.vox.com/2018/9/20/17871330/hurricane-maria-puerto-rico-damage-death-toll-trump. Leptospirosis is a bacterial disease that can lead to kidney damage, meningitis, liver failure, and death. *Leptospirosis*, CTRS. FOR DISEASE CONTROL AND PREVENTION, https://www.cdc.gov/leptospirosis/index.html (last visited Nov. 3, 2019).

75. Einbinder, *supra* note 8.

76. Frances Robles & Jugal K. Patel, *On Hurricane Maria Anniversary, Puerto Rico Is Still In Ruins*, N.Y. TIMES (Sept. 20, 2018), https://www.nytimes.com/interactive/2018/09/20/us/puerto-rico-hurricane-maria-housing.html.

77. *Id.*

78. *See generally* Charley E Willison et al., *Quantifying Inequities in US Federal Response to Hurricane Disaster in Texas and Florida Compared with Puerto Rico*, BMJ GLOBAL HEALTH 2019, https://gh.bmj.com/content/bmjgh/4/1

delivered a fraction of the supplies that had been delivered to Harvey survivors in the same nine-day period following the storm: 1.6 million meals, 2.8 million liters of water, and 5,000 tarps following Maria, compared to 5.1 million meals, 4.5 million liters of water, and 20,000 tarps following Harvey.[79] Even the tarps—a simple but essential relief supply to storm survivors—demonstrated the huge delivery gaps between Harvey and Maria survivors.[80] Still reeling from Hurricanes Harvey and Irma, federal workers were thinly resourced.[81] Nine days after the storm, only 10,000 federal personnel were deployed to aid in the recovery efforts.[82] And many of those who actually made it to Puerto Rico were trainees.[83] According to a *New York Times* analysis, the median grant paid to repair homes of Hurricane Maria survivors was $1,800, compared to about $9,127 paid out to Hurricane Harvey survivors in Texas.[84]

The difference in the immediate response of FEMA payout approvals was also stark: nine days after Hurricane Harvey, FEMA had approved $141.8 million in individual assistance to Harvey survivors.[85] Nine days after Hurricane Maria, however, FEMA had approved just $6.2 million for Maria survivors.[86] It took FEMA only ten days to approve permanent disaster work for Texas; yet it took forty-three days for FEMA to offer the same approval for Puerto Rico.[87] Eventually, the federal government approved $1.39 billion in grants for more than 462,000 Puerto Rican homeowners and renters.[88] In February 2017, Congress approved $15.8 billion in FEMA aid for both Puerto Rico and the US Virgin Islands—"far less than the estimated $94 billion needed just for Puerto Rico."[89]

/e001191.full.pdf (detailing the numerous imbalances between the federal responses to Hurricanes Harvey and Maria).

79. Einbinder, *supra* note 8.

80. *Id.*

81. *Id.*

82. *Id.* This number is substantially less than the 30,000 federal personnel deployed to Texas after Harvey within nine days of the storm and the 22,000 deployed to Florida after Irma in the same timeframe. *Id.*

83. *Id.*

84. Robles & Patel, *supra* note 76.

85. Danny Vinik, *How Trump Favored Texas over Puerto Rico*, POLITICO (Mar. 27, 2018, 5:00 AM), https://www.politico.com/story/2018/03/27/donald-trump-fema-hurricane-maria-response-480557.

86. *Id.*

87. *Id.*

88. David Nakamura & Ashley Parker, *'It Totally Belittled the Moment': Many Look Back in Dismay at Trump's Tossing of Paper Towels in Puerto Rico*, WASH. POST (Sept. 13, 2018), https://www.washingtonpost.com/politics/it-totally-belittled-the-moment-many-look-back-in-anger-at-trumps-tossing-of-paper-towels-in-puerto-rico/2018/09/13/8a3647d2-b77e-11e8-a2c5-3187f427e253_story.html?utm_term=.8d74b743563c.

89. Alexia Fernandez Campbell, *6 Months After Hurricane Maria, Puerto Rico Has a Suicide Crisis and a Housing Shortage*, VOX (Mar. 20, 2018, 1:50 PM),

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C.   White House Response

If the recovery efforts paint a picture of vastly different responses from the federal government to survivors struggling from the effects of very similar storms, the response from the White House was even more alarming. The President—through his words and actions—revealed a highly different regard for the hurricane survivors in Texas and Puerto Rico.

The President first visited survivors of Hurricane Harvey on August 29, 2017, just four days after the storm.[90] He returned for a second visit to meet with flood victims and serve lunch to families in shelters.[91] In contrast, the President did not visit Puerto Rico for almost two weeks after the storm struck the island.[92] The President started his visit by complaining about the cost of the recovery efforts in Puerto Rico, then handed out supplies to survivors.[93]

Through his words, the President revealed different emotional reactions to the storms. After he visited Houston for the second time in eight days, he returned to the White House and called on people to "join us as we continue to pray for those who have lost family members or friends, and for those who are suffering in this time of crisis."[94] In Puerto Rico, immediately upon stepping off Air Force One, he complained about the budget constraints the recovery would put on the government.[95] He said, "Now, I hate to tell you, Puerto Rico, but you've thrown our budget a little out of whack because we've spent a lot of money on Puerto Rico."[96]

The President's tweets also reveal divergent emotional responses to hurricane survivors. The imbalance can be measured by both the number of presidential tweets about the storms, and the messages being relayed by the Commander in Chief.[97] To the extent that one

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https://www.vox.com/policy-and-politics/2018/3/20/17138990/puerto-rico-hurricane-maria-6-months.

90.   Geoff Bennett, *President Trump Visits Texas to Assess Harvey Damage*, NPR (Aug. 29, 2107, 4:32 PM), https://www.npr.org/2017/08/29/547099660/president-trump-visits-texas-to-assess-harvey-damage.

91.   Carroll & Borger, *supra* note 58. President Trump was criticized on the first visit to Texas for not meeting with flood victims. *Id.*

92.   Mandalit del Barco, *In the Aftermath of Hurricane Maria, President Trump Visits Puerto Rico*, NPR (Oct. 3, 2017 4:50 PM), https://www.npr.org/2017/10/03/555425750/in-the-aftermath-of-hurricane-maria-president-trump-visits-puerto-rico.

93.   *Id.*

94.   Carroll & Borger, *supra* note 58.

95.   *See* del Barco, *supra* note 92.

96.   *Id.*

97.   Indeed, President Trump's expansive use of Twitter has been compared to a public forum. *See* Knight First Amendment Inst. at Columbia Univ. v. Trump, 302 F. Supp. 3d 541, 575 (S.D.N.Y. 2018) (concluding that "the interactive space of a tweet from @realDonaldTrump accounts constitutes a designated public forum"); Scott Olson, *Trump Can't Block Users on Twitter, Judge Says*,

may presume that tweets reveal the President's preoccupation with an event, the President's Twitter trail evinces far less concern for Puerto Rico.[98] For example, in the first weeks after the two hurricanes, President Trump sent three times as many tweets about Harvey and Texas as he did about Maria and Puerto Rico.[99] Worse, the language of the tweets revealed disdain for Puerto Rico—often just days after the storm struck.[100] Just ten days after Hurricane Maria pummeled Puerto Rico, President Trump tweeted: "[They] want everything to be done for them and it should be a community effort. 10,000 Federal workers now on island doing a fantastic job."[101] On the other hand, the President took great pride in the response to Hurricane Harvey. He tweeted, "Wow – now experts are calling #Harvey a once in 500 year flood! We have an all out effort going, and going well!"[102]

In addition to what can be reasonably inferred from the President's tweets, the President's attitude toward Puerto Rico was crystallized in the paper towel toss seen around the world.[103] At a scripted photo opportunity to hand out supplies to Hurricane Maria survivors in a San Juan church, President Trump inexplicably began throwing paper towels to people gathered for help inside Calvary Chapel.[104] A video clip shows the President throwing "six rolls in 20 seconds."[105] His actions were widely criticized for belittling the severity of the storm's impact and setting the wrong tone during a crisis.[106] The President's attempted defense of his actions were more

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VOX (May 23, 2018, 3:10 PM), https://www.vox.com/2018/5/23/17385256/trump-twitter-lawsuit-block-users-loser; *see also* Bryan Siddique, *Tweets that Break the Law: How the President's @realDonaldTrump Twitter Account Is a Public Forum and His use of Twitter Violates the First Amendment and the President Records Act*, 42 NOVA L. REV. 318 (2018). At the start of October 2019, Donald Trump's account (@realDonaldTrump) had more than 65 million followers. Donald J. Trump (@realDonaldTrump), TWITTER, https://twitter.com/realDonaldTrump?ref_src=twsrc%5Egoogle%7Ctwcamp%5Eserp%7Ctwgr%5Eauthor (last visited Nov. 3, 2019).

   98. Vinik, *supra* note 85. President Trump sent twenty-four tweets about Harvey immediately following the storm, and only eight about Maria in the same span immediately following the hurricane's hit on the island. *Id.*

   99. *Id.*

   100. *Id.*

   101. Donald J. Trump (@realDonaldTrump), TWITTER (Sept. 30, 2017, 7:29 AM), https://twitter.com/realdonaldtrump/status/914089888596754434; *see also* Vinik, *supra* note 85.

   102. Donald J. Trump (@realDonaldTrump), TWITTER (Aug. 27, 2017, 9:25 AM), https://twitter.com/realDonaldTrump/status/901797906046439426; *see also* Vinik, *supra* note 85.

   103. Nakamura & Parker, *supra* note 88.

   104. *Id.*

   105. *Id.*

   106. *Id.*; *see also Puerto Rico: Trump Paper Towel-Throwing "Abominable,"* BBC NEWS (Oct. 4, 2017), https://www.bbc.com/news/world-us-canada-41504165

confounding. He said later, "They had these beautiful, soft towels.
Very good towels. And I came in and there was a crowd of a lot of
people. And they were screaming and loving everything. I was
having fun, and they were having fun."[107]

Through words, his notorious tweeting, and his actions, the
White House response to Hurricane Harvey was faster, more robust,
and in many ways more compassionate than the response to
Hurricane Maria.

III. EMOTIONAL APPRAISALS: A PRIMER

When faced with very similar encounters—in this case, storms
with very similar characteristics that pummeled Americans within
weeks of each other—why did the federal government respond so
differently? In terms of cognition and emotion, how can we encounter
similar experiences yet produce such divergent responses to them?
Emotional appraisal theorists provide a useful framework for
understanding the process that occurs between an event and an
emotional episode.[108] By better understanding this framework, we
might consider safeguards that can be employed to predict future
responses and enhance government accountability.

Understanding emotional appraisals—particularly those of
world leaders—is essential because people's emotions and actions
arise from their perceptions.[109] The relationship between law and
values is inextricably connected to the relationship between thoughts
and feelings.[110] The interpretation of law to make legal provisions
both "applicable and sensible" necessarily requires an evaluation.[111]

To explain how people typically go about emotional evaluations
or appraisals, Scherer[112] provides "five major checks" that are often

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(describing how San Juan Mayor, Carmen Yulin Cruz, called Trump's throwing
of paper towels as a "terrible and abominable").

107.   *See* Daniella Silva, *Trump Defends Throwing Paper Towels to Hurricane
Survivors in Puerto Rico*, NBC NEWS (Oct. 8, 2017), https://www.nbcnews.com
/politics/politics-news/trump-defends-throwing-paper-towels-hurricane-
survivors-puerto-rico-n808861 (recounting the President's defense of his actions
in an interview he did with Christian network Trinity Broadcasting).

108.   Harold Anthony Lloyd, *Cognitive Emotion and the Law*, 41 LAW &
PSYCHOL. REV. 53, 73 (2016).

109.   Ellsworth & Scherer, *supra* note 18, at 572.

110.   Julia Haenni, *Emotion and Law: How Pre-rational Cognition Influences
Judgment*, 13 GERMAN L.J. 369, 373 (2012).
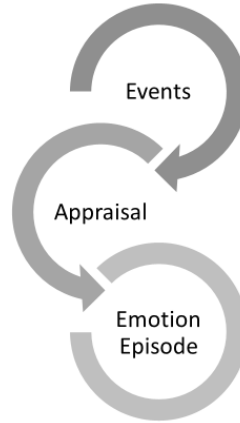
111.   *Id.*

112.   Though this discussion is based on the framework developed by Klaus R.
Scherer, other appraisal theorists have presented similar paradigms to explain
how organisms constantly evaluate the relevance of environmental changes to
their own well-being. *See* Ellsworth & Scherer, *supra* note 18, at 572. The work
in emotional appraisal is rooted in the work of many theorists, including Arnold,
Lazarus, Frijda, Roseman, and Smith/Ellsworth. *Id.* Indeed, the relationship
between appraisal and emotion can be traced back to Aristotle, Descartes,

involved in emotional appraisals of experiences.[113] The checks include: 1) a novelty check; 2) an intrinsic pleasantness check; 3) a goal/need significance check; 4) a coping potential check; and 5) a norm/self-compatibility check.[114] The appraisal dimension is key because the emotions people feel can be predicted from their appraisal of their surrounding circumstances or events.[115] The process is illustrated by the following sequence:

Though appraisal theorists differ on the appraisals they believe are most important, they agree that an evaluation of circumstances plays a critical role in the differentiation of emotions.[116] Most theorists agree that appraisals are often automatic and unconscious.[117] Appraisal theories are a paradigm for explaining emotions.[118]

> Appraisal theories attempt not only to describe but also to explain emotions: The appraisal process is a link between the organism and the situation that produces the emotion. Emotions are adaptive response to the world, not simply abstract sensations . . . .[119]

Spinoza and Hume. Agnes Moors & Klaus R. Scherer, *The Role of Appraisal in Emotion*, *in* HANDBOOK OF COGNITION AND EMOTION 135, 135 (Michael D. Robinson et al. eds., 2013).

113. Lloyd, *supra* note 108, at 73.
114. Scherer, *supra* note 1, at 174.
115. Ellsworth & Scherer, *supra* note 18, at 573.
116. *Id.*
117. *Id.* at 574.
118. *Id.*
119. *Id.*

Under the appraisal dimensions postulated by Scherer, a "[n]ovelty [c]heck" is first in the sequence.[120] For a novelty check, there is a physical, social, or mental change in the environment that attracts the organism's attention.[121] The novelty check determines whether there is a change in the pattern of external or internal stimulation.[122] Organisms[123] need to be sensitive to novelty because changes in the environment could imply danger.[124] Since novel events may suggest unusual dangers or opportunities, organisms must pay attention to unpredicted events.[125]

Generally, the next step of appraisal is a sense of intrinsic pleasantness or unpleasantness.[126] When the valence is negative, further appraisals often follow.[127] The organism will differentiate based on a series of unconscious inquiries: Is this important to me? Is this impeding my progress toward a goal? Can this be controlled?[128] The identification of a stimulus as pleasant or unpleasant can be based on innate detectors or learned associations.[129]

The third step of the emotional appraisal framework is motivational bases—as examined through a goals/needs and significance check.[130] Here, the organism weighs the extent to which a stimulus or situation furthers or endangers its goals.[131] There is both a relevance and a conduciveness check: specifically, whether the stimulus is conducive to advancing the organism's goals.[132] This appraisal aspect is central to most models.[133] At the core of this dimension is the understanding that organisms have "hierarchies of goals and needs that they try to satisfy (whether they know it or not),"[134] and there is an incredibly wide range of goals animating this

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120. Moors & Scherer, *supra* note 112, at 144; *see also* Ellsworth & Scherer, supra note 18, at 574.

121. Ellsworth & Scherer, *supra* note 18, at 574.

122. Scherer, *supra* note 1, at 174.

123. Throughout the applicable literature, the term "organism" is used to describe the actor in question because theorists maintain that, for the most part, appraisals are "within the capability of many species, at least in a rudimentary fashion." Ellsworth & Scherer, *supra* note 18, at 581. There is a more nuanced distinction between most species and humans when the dimension of social dimensions is evaluated. *See* discussion *infra* Subpart IV.E. and accompanying notes.

124. Ellsworth & Scherer, *supra* note 18, at 576.

125. *Id.*

126. *Id.* at 574.

127. *Id.*

128. *Id.*

129. Scherer, *supra* note 1, at 174.

130. Ellsworth & Scherer, *supra* note 18, at 578.

131. *Id.*

132. Scherer, *supra* note 1, at 174.

133. Ellsworth & Scherer, *supra* note 18, at 578.

134. *Id.*

dimension.[135] Moreover, these goals range from the mundane (should I cross the street on my walk) to the existential (survival).[136] Many appraisal theorists believe the conduciveness of a stimulus to attainment of a goal is the single most important factor.[137] In a review of recovery efforts, later in this Article,[138] the conduciveness of recovery efforts for Hurricane Harvey aligned strongly with the President's goals.

Fourth, there is often a "coping potential check" regarding the causation of the event and the "coping potential available to the organism" in light of causation.[139] One of the significant contributions by appraisal theorists[140] was the recognition of a secondary appraisal that evaluated an organism's ability to deal with a situation.[141] The coping appraisal allows the organism to evaluate the resources at its disposal, to be informed by the cause, and to determine the appropriate response.[142] The organism's perception of its own power—whether physical strength, money, or knowledge—will help it decide whether to pursue fight or flight.[143]

Finally, the last dimension of emotional appraisal is a norm/self-compatibility check.[144] The theorists acknowledge that there is a social context of appraisals; specifically, appraisals evaluated in the context of norms, values, justice, and social identity.[145] The appraisal of deservedness is influenced both by social norms and the consideration of one's behavior with reference to self-concept.[146] These reflexive emotions examine to what extent behavior falls short of one's moral code or obligatory conduct.[147] Incompatibility between the norms of group demands and internal standards can lead to "contempt" in judging others.[148]

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135. *Id.*
136. *Id.*
137. *Id.*
138. *See* discussion *infra* Part IV and accompanying notes.
139. Lloyd, *supra* note 108, at 73 (quoting Scherer, *supra* note 1, at 174).
140. This particular contribution was attributed to Lazarus. Ellsworth & Scherer, *supra* note 18, at 580; *see also* Richard. S. Lazarus & Susan Folkman, *Transactional Theory and Research on Emotions and Coping*, 1 EUR. J. PERSONALITY 141, 148 (1987) (exploring the premises of the cognitive-relational theory of emotion and coping through an analysis of ten years of empirical research).
141. Ellsworth & Scherer, *supra* note 18, at 580.
142. *Id.*
143. *Id.*
144. *Id.* at 581.
145. *Id.*
146. *Id.*
147. *Id.*
148. *Id.*

IV. EMOTIONAL APPRAISALS EXAMINED THROUGH HARVEY AND
MARIA

The dimensions of emotional appraisal provide a structure to account for the significant imbalance in hurricane recovery efforts under President Trump's administration. The consideration of these dimensions and our understanding of the relationship between cognition and emotion can help predict behavior and eventually shape reforms that will guard against future, damaging, divergent treatment. When the federal responses to Hurricanes Harvey and Maria are examined under the emotional appraisal framework, it offers a cogent explanation for why the storms' survivors received such disparate treatment under the Trump administration.

A. Novelty

The novelty check asks whether we are faced with a novel event.[149] Fortunately, hurricanes are inherently novel. Though the earth has seen an increase in the intensity of hurricanes because of climate change,[150] Hurricane Harvey is still "novel" in that it was the first "major hurricane" to make landfall in the United States since 2005.[151] Since Hurricanes Sandy and Ike did not qualify under the National Hurricane Center guidelines, the last major hurricane to make landfall in the United States was Hurricane Wilma on October 25, 2005.[152]

By contrast, Hurricane Maria was the *third* major hurricane to make United States landfall in less than a month.[153] Hurricane Harvey reached Texas on August 25, 2017; Hurricane Irma reached Florida on September 10, 2017; and Hurricane Maria reached Puerto Rico on September 20, 2017.[154] Novelty, according, to Scherer, increases the attention that is given to an external event or

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149. *Id.* at 576.
150. The warming climate is fueling more storm surges and rainfall. *Climate Change Makes Hurricanes More Destructive*, ENVTL. DEF. FUND, https://www.edf.org/climate/how-climate-change-makes-hurricanes-more-destructive (last visited Nov. 3, 2019); *see also Hurricanes and Climate Change*, CTR. FOR CLIMATE AND ENERGY SOLS., https://www.c2es.org/content/hurricanes-and-climate-change/ (last visited Nov. 3, 2019).
151. Brian McNoldy, *Harvey Will Probably Make Landfall as a "Major Hurricane." Here's What That Means*, WASH. POST (Aug. 25, 2017), https://www.washingtonpost.com/news/capital-weather-gang/wp/2017/08/25/harvey-will-probably-make-landfall-as-a-major-hurricane-heres-what-that-means/. According to the National Hurricane Center, a major hurricane is at least a Category 3 storm—meaning it has peaked sustained winds at 111 miles per hour. *Id.* Neither Sandy nor Ike qualified as major storms when they made landfall. *Id.*
152. *Id.*
153. Einbinder, *supra* note 8.
154. *Id.*

stimulus.[155] Since Maria was on the heels of other major storms, its novelty was diminished. It probably received less attention as a result.

B.   *Intrinsic Pleasantness*

Pleasant stimulus events induce approach tendencies, while unpleasant stimulus events induce avoidance tendencies.[156] It is plain that hurricanes are intrinsically unpleasant; therefore, this dimension does not differentiate between Harvey and Maria. The two hurricanes were incredibly similar in their strength and potential for damage.[157] Even the "weakest" hurricanes are the source of deaths, injuries, property loss, mental health challenges, and public health crises.   Hurricanes are inherently destructive[158] and disruptive. These characterizations are true, whether the hurricanes are impacting a large continental state or a small island.

Both storms were unpleasant, and while President Trump seemed more responsive to Harvey over Maria, there was evidence of avoidance manifested in his response to both hurricanes. Specifically, the President waited almost two weeks before making his first visit to Puerto Rico.[159] And though he went to Texas within four days of Hurricane Harvey, he was criticized for not meeting with hurricane survivors at that time.[160]   In terms of the intrinsic pleasantness characteristic, there is no meaningful distinction between Hurricanes Harvey and Maria.

C.   *Goals / Needs Significance*

As raised earlier, the conduciveness of a stimulus event to goal attainment or need satisfaction has been identified as the "single most important evaluation dimension."[161] This principle provides the most compelling explanation for the imbalance in federal recovery assistance between Harvey and Maria.

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155.   Ellsworth & Scherer, *supra* note 18, at 576.

156.   Scherer, *supra* note 1, at 174.

157.   Both Hurricane Harvey and Hurricane Maria were Category 4 storms. Einbinder, *supra* note 8.

158.   *See Hurricane Preparedness - Hazards*, NAT'L HURRICANE CTR., https://www.nhc.noaa.gov/prepare/hazards.php (last visited Nov. 3, 2019) (listing the major hazards associated with hurricanes).   Hurricane hazards include threat of storm surge and storm tide, heavy rainfall and flooding, high winds, rip currents and tornadoes. *Id.*

159.   del Barco, *supra* note 92.

160.   *See, e.g.*, Matthew Nussbaum, *Trump Gets Do-over, Comforts Harvey Victims*, POLITICO (Sept. 2, 2017, 3:05 PM), https://www.politico.com/story/2017/09/02/trump-hurricane-harvey-victims-do-over-242282.

161.   Ellsworth & Scherer, *supra* note 18, at 579.

Under the goals/needs category, one must examine how conducive a robust federal response is to advancing goals/needs for the Trump administration. A review of the demographics for Texas and Puerto Rico are instructive here. Hurricane Harvey most severely impacted Texas, a Republican state that President Trump carried in the 2016 presidential election.[162] Texas is predominantly Republican, and Republicans have carried the state in every presidential election since 1976.[163] For a President who has been preoccupied with re-election since he took office,[164] President Trump no doubt recognized the significant ways responsiveness to Texan voters' hurricane struggles could bolster his re-election efforts.

For Puerto Rican survivors of Hurricane Maria, however, there was no way in which responsiveness to their plight could advance the President's re-election goals. First, the island of Puerto Rico has emerged as a "star" in choosing the next Democratic candidate for President.[165] More importantly, Puerto Ricans on the island have limited voting rights.[166] Though they are U.S. citizens, those who live in Puerto Rico (a United State territory) are not permitted to vote in presidential elections—they may only vote in presidential primaries.[167] This distinction renders them irrelevant to President Trump's re-election goals. Therefore, prioritizing their recovery is not conducive to satisfying the President's campaign needs. Thus,

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162. *Texas Presidential Race, Results: Donald J. Trump Wins*, N.Y. TIMES (Aug. 1, 2017, 11:27 AM), https://www.nytimes.com/elections/2016/results/texas-president-clinton-trump. Trump had over 800,000 more votes than Hillary Clinton in Texas. *Id.*

163. Ben Philpott, *Why is Texas so Red, and How Did it Get That Way?*, HOUS. PUB. MEDIA (Oct. 31, 2016, 6:30 AM), https://www.houstonpublicmedia.org/articles/news/politics/2016/10/31/174443/why-is-texas-so-red-and-how-did-it-get-that-way/.

164. Steve Benen, *After Condemning 'Permanent Campaign,' Team Trump Gears up for 2020*, MSNBC (Jan. 3, 2017, 12:45 PM), http://www.msnbc.com/rachel-maddow-show/after-condemning-permanent-campaign-team-trump-gears-2020 (detailing President Trump's commitment to running his re-election campaign committee before he was even sworn into office).

165. Gabriela Martinez, *Why some 2020 Democratic Contenders are Making Puerto Rico an Early Campaign Stop*, PBS (Feb. 7, 2019, 6:53 PM), https://www.pbs.org/newshour/politics/why-some-2020-democratic-contenders-are-making-puerto-rico-an-early-campaign-stop.

166. Puerto Rico is an unincorporated territory, and as such, the residents of Puerto Rico are not entitled to vote for President of the United States. *See* Igartúa-de la Rosa v. United States, 417 F.3d 145, 151 (1st Cir. 2005) (holding that U.S. citizens and residents of Puerto Rico cannot vote for President or Vice President under the Constitution or U.S. treaty obligations).

167. Nicole Acevedo, *Puerto Ricans Push Presidential Candidates to Make Island a Top Campaign Issue*, NBC NEWS LATINO (Mar. 20, 2019, 5:20 PM), https://www.nbcnews.com/news/latino/puerto-ricans-push-presidential-candidates-make-island-top-campaign-issue-n985446.

Harvey satisfies the goals/needs significance appraisal check, but Maria does not.[168]

D.   Coping Potential

The dimension of coping potential examines the causation of the stimulus event and examines the coping potential of the organism in light of the causation.[169]   This particular element examines the "relative power of the organism to change or avoid the outcome through fight or flight" and an internal restructuring.[170]   Essentially, this means the organism assesses the stimulus event in light of its own coping mechanisms. This assessment is necessarily informed by the coping deficiencies or efficiencies of the stimulus.[171]   The more "need" a stimulus represents, the more strain it will put on the organism's own coping mechanisms.[172]   Through an examination of these factors, the coping appraisal check is measured by the organism's ability to deal with the situation and its possible outcomes.[173]

For several legitimate reasons, President Trump probably had diminished coping checks in place by the time he was confronted with Hurricane Maria. Hurricane Harvey had the benefit of novelty, but by the time Hurricane Maria arrived, the nation and the President must have been battling hurricane fatigue. Maria arrived during a very busy hurricane season and was the third major hurricane to hit the United States in less than a month.[174]   Further, the Trump administration was relatively new in its tenure—Trump had been in office for less than a year.[175]   To be fair, natural disasters of the

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168. Scherer, *supra* note 1, at 174. A similar argument could be made to explain why the President was so cavalier about the California wildfires survivors in November. The President blamed the wildfires of November 2018 on forest management and threatened to withhold federal payments from the state. *See* Kendra Pierre-Louis, *Trump's Misleading Claims about California's Forest 'Mismanagement,'* N.Y. TIMES (Nov. 12, 2019), https://www.nytimes.com /2018/11/12/us/politics/fact-check-trump-california-fire-tweet.html.   California has been reliably Democrat in Presidential elections since the early 1990s. Priya Krishnakumar et al., *After Decades of Republican Victories, Here's How California Became a Blue State Again*, L.A. TIMES (Dec. 2, 2016, 10:00 AM), https://www.latimes.com/projects/la-pol-ca-california-voting-history/.

169. Scherer, *supra* note 1, at 174.

170. *Id.*

171. *See* Ellsworth & Scherer, *supra* note 18, at 580.

172. *See id.*

173. *Id.*

174. Einbinder, *supra* note 8.

175. *See* James Hohmann, *The Daily 202: Hurricane Harvey will be Trump's First Major Natural Disaster Test*, WASH. POST (Aug. 25, 2017), https://www.washingtonpost.com/news/powerpost/paloma/daily-202/2017/08/25 /daily-202-hurricane-harvey-will-be-trump-s-first-major-natural-disaster-test/599f8b2d30fb0435b8208fb9/?noredirect=on.

magnitude of Harvey and Maria test any presidency.[176] And President Trump's administration was worried about developing its own "Katrina-like" response blunder.[177] It was a comparison that some leaders noted.[178]

The differences in the perceived coping abilities of the hurricane survivors also made it more likely for President Trump to sense a greater likelihood of failure with the response to Maria. At the very start of his involvement with Harvey survivors, the President embraced an image of a strong, determined crowd in Texas.[179] On his initial visit in Texas, the President rallied Hurricane Harvey survivors and reinforced a message of resiliency; he said, "I will tell you. This is historic. It's epic what happened? But you know what? It happened in Texas, and Texas can handle anything."[180]

Conversely, the President criticized Puerto Rico repeatedly for its financial and infrastructural challenges.[181] Even before the storm hit, Puerto Rico was struggling. The island was mired in debt,

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176. *See, e.g.*, Laurie Kellman, *Feeling Your Pain: Presidents Tread Tricky Disaster Politics*, AP NEWS (Sept. 14, 2018), https://www.apnews.com/d7462ccbcb3b4a1bb72fbcced3a5603e.

177. The federal response to Hurricane Katrina—a Category 5 hurricane that decimated New Orleans in 2005—was marked by numerous and persistent government failures. *See generally* DOUGLAS BRINKLEY, THE GREAT DELUGE: HURRICANE KATRINA AND THE MISSISSIPPI GULF COAST (2006) (chronicling the violence of the storm, the ensuing flood, government failures, and the human tragedies that followed); AFTER THE STORM: BLACK INTELLECTUALS EXPLORE THE MEANING OF HURRICANE KATRINA (David Dante Troutt ed., 2006) (highlighting the plight of African-American survivors from the Gulf Coast tragedy). The governmental failures surrounding Hurricane Katrina ranged from evacuation failures to FEMA's delivery of toxic trailers to survivors as temporary housing. *See* Olympia Duhart, *Blowing the Lid Off: Expanding the Due Process Clause to Defend the Defenseless Against Hurricane Katrina*, 13 TEX. WESLEYAN L. REV. 411, 429 n.125 (2007) (exploring the possibility of a Section 1983 claim for failure to evacuate poor residents); *see also* Olympia Duhart, *Improving the Odds of Government Accountability in the Disaster-Prone Era: Using the 9/11 Fund Factors to Remedy the Problem of Toxic Katrina Trailers*, 24 J. LAND USE & ENVTL. L. 253, 259 (2009) (addressing the dangerous, toxic trailers FEMA issued to Hurricane Katrina survivors).

178. San Juan's Mayor, Carmen Yulín Cruz, did not mince words when describing the federal response to Hurricane Maria. She said: "It's a historic failing. This is President Trump's Katrina." Josiah Ryan, *San Juan Mayor: Hurricane Maria is Trump's Katrina*, CNN (Sept. 20, 2018), https://www.cnn.com/2018/09/20/politics/san-juan-mayor-hurricane-maria-full-circle-cnntv/index.html.

179. Bennett, *supra* note 90.

180. *Id.*

181. Five days after the storm struck Puerto Rico, President Trump tweeted: "Texas & Florida are doing a great job but Puerto Rico, which was already suffering from broken infrastructure & massive debt, is in deep trouble." Donald J. Trump (@realDonaldTrump), TWITTER, (Sept. 25, 2017, 5:45 PM), https://twitter.com/realdonaldtrump/status/912478274508423168.

racking up more than $71 billion in debt before the storm hit.[182] It was also crippled by infrastructure that had not been properly maintained for years.[183] The power grid, roads, levees, bridges, and water pumping stations were all in dire need of repair long before Maria ripped through the island.[184]

And the people who lived on the island were not doing much better. Up to one-third of all Puerto Ricans had no bank account.[185] The insurance figures are even more alarming: only 15 percent of those who applied for FEMA assistance had homeowner's insurance, and only 3 percent of applicants had flood insurance.[186] How do these figures signal a low coping threshold for Maria survivors? It means that the relief aid paid directly to survivors—an average of $2,974 per household[187]—was not enough without other money to help support a meaningful recovery.[188] Unlike many survivors in Texas who were able to use a government grant to bolster their recovery, survivors in Puerto Rico often relied completely on government funds.[189] In most cases, the grant was not enough to make their homes habitable again.[190] The deep, abiding needs in Puerto Rico—compared to the image of self-reliance the President perceived in Texas—likely triggered his "flight" response in Puerto Rico. On some level, he probably felt unable to cope with Puerto Rico's demands.

E.   Norm/Self-Compatibility

The last dimension in the emotional appraisal check is the norm/self-compatibility assessment. This measure examines the social context of appraisal, particularly with respect to norms and values as they relate to the self and its social identity.[191] Shared norms are sustained by reactions from group members, and appraisals are heavily influenced by evaluation of one's behavior with reference to one's salient social identity.[192] Group status, therefore, becomes highly relevant.

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182. Laura Sullivan, *How Puerto Rico's Debt Created a Perfect Storm Before the Storm*, NPR (May 2, 2018, 7:10 AM), https://www.npr.org/2018/05/02/607032585/how-puerto-ricos-debt-created-a-perfect-storm-before-the-storm. Sullivan traces the relationship between Puerto Rico's staggering debt and "unethical" Wall Street practices. *Id.*
183. *Id.*
184. *Id.*
185. Robles & Patel, *supra* note 76.
186. *Id.*
187. Einbinder, *supra* note 8.
188. Robles & Patel, *supra* note 76.
189. *Id.*
190. *Id.*
191. Ellsworth & Scherer, *supra* note 18, at 581.
192. *Id.*

Here, Hurricane Harvey was likely favorably regarded on the norm/compatibility check because the political and racial demographic of those affected more closely aligned with the President's group status. Hurricane Harvey survivors were predominantly Republican[193] and white.[194] Puerto Ricans, on the other hand, do not mirror the President's social identity. They are overwhelmingly minorities and poor.[195] They also live on an island, another factor that situates Hurricane Maria survivors as "outsiders."[196]

Observers have also called out President Trump's regard for Puerto Ricans as outsiders.[197] In many ways, President Trump seemed to suggest that they were not Americans. In his tweets responding to aid allocated for Hurricane Maria survivors, President Trump complained that Puerto Rico's politicians "only take from the US" and that Puerto Rico will "continue to hurt our Farmers and States with these massive payments."[198]

Even with Texas recovery efforts, there is a disparity between Hurricane Harvey survivors.[199] Those that were more removed from the President's self-image were not treated as well as those that looked more like him. A report showed that the wealthier and whiter hurricane survivors were, the better they fared.[200] A year after the storm, 27 percent of Hispanic Texans whose homes were badly

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193. *See supra* notes 161–63 and accompanying text.

194. In Texas, 78.8% of the population is white. *QuickFacts: Louisiana; Texas*, U.S. CENSUS BUREAU, https://www.census.gov/quickfacts/fact/table /la,tx/PST120218 (last visited Nov. 3 2019). Only 15.9%. of the population lived below the poverty level when Harvey hit. *Selected Economic Characteristics: 2016 American Community Survey 1-Year Estimates*, U.S. CENSUS BUREAU, https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid =ACS_16_1YR_DP03&prodType=table (last visited Nov. 3, 2019).

195. In Puerto Rico, 99 percent of the population identifies as Hispanic or Latino. *QuickFacts: Puerto Rico*, U.S. CENSUS BUREAU, https://www.census.gov /quickfacts/PR (last visited Nov. 3, 2019). And 43.5% of the population lived below the poverty when Maria struck. *Selected Economic Characteristics*, *supra* note 194.

196. *See* Julia Sharpe-Levine, *It's Past Time for the United States to Get Out of Puerto Rico's Way*, REWIRE.NEWS (July 24, 2019, 4:14 PM), https://rewire.news /article/2019/07/24/its-past-time-for-the-united-states-to-get-out-of-puerto-ricos-way/.

197. *See* Martinez, *supra* note 165.

198. Aaron Blake, *Trump Keeps Talking about Puerto Rico Like it isn't the U.S. It doesn't Seem Like a Mistake*, WASH. POST (Apr. 2, 2019), https://www.washingtonpost.com/politics/2019/04/02/white-houses-seemingly-deliberate-effort-otherize-puerto-rico/?utm_term=.2b634a4c5c3d.

199. *See* Manny Fernandez, *A Year After Hurricane Harvey, Houston's Poorest Neighborhoods Are Slower to Recover*, N.Y. TIMES (Sept. 3, 2018), https://www.nytimes.com/2018/09/03/us/hurricane-harvey-houston.html. FEMA has set aside $462 million for a program to directly rebuild homes that are too damaged to repair. Robles & Patel, *supra* note 76.

200. Fernandez, *supra* note 199.

damaged reported that their homes were still unsafe.[201] For African-Americans, the same figure was 20 percent, while only 11 percent of whites reported the same issue.[202] Disparities also existed among income levels.[203] Fifty percent of lower-income respondents said they weren't getting the help they needed, compared to 32 percent of those with higher income levels.[204]

Through the framework of emotional appraisals, Puerto Rico's "otherness" caused it to receive differential treatment and fall short of the norm/compatibility dimension of emotional appraisal. Ricardo Rosselló, who served as Governor of Puerto Rico during Hurricane Maria, has called out the need to correct the imbalance fueled by Puerto Rico's status.[205] The governor said,

> There is no doubt that Puerto Rico gets treated differently to a state. And there is no doubt that it has been true for the disaster response as well. . . . Our objective is to eradicate this notion of second-class citizenship in the United States, so that whenever a disaster hits — whether it's Texas, Florida, New York or Puerto Rico — the federal government responds equally in all cases.[206]

Because Puerto Rico fails the norm/self-compatibility check for President Trump, the people who survived Hurricane Maria were subject to a less compassionate and less robust recovery effort than those who survived Hurricane Harvey.

The federal government and President Trump's divergent responses to Hurricanes Harvey and Maria were driven, at least in part, by an emotional reaction to factors of each event. Considering these events through the lens of appraisal theory accounts for this divergence better than ignoring the emotional component of reactions to these events.

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201. *Id.*

202. *Id.*

203. *Id.*

204. *Id.* The survey was conducted by the Kaiser Family Foundation and the Episcopal Health Foundation. *Id.*

205. Vinik, *supra* note 85. Governor Ricardo A. Rosselló of Puerto Rico announced his resignation July 24, 2019, immediately following widespread protests triggered by a leaked private group chat that revealed "crude conversations" among Rosselló and his close advisors. Patricia Mazzei & Frances Robles, *Ricardo A. Rosselló, Puerto Rico's Governor, Resigns After Protests*, N.Y. TIMES, (July 24, 2019) https://www.nytimes.com/2019/07/24/us/rossello-puerto-rico-governor-resigns.html. The conversations also suggested wrongdoing and disdain for the public. *Id.*

206. *Id.*

V. CONCLUSION

Despite the numerous similarities in the storms' make-up and impact, Hurricanes Harvey and Maria elicited highly disparate federal disaster responses from the government under President Trump. Everything ranging from the delivery of tarps, to meals, to the number of federal workers deployed demonstrated a swifter, more expansive response to Harvey survivors in Texas compared to Maria survivors in Puerto Rico.[207] The comments and actions from the President also demonstrated a preference for Hurricane Harvey survivors and a shocking resentment[208] toward Hurricane Maria survivors. Said one activist, "We feel Puerto Rico was treated with disdain, with prejudice and racism."[209]

The Trump administration has asserted that the delay in assistance to Puerto Rico is attributable to geographic limitations;[210] however, disaster appropriations also lagged behind appropriations for Harvey and Irma.[211] The extreme variation in the amount of time it took for Texas and Puerto Rico to receive aid—twice as long for appropriations and thirty times as long to reach federal staffing rates—cannot be explained by mere geography during an ongoing disaster.[212] In many measurable ways, the Trump administration responded far more aggressively to Harvey than it did in Puerto Rico.[213]

Differential treatment of federal disaster response efforts[214] will exacerbate associated long-term challenges, including physical health, mental health, and wide-ranging public health outcomes.[215]

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207. *See supra* Part II.

208. Following the storm, President Trump has repeatedly criticized local leaders in Puerto Rico after they questioned the federal government's response to the disaster. Martinez, *supra* note 165.

209. *Id.*

210. Willison et al., *supra* note 78.

211. *Id.*

212. *Id.*

213. *See generally* Vinik, *supra* note 85 (tracing the numerous ways that President Trump and his administration showed preferential treatment to Hurricane Harvey survivors over Hurricane Maria survivors).

214. Willison et al., *supra* note 78.

215. *Id.* In one particularly alarming report, a nonprofit clinic in Toa Baja, Puerto Rico, that relies on patients' food-stamp money for support, must now ask HIV-positive men with severe health complications to sit for hours in soiled diapers because the clinic is short on funds due to cuts in food stamps that hit 1.3 million Puerto Ricans in March 2019. Jeff Stein & Josh Dawsey, *Puerto Rico Faces Food-Stamp Crisis as Trump Privately Vents about Federal Aid to Hurricane-Battered Island*, WASH. POST (Mar. 25, 2019), https://www.washingtonpost.com/business/economy/puerto-rico-faces-food-stamps-crisis-as-trump-privately-vents-about-federal-aid-to-hurricane-maria-battered-island/2019/03/25/ade500fe-4cb3-11e9-b79a-961983b7e0cd _story.html?utm_term=.ea22b6384df3. Congress did not reauthorize the money

Since Hurricane Maria, for example, Puerto Rico has experienced a staggering suicide crisis.[216] A suicide crisis hotline run by Puerto Rico's Department of Health saw a 246% increase in calls following the storm.[217]

The dimensions of emotional appraisal help unpack the psychology that may explain why the federal government, under President Trump, responded inadequately to Hurricane Maria survivors in Puerto Rico. These discussions could also help avoid the same disparate treatment when responding to future storms. Like most emotionally charged responses, awareness is the first step toward regulating our responses. Awareness of appraisals—even those done subconsciously—is essential toward making any self-corrections. Furthermore, appraisal theorists have noted that appraisals are not cold, static, and slow.[218] Rather, appraisals can be manipulated.[219] Emotion "does not represent an inflexible state of mind."[220] Highlighting the goals/needs dimension, for instance, may be outcome determinative to lead to a more equitable result for survivors. In the case of Hurricane Maria, the goal/needs of response to a humanitarian crisis can be highlighted to outweigh the perceived lack of relevance based on voting impact. Finally, an enforcement of mandatory guidelines[221] that reduce discretion—and perhaps negative emotions—could also be explored.

The disaster response for Harvey[222] and Maria did not align with storm severity or recovery needs. Instead, the responses may reveal the differences in emotional appraisals made in the wake of the storms. Considering the ways in which emotion and cognition influence judgments may improve government obligations to citizens following natural disasters.

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for additional food stamp aid following Maria, and the Trump administration has "derided the extra aid as unnecessary." *Id.*

216. Fernandez Campbell, *supra* note 89.

217. *Id.*

218. Ellsworth & Scherer, *supra* note 18, at 585–86.

219. *See generally* S.H. Hemenover & Richard A. Dienstbier, *The Effects of Appraisal Manipulation: Affect, Intrusive Cognitions, and Performance for Two Tasks*, 20 MOTIVATION & EMOTION 319, 319 (1996) (examining the relationship between appraisals and anxiety by manipulating appraisals in subjects).

220. Haenni, *supra* note 110, at 370.

221. One such guideline, for instance, would be a mandatory formula that considered storm severity, population, and timelines in determining the deployment of federal resources such as food, tarps, and allocations.

222. To be clear, it is worth stressing that Hurricane Harvey survivors deserved the attention, relief, and support that they have been provided. The goal here is not to diminish the need to respond effectively to people in need; rather, it is to expand the governmental response for everyone with needs.

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APPENDIX "A"

Appraisal Checks	Harvey	Maria
Novelty	✓	✗
Intrinsic Pleasantness	✗	✗
Goals/Needs Significance	✓	✗
Coping Potential	✓	✗
Norm/Self-compatibility	✓	✗

The above table charts the dimensions of emotional appraisals[223] through Hurricanes Harvey and Maria. One way to account for the federal government's differential treatment of Hurricane Maria is through its circumstances, which did not present in a way that triggered a compassionate, emotional response from the federal government under President Trump.

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223. *See* Scherer, *supra* note 1, at 174.