CAMILLE WAS NO LADY BUT KATRINA WAS A BITCH: GENDER, HURRICANES & POPULAR CULTURE

AN ABSTRACT

SUBMITTED ON THE ELEVENTH DAY OF OCTOBER 2013

TO THE DEPARTMENT OF HISTORY

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

OF THE SCHOOL OF LIBERAL ARTS

OF TULANE UNIVERSITY

FOR THE DEGREE

OF

DOCTOR OF PHILOSOPHY

BY

(ELIZABETH SKILTON)

APPROVED:

(RACHEL DEVLIN), PH.D.

DIRECTOR

(RANDY SPARKS), Ph.D.

(ROSANNE ADDERLEY), Ph.D.

(LAWRENCE POWELL), Ph.D.

ABSTRACT

This dissertation uses the history of the hurricane naming process to compare the shifting environmental, scientific, and cultural changes taking place throughout the world during the twentieth century. It argues four major points: first, once gender is assigned to an object and adopted publicly en mass, it cannot be removed. Second, hurricane names have segregated hurricanes from other natural disasters in public consciousness. From "witches" and "bitches" to "monsters" and "menaces," the hurricane in popular memory calls forward explicitly gendered imagery; earthquakes, typhoons, dust bowls, plagues of insects, and other natural disasters do not carry the same sort of gendered associations. Third, by tracing the development and acceptance of the U.S. state-implemented hurricane naming process, it is possible to trace the spread of American gendered terms throughout the world. As illustrated throughout, gendered American meteorological terms are also found in global references to storms proving that hurricane names and descriptions are a form of both ecological and soft-power cultural imperialism.

Finally, and most importantly, the socio-political implications tied to name and descriptive choices used with hurricanes have had a profound impact on storm perception globally. Introduced in 1954 by the U.S. Weather Bureau as a female-only hurricane naming system, hurricane names were rapidly adopted by other countries under U.S. meteorological control in the post-World War II

era. With fears over Cold War politics both abroad and at home, the feminized hurricane was not just a weapon of mass destruction to be harnessed but also a potential tool of cultural domination through descriptive means. By the 1970s, with a discussion of feminism worldwide, references to the female-named storms helped produce dualistic images of "stormy women" and the "Women's Lib Storm" that were politically useful to men and the state when they felt threatened by feminism. Meanwhile, today's references to Hurricane Katrina, and later Sandy, as a "bitch" on Twitter reappear in blogs around the world. Due to this, the feminization of hurricanes has created and sustained a misogynistic, pervasively American form of vilification of women in media portrayals that continues to this day.

CAMILLE WAS NO LADY BUT KATRINA WAS A BITCH: GENDER, HURRICANES & POPULAR CULTURE

A DISSERTATION

SUBMITTED ON THE ELEVENTH DAY OF OCTOBER 2013

TO THE DEPARTMENT OF HISTORY

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

OF THE SCHOOL OF LIBERAL ARTS

OF TULANE UNIVERSITY

FOR THE DEGREE

OF

DOCTOR OF PHILOSOPHY

BY

(ELIZABETH SKILTON)

APPROVED:

(RACHEL DEVLIN), PH.D.

DIRECTOR

RANDY SPARKS), PH.D.

(ROSANNE ADDERLEY), Ph.D.

(LAWRENCE POWELL), Ph.D.

©COPYRIGHT BY ELIZABETH C. SKILTON, 2013

ALL RIGHTS RESERVED

ACKNOWLEDGEMENTS

Notable environmental historian William Cronon recently published an article in the *Journal of American History*, on the prevalence of "professional boredom" felt by historians. Stating that the challenge of history has not been the decrease in information or topics but the dryness of its results, Cronon challenged young historians to think outside of the box, use a wide-variety of sources, and most of all make their work interesting to both an academic and public audience. This dissertation is a direct product of this challenge; its contents, research, and the discussion fostered by it has made every day an interesting one. But it would not have been imaginable without the help of many.

First and foremost, this dissertation would not have been possible without the support of Ms. Roxcy O'Neal Bolton, and her daughter, Bonnie Bolton. Roxcy Bolton is the pioneer feminist – and truly enigmatic woman – who inspired the contents included in the dissertation itself as well as the movement toward the male-female naming system that is used today. It was an absolute pleasure to work with her and have access to every piece of correspondence between herself and the Weather Bureau during her protest of female-only hurricane names. While the protest she lead only made up a small period of time in her enormously influential life, it provided a unique glimpse into the everyday struggles of feminists in the 1970s.

Secondly, a special thanks also goes to the National Oceanic and Atmospheric Administration (NOAA) and the National Hurricane Research Division for helping me fill in one of the most important gaps in hurricane history documented evidence of how and why the hurricane naming process began. After reaching an uncomfortable standstill in my research after exhausting archival sources, NOAA Records Officer Andre Sivels forwarded my emails for advice to Neal Dorst at the National Hurricane Research Division and meteorological historian James Rodger Fleming. The result – over 50 emails exchanged with Neal Dorst, Gary Padgett, Brian Norcross, Miles Lawrence, former hurricane directors Neil Frank and Robert Simpson, and many others. Between help provided by all, and the information collected from Roxcy Bolton, I have been able to put together the most comprehensive story of hurricane naming, and subsequently, all storm naming history ever produced. The resulting conclusions posed by my questions and collaborative knowledge shared has caused a revision of all NOAA related cyclone and hurricane naming histories.

As to the development of the dissertation in content and construction, first and foremost, extreme gratitude goes to my advisor, Rachel Devlin of Rutgers University, whose continued support for the past six years has been irrefutable, despite all obstacles. Through all the emails, phone calls, and random drop-bys, she has maintained a vigilant watch over my work, sharing in my research find joy and academic frustrations, all while providing a great example of academic success. Next, a long overdue thanks to my secondary advisors at Tulane University, Randy Sparks and Elisabeth McMahon, who both took on the

challenge of making sure I "made it" both professionally and personally through this process. Third, thanks to my Ph.D. committee members, Rosanne Adderley and Lawrence Powell, whose suggestions, commentary, and support has significantly impacted the finished product.

Next, I would like to thank those who have been influential in the research process for my work. A special thanks goes to the Louisiana Research Collection, or "Special Collections" and the Louisiana State Museum who not only provided me with research support, but also temporary jobs that have helped fund my research trips. Much appreciated gratitude also goes to the following organizations/institutions that supported this research financially. I received a Tulane University School of Liberal Arts Fellowship for five years, which allowed me to devote undivided attention to my studies and enough time to do the majority of my research. I was also granted SLA Summer Merit fellowships that allowed me to access files at the Library of Congress, the National Weather Bureau National Archives and Miami Regional Archives, the Florida State Museum and Archives, and the University of Southern Mississippi-Gulf Coast Hurricane Katrina Archives. The New Orleans Center for the Gulf South also generously provided significant funding through a Global South Fellowship in my last year that made my dream of expanding my research globally a possibility.

The following institutions granted me access to their archives and microfilm, or sent me microfilm through Inter-Library Loan: Tulane University, New Orleans Public Library, Rice University, College of Charleston, the Citadel, Florida International University, University of Florida, Auburn University, University of Southern Mississippi, North Carolina State University, Duke

University, Emory University, University of Buffalo, Southern University of New York (SUNY), American University, Clemson University, Mobile Public Library, Case Western Reserve University, Ohio State University, University of Iowa, University of Northern Iowa, Wartburg College, University of Wisconsin-Madison, and Northwestern University. Particular thanks goes to Florida International University and American University, which both provided me discounted extended-stay student housing while doing research in Miami and Washington, D.C.

Next, a dissertation like this could not have been possible without a significant system of academic support. I would like to thank the Tulane University History Department and School of Liberal Arts faculty for their opendoor policy that allowed me to consult with professors of all disciplines regularly. Particularly, thanks goes to those that I had the ability to take courses with and work one-on-one on various elements of this dissertation and the research proposals necessary for funding it. They include: Justin Wolfe, Gertrude Yeager, Jana Lipman, George Bernstein, Bruce Raeburn, Bill Meneray, Thomas Adams, Karissa Haugeberg, Brian DeMare, Virginia Gould, Todd Michney, Sasha Turner, Linda Pollock, Emily Clark, Deborah Troescher, Carol Haber, Carol Reese, Joel Dinnerstein, and Vicky Mayer.

In addition to Tulane faculty, I have had the privilege of studying under, working with, and receiving comments from a variety of academics throughout the country. They include: Matthew Mulcahy, Craig Colten, Dave Anderson, Kent Germany, John Burnham, Kerry Smith, Pamela Tyler, Michelle Nickerson, Elizabeth McRae, Renee Sentilles, Rhonda Williams, Miriam Levin, Lisa

Hazirjian, Tanetta Anderson, Karen Leathem, Ann Larabee, Ann Case, Leon Miller, and Eira Tansley. I would also like to thank the Department of History and Geography faculty and staff at the University of Louisiana at Lafayette for their support while I defended and completed my dissertation edits while serving as a visiting instructor during the fall of 2013. The collegial encouragement shown was both inspiring and truly appreciated at the final stage.

Following faculty and other academics, thanks also goes to my favorite department secretary, Donna Denneen, for her support in all ways. Similarly, my academic cohort has played a significant role in the development of ideas, reading of various drafts, or the provision of beverages when a well-deserved break was in order. They include: Kristin Condotta Lee, Walter Stern, Kevin Fontenot, Brian McGowan, Bobby Ticknor, Nancy Stockton, Vera Gutmann, Alex McManus, Rien Fertel, Brad Mollman, Rodrigo Massi, Richard Conway, Sarah Borealis, Mark Lentz, Lee Smith, Shelene Roumillat, Isabel Quintana, Maria Aguilar, Gemma Birnbaum, Tierra Jolly, Josh Goodman, Beau Gaitors, Sitela Alvarez, Jonathon Moore, Samantha Perez, Matt Kocsan, and Christopher Willoughby.

Over the years I have developed a phenomenal non-academic support system. The following friends and family members have cheered me on through every status update, provided me an air mattress to crash on when visiting for research, taken me out for dinners, or answered phone calls/emails/text messages when I have exhausted my wit. They include: Adam Beauchamp, Caitlin & Nick Meyers, Jessica Rocco, Matt Nemergut, Liz Sparks, Ross Miller, Rich Manfredi, Sara & Andrew Bartlett, Christina Sharron, Mary Manning, Laura

Ansley, Amelia McGowan, Michelle Price, Matt Deming, Tiffany Delcour, Brad Hubbard, Fred Neal, Scott Schroth, Emily Antes, Jennifer Mathewson, Meg McKenna, Krystle Suszter, Katie DiSimoni, Rebecca Gray, Harry and Rosa Howard, The Wagners (Cyndi, Scott, Hannah & Chloe), The Skiltons (Bob, Jeanne, John, Carmen, Margie, Keith & cousins), and Virginia Bishop.

Finally, a special thanks to my family, who taught me the importance of "squeezing life's lemons." Mom, Dad, Kat, and Maddie — this is for you.

Liz Skilton, December 2013, New Orleans

CONTENTS

II

ACKNOWLEDGEMENTS

	AB.	BREVIATIONS VIII	
	ILL	USTRATIONS IX	
	Fic	GURES & TABLES XV	
	Int	TRODUCTION: A LADY CALLED CAMILLE 1	
PAR ⁷	ΓΙ.	GENDERING THE WIND	
	1.	WEATHER IS THE NATION'S BUSINESS: METEOROLOGICAL TITANS & THE CULT OF AMERICAN METEOROLOGY	33
	2.	THEY CALL THE WIND MARIA: FEMINIZING THE HURRICANE	59
	3.	FROM BAD GIRLS TO BOMBSHELLS: SEXUAL CONTAINMENT, THE HURRICANE, & THE COLD WAR	94
	4.	IT ALL BEGAN WITH ALICE: THE BAD GIRLS OF '54	114
	5.	LADIES NO MORE: THE CHANGING IMAGE OF THE FEMINIZED HURRICANE	142
PART	ΓII.	THE PROBLEM WITH A NAME	
	6.	CEASE & DESIST: ROXCY BOLTON SAYS NOW IS THE TIME FOR CHANGE	175
	7.	It's Raining Men: Juanita Kreps Steps In	200
	8.	MISTERS, MONSTERS, & MENACES: INTRODUCING BUD	223
PAR'	Г II	I. THE 21 ST CENTURY HURRICANE	
	9.	THE STORM OF THE CENTURY OF THE WEEK: MEDIA & THE MODERN STORM	260
	10.	KATRINA YOU BITCH!: POPULAR CULTURE & THE HURRICANE	292

EPILOGUE: A COLD HARD WINTER FOR STORM NAMING SYSTEMS	345
BIBLIOGRAPHY	349

ABBREVIATIONS

Archives II National Archives at College Park, MD

D.R. Dominican Republic

ERA Equal Rights Amendment

HH Hurricane Hunters

IMO International Meteorological Organization

LOC Library of Congress

MMS Mexican Meteorological Service

NARA National Archives and Records Administration

NATO North Atlantic Treaty Organization

NHC National Hurricane Center

NOAA National Oceanic and Atmospheric Administration

NOW National Organization for Women

NWB National Weather Bureau

NWS National Weather Service

P.R. Puerto Rico

UN United Nations

U.S. United States

WB Weather Bureau

WITNB "Weather Is The Nation's Business," report, 1953

WMO World Meteorological Organization

ILLUSTRATIONS

CARTOONS & DRAWINGS

Weather Man	55
Ralph Bohun's Depiction of Wind, 1671	63
The Kingdom of Wragge	66
Domesticating the Atom Bomb	102
Hurricane Edna	119
You Were Certainly No Lady!	126
Hurricane No. 8	129
Hurricane Hazel	129
Oh No! Not Another!	133
Meteorological Optometrist & The Hurricane Girls	134
First Blow of the Season	144
Peek-a-boo Donna	147
It Was The Cyclone, <i>Diario de la Marina</i>	165
Hazel, The Gleaner	166
Adios! An Don't Come Back! <i>El Mundo</i>	167
Connie, El Mundo	168
Connie & Diane, <i>El Mundo</i>	169
The NOW Hurricane	175
Hurricane Emmy Lou	189

Feminists Prevail	216
Grin & Bear It	219
A Not So Equal Naming System	230
David & Frederick as Storks	232
Hugo Lookin' At You	242
David, Daily Tribune	247
Gilbert, The Gleaner	248
Beat Up, The Gleaner	249
Threat of Hugo, <i>Daily Tribune</i>	250
Andrew, Daily Tribune	287
Floyd, Daily Tribune	287
Voodoo Priestess Katrina	299
New Orleanian Reaction	300
Large Footprints	304
Stormy Eye	305
Rita/Mother Nature	308
Don't Mess With Texas	308
Madam Katrina's S&M Show	309
Voracious Rita	310
Hurricane Ballet	310
Gustav and the GOP Convention	333
Isaac at the Gym	342
Hurricane Sandra Dee	343

LETTERS & INTERVIEWS

Senator Thomas H. Kuchel to U.S. Weather Bureau	137
Professor Fritz Fogelhammer & Art Buchwald	195
Maps	
1. Hurricane, Typhoon, and Tropical Cyclone Naming History Timeline	xi
2. Introduction of Female-Only Naming System for Hurricanes, Typhoons, and Tropical Cyclones, 1896-1964	171
3. Implementation of Male-Female Naming System for Hurricanes, Typhoons, and Tropical Cyclones, 1975-1979	246
4. Implementation of Male-Female Naming System for Hurricanes, Typhoons, and Tropical Cyclones, 1975-2011	289
PHOTOGRAPHS	
A Lady Called Camille, U.S. Department of Agriculture, 1971	1
Regional Office Observation Training Class	45
Weather Women Plotting Weather Maps, 1945	45
Weather Bureau Station in The Philippines, 1947	51
P. J. "Hawf" Hoffstrom in Weather Tower	54
Storm 1941 Book Cover	59
Miss Hurricane Hunter 1956	94
Why Gales Are Gals	96
Eccentric Edna (highlighted samples)	111-2

Carol vs. the Old North Church	115
Connie's No Lady and Her Temper Proves It	131
CamilleShe Was No Lady, Charity Booklet	142
Any Way You Look at It Donna Was a Real Witch	147
Erratic Camille Has Titanic Punch	150
Four Men Who Knew Camille	151
The Hurricane Hunters	153
Will Debbie Freeze to Death?	155
Hazel Headline, Le Nouvelliste	162
Ciclón Connie, Diario de la Marina	163
Plane Attacks Debbie, <i>The Gleaner</i>	170
Roxcy Bolton at the 1972 National Weather Bureau Conference	190
"It's Raining Men" Album Cover	200
Goodbye to Chauvinism	217
Furious Female Agnes	226
12 Dead in Her Wake	226
Killer	232
Indecisive Elena Sits Offshore	233
Alicia's Zigzag	236
Front Page, Miami Herald	238
Hugo, We Go	241
Atomic Hugo	243
The Daily Show With John Stewart 1	260

The Daily Show With John Stewart 2	261
Beyond Jennifer & Jason	272
Havana Granma International	285
San Juan El Nuevo Dia	285
Another Battle Against Hurricanes	286
Lakeside Shopping Mall Blue Tarp Christmas Village Display	318
The Blame Game Board Game	319
Katrina Beads	321
Blow Me Bumper Sticker	323
Katrina Gave Me A Blow Job I'll Never Forget T-Shirt	324
Girls Gone Wild: Katrina, Rita, & Wilma T-Shirt	325
Evolution of Katrina You Bitch! Products & Slogan	326
Sandy's A B*tch.	343
Snowicane Dorva	345
Winter Storm Nemo	347
Poems & Songs	
They Call the Wind Maria	88
O' Regutiful Storm	204

WORD CLOUDS

Female-Named Storm Descriptors, 1954-1989	257
Male-Named Storm Descriptors, 1979-1989	257
Male-Named Storm Descriptors, 1992-2004	275
Female-Named Storm Descriptors, 1992-2004	275

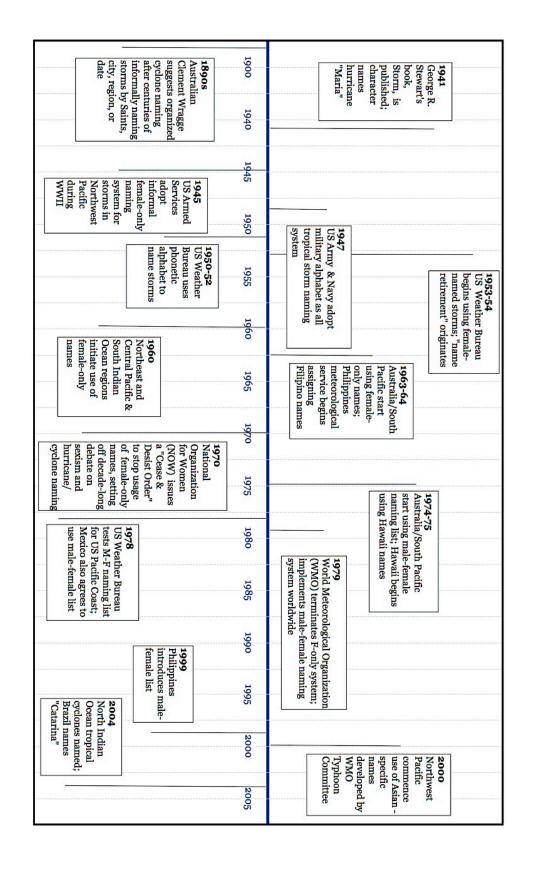
FIGURES AND TABLES

FIGURES

1. Map of Cities Studied in Dissertation	17
2. Number of Articles in U.S. Newspaper Data Set, by Region	22
3. Gender reference use by city, 1954-1969	159
4. Number of articles by city and region, 1954-1969	160
5. Number of articles by city and region, 1954-1989	253
6. Gender reference use by city, 1972-1989	254
7. Gender reference use by city, 1954-1989	255
8. Gender reference use by city, 1992-2004	282
9. Number of articles by city and region, 1992-2004	283
10. Gender reference use by city, 1954-2004	284
11. Gender reference use by city, 2005-2008	338
12. Number of articles by city and region, 2005-2008	339
13. Gender reference use by city, 1954-2008	340
TABLES	
1. List of Hurricanes Studied	19
2. Total Articles for U.S. Newspaper Data Set	21
3. Foreign and U.S. Territory Newspapers	23

4. Number of U.S. Weather Bureau Employees, 1942-45	43
5. Number of Women Employed by Weather Bureau in WWII	44
6. Number of U.S. Weather Bureau Employees, 1945-51	49
7. Pacific Theater Female-Only Naming List, 1945	79
8. Phonetic Alphabets, 1940-1956	83
9. Storm Naming Lists, 1945-1955	91
10. Variables Studies in Dissertation Data Set	108
11. Article and Gender References by City, 1954-1969	157
12. Storm Naming Lists, 1978-1979	228
13. Article and Gender References by City, 1972-1989	251-2
14. Total Number of Newspaper Articles Before & After 24/7 News Cycle, 1954-2008	270
15. Article and Gender References by City, 1992-2004	280-1
16 Article and Gender References by City 2005-2008	335

MAP 1. HURRICANE, TYPHOON, & TROPICAL CYCLONE NAMING HISTORY TIMELINE, 1890-2004



INTRODUCTION A LADY CALLED CAMILLE



A Lady Called Camille, U.S. Department of Agriculture, 1971. 1

"Camille was no lady," stated a weatherman in a 1971 film produced by the U.S. Department of Agriculture recounting the horrific hurricane of 1969 that devastated Louisiana, Mississippi, and Alabama. The film, entitled, "A Lady Called Camille," that premiered on major news networks throughout the country inadvertently documented the growing trend of referring to destructive storms by female names.² Nearly thirty-four years later the similarly wild hurricane Katrina was declared worse than Camille in everything from graffiti to bumper stickers.

¹ Department of Agriculture, "A Lady Called Camille," AVA11983VNB1, 1971, Accessed on YouTube, Posted by Public.Resource.Org on October 5, 2008, http://www.youtube.com/watch?v=3XSF_V3BXWQ.

² Ibid.

In fact, as the "Rotten to the Corps" group of Mardi Gras parade floats satirically referencing failures related to Hurricane Katrina stated, Katrina was a "bitch!"³

While today's "Katrina You Bitch!" seems much more abrasive than yesterday's "Camille Was No Lady," this author quickly found when presenting this shift in phrases for hurricanes over the past five years at conferences and lectures throughout the U.S. that these specific phrases to describe hurricanes were not surprising to many audiences; instead they were viewed as a natural progression of hurricane terminology. In fact, many interviewed about the storm naming process assumed that it had always existed in its current form.

To a researcher who grew up in "tornado alley," the concept of attaching names and more particularly, gender, to storms was unfathomable. Similarly, the idea that a storm would be referenced as a "bitch" was offensive. As my curiosity over this strange naming trend peaked, I began to research how and why the hurricane naming process was introduced. I quickly found that the only references to the development of the modern hurricane naming system were often condensed into two paragraphs or less in text. Surprisingly, less information about the hurricane naming system was available on the National Oceanic and Atmospheric Administration websites and official documents at the time. Continuing my research, I discovered that there was a vast hole in historical discussion of storm names. No scholar has effectively analyzed the reasoning behind this peculiar trend of naming hurricanes or how it has evolved.

³ "Katrina You Bitch!" Mardi Gras Float, in Mardi Gras '06 Album, Le Krewe d'État, Rotten To The Corps Parade, 2006, Image taken by Chuck T. on February 24, 2006, Accessed on August 29, 2009, http://www.flickr.com/photos/sazerac/sets/72057594083 235628/.

Similarly, there has been no breakdown of the after-effects of this naming system. Thus began my journey to answer these peculiar questions.

The product of this quest, this dissertation, was meant to primarily fill in this missing discourse. The dissertation explains how hurricanes got their "names" and what happened after they did. The dates and facts unearthed through this dissertation's research have caused a revision in the NOAA's official hurricane naming history as of September 2012. But, more importantly, through the process of my research, I uncovered a more complex history of the "gendering" of U.S. culture, the spread of U.S.-influenced meteorology, and its impact on the perception of gender globally.

The history behind calling a hurricane "no lady" or a "bitch" is much more complicated than just a simple discussion of shifting cultural vernacular and common naming identification customs. The socio-political implications tied to these word choices have had a profound impact on storm perception. Through analysis of these terms and others, the dissertation contextualizes the assumptions of a coarsening of culture throughout the later twentieth century. It concludes that Hurricane Katrina did not become a "bitch" on its own and Camille was not a "lady" in the beginning, but the terms are part of a larger story of the development of American popular culture in the post-World War II era. Similarly, it argues that the naming process of hurricanes has segregated hurricanes from other natural disasters in public consciousness, creating a self-sustaining culture that surrounds it.

ALL IN A NAME

Hurricanes themselves are not innately gendered. Nothing about a cyclonic natural force is physically gendered or has a specific sex. Because of this, many questions arise as to why "unspecific winds" became a gendered object in popular discourse. How could there be an assignment of gender, feminine at first, so readily and widely accepted into and used freely in mainstream descriptive language? More importantly, while the gendering of a natural force might seem contrived, when placed in the context of gender history, was it inevitable?

To start this analysis, some key terms must be defined. First, sex is an identification based on biological parts. In contrast, gender is a social construction that while ever fluctuating, influences the character definition of what is male and what is female based not only on biological features, but also on role assessment. Thus, as historian Joan Scott has pointed out, gender is an extremely "useful category of analysis" that provides historians with a way to effectively analyze cultural traditions and transitions.⁴

Traditionally, society dictates sex and gender based on identifiable characteristics — those that include biological or societal markers — such as names. Thus, it is the name of a hurricane that sets it apart from all other natural disasters. Introduced formally in 1953 by the U.S. Weather Bureau, the hurricane naming system and subsequent gendered descriptive process went on to affect every country in the world. Yet no historian has effectively contextualized this monumental cultural change.

⁴ Joan Wallach Scott, "Gender: A Useful Category of Historical Analysis," in *Gender And The Politics Of History* (New York: Columbia University Press, 1988) 20-50.

Whether employed, as historian Ted Steinberg says, "as a mediating language" when "culture collides with nature," or simply named out of playful whim, it is the descriptions of hurricanes that give them identifiable feminine and masculine characteristics. Hurricanes are unique compared to other natural forces, as they are the only natural force to have been specifically named and described in widely publicized and accepted definitions corresponding to gender roles. Earthquakes, typhoons, dust bowls, plagues of insects, and other natural "disasters" do not carry the same sort of gendered connotation as hurricanes. Through hurricanes it is possible to ask: is gender associated with a culturally constructed name? And, if so, to what degree does the emphasis on gender and name association play in its usage?

The continued use of gender stereotypes with Katrina and other storms brings attention to the gendering of natural forces. While humorous descriptions of Camille as "un-ladylike" or Katrina as a "bitch" have circled throughout the world in their respective decades, the feminization of hurricanes has paralleled American usage of gender in everyday society. The underlying messages associated with the naming and gendering of hurricanes provide provocative answers to the question of the cultural impact of the environment on the construction of gender in the twentieth century. For instance: what are the effects of gendering the environment on the social perspective of storms? Once gender is attached to an object can it ever fully be removed? How do mediums of

⁵ Similarly, as Jeffrey Weeks states, "[T]he meanings we give to 'sexuality' are socially organized, sustained by a variety of languages, which seek to tell us what sex is, what it ought to be—and what it could be," which in relation to hurricanes is applicable. Jeffrey Weeks, "Sexuality," in *Major Problems in the History of American Sexuality*, Edited by Kathy Peiss (Boston: Houghton Mifflin Company, 2002) 7.

culture impact the American perception of the environment? What about the larger world? Do assignments of gender to hurricanes apply just to the storm or to the storm aftermath? Does this gendering exist with other natural and unnatural disasters? Who controls the naming and gendering of storms? How has this impacted storm names throughout history? However, the most important question I ask in this dissertation is: How much and when does it become a primarily "American" trend to feminize natural disasters?

Why Gender & Hurricanes? Current Hurricane Historiography

Before explaining more about my research it is necessary to examine the reason for the dissertation itself. This section of the introduction examines the basic hurricane historiography; discusses the shape of the environmental history field and how hurricanes fit into it; analyzes the intervention made by ecofeminists in the environmental history field; explains why ecofeminism and gender history are important aspects of study in environmental history; and, introduces the concept of an elusive gendered hurricane as a studied historical figure. After tying together all of these subjects I explain the methodology used in my dissertation.

Storm, Storms, or Storm Effect: The Focus of Generic Hurricane Histories

The history of hurricanes can be divided into several broad categories: studies focusing on technological and meteorological advances in hurricane history; localized cultural studies relevant to one storm, one time period and one place; and hurricane studies focusing on large-scale cultural history. Simply put, these studies focus on a single storm, multiple storms, or storm effects.

From Ralph Bohun's, A Discourse Concerning the Originie and Properties of Wind, With An Historical Account of Hurricanes and other Tempestuous Winds, published in 1671 as an explanation to the king of England of this new "phenomena" experienced in the colonies, to works published today, historians documenting hurricanes have categorized hurricanes within the history of technology and meteorology. ⁶ Contemporary historians focusing on the nineteenth and twentieth centuries review hurricanes and their impact through the introduction of new forms of scientific knowledge. ⁷ Robert Simpson and Herbert Riehl, for instance, describe the advent of the systems of weather tracking such as the Saffir-Simpson scale. In so doing, they add to the discussion of modern hurricane impact on culture through the study of scientific influence. However, these historians neglect the broader societal trends and developments covered in more cultural hurricane histories.

Other hurricane histories describe the cultural history of hurricanes by focusing on a particular hurricane, year or time period, and place affected. By focusing on small-scale, localized events, these histories are extremely effective in

⁶ Ralph Bohun, A Discourse Concerning the Origine And Properties Of Wind. With An Historical Account of Hurricanes, and other Tempestuous Winds (Oxford: W. Hall for Tho. Bowman, 1671).

⁷ See Robert H. Simpson and Herbert Riehl, *The Hurricane and Its Impact* (Baton Rouge: Louisiana State University Press, 1981); Bob Sheets and Jack Williams, *Hurricane Watch: Forecasting The Deadliest Storms On Earth* (New York: Vintage Books, 2001); Kerry Emanuel, *Divine Wind: The History and Science of Hurricanes* (Oxford: Oxford University Press, 2005); David Keys, *Catastrophe: An Investigation into the Origins of the Modern World* (London: Century Books, Ltd., 1999).

covering the cultural impact of a single hurricane.⁸ Patricia Bellis Bixel and Elizabeth Turner, for example, describe the impact of the 1900 Galveston Storm on Galveston, Texas. Similarly, Stefan Bechtel uses 1969's Hurricane Camille to delve into the broad reaction of a post-World War II culture to a sizable threat. Douglas Brinkley's work on Hurricane Katrina and New Orleans or Leigh Jones and Rhiannon Meyers' discussion of Hurricane Ike are the most current examples of this type of history.⁹ Due to the localized and current nature of their studies, they are able to give in-depth analysis of meteorological techniques and knowledge about storms in everyday populations. While having the benefit of both the cultural and scientific history included in these histories, the historians miss out on the large-scale impact seen by viewing several hurricanes over time.

Finally, the last category of hurricane histories focus on the large-scale cultural impact of hurricanes by covering the multiple ways hurricanes have affected the individuals, communities, economics, politics, and culture of an area over time. Matthew Mulcahy and Louis Pérez, for instance, describe the impact of hurricanes on the development of colonial culture in the Caribbean. These historians expand the limited focus of local- and time-specific histories by

_

⁸ See Patricia Bellis Bixel and Elizabeth Hayes Turner, *Galveston And The 1900 Storm:* Catastrophe and Catalyst (Austin: University of Texas Press, 2000); Stefan Bechtel, Roar of the Heavens (New York: Citadel Press Books, 2006); Douglas Brinkley, The Great Deluge: Katrina, New Orleans, and the Mississippi Gulf Coast (New York: Harper Collins, 2006); Jay Barnes and Steve Lyons, Florida's Hurricane History (Durham: The University of North Carolina Press, 2007); Eliot Kleinberg, Black Cloud: The Great Florida Hurricane of 1928 (New York: Carroll & Graf Publishers, 2003); Erik Larson, Isaac's Storm: A Man, a Time, and the Deadliest Hurricane in History (New York: Vintage Books, 1999).

⁹ Leigh Jones and Rhiannon Meyers, *Infinite Monster: Courage, Hope, and Resurrection in the Face of One of America's Largest Hurricanes* (Dallas: Penland Scott Publishers, 2010).

covering vast time periods and cultural changes, including scientific advances.¹⁰ However, these studies tend to be primarily focused on pre-colonial, colonial, or nineteenth century time periods and cultures, and do not cover twentieth century hurricane history.

Hurricane Histories & The Environmental Field

Overall, hurricane histories are part of the larger discussion of the environmental history field, and as such, understanding the development of the field is crucial to understanding where this dissertation aims to add to discourse. Since the Environmental Movement of the 1970s, historians of environmental history have posited that nature and culture are inseparable. Historian Donald Worster defines the field as developing a tripartite focus on ecology, production, and cognition by the late 1990s. Worster argues that those focusing on ecology rely on the idea of the social construction of nature. They have published work on the early conservation movements, then social movements later on. Historians examining production provide an explanation of how different societies have produced food, life, and established themselves in an environmental context. ¹² Environmental cognition historians explain how

¹⁰ Matthew Mulcahy, *Hurricanes and Society in the British Greater Caribbean*, 1624-1783 (Baltimore: Johns Hopkins University Press, 2006); Louis Pérez, *Winds of Change: Hurricanes & The Transformation of Nineteenth Century Cuba* (Chapel Hill: University of North

Carolina Press, 2001); Ivan Ray Tannehill, *Hurricanes, Their Nature and History: Particularly Those of the West Indies and the Southern Coasts of the United States* (Princeton: Princeton University Press, 1956).

¹¹ Donald Worster, *The Ends of the Earth: Perspectives on Modern Environmental History* (New York: Cambridge University Press, 1988).

¹² Hal Barron, Mixed Harvest: The Second Great Transformation in the Rural North, 1870-1930 (Chapel Hill: University of North Carolina Press, 1997); and Mark Fiege, Irrigated

humans understand and relate to nature — particularly defining concepts of the "wilderness," "nature," and regional understandings (e.g., the "Gulf South" area).

Radical Environmentalism: Ecofeminist Influences

The environmental history field breakdown provided by Worster is very important in terms of the development of gender and environmental history. Nowhere in Worster's breakdown of the environmental history field is a discussion of how gender fits into the perception of these three areas. It is simply assumed that it might be under ecology or production — but neither one officially deals with gendered perception of the environment.

The question of how gender impacts both the natural world and the manmade world was addressed with the rise in women's history as a field.

Ecofeminism, a blend of radical feminism and ecology, emerged from the
feminist and environmental movements taking place at the same time.

Ecofeminists brought attention to how systems of patriarchy, gendered
stereotypes, and women have affected the environment.

There are two basic ecofeminists arguments: cultural ecofeminists and social ecofeminists. Cultural ecofeminists, such as Charlene Spretuak, argue that the environment and women are oppressed due to male domination over

Eden: The Making of an Agricultural Landscape in the American West (Seattle: University of Washington Press, 1999).

society.¹³ Specifically, they analyze the perception of male domination of women through the domination of nature, as expressed in art and literature.¹⁴

Social ecofeminists on the other hand view the environment as more of a political element than a natural category. For instance, Carolyn Merchant's work on the Scientific Revolution in Europe argues that the concept of an organic society that worshipped "Mother Earth" was eliminated with technological shifts to a mechanical one that prized masculine dominance by "cold machinery." Merchant also suggests in her article "Gender & Environmental History," that the focus of environmental history needed to be updated to add "reproduction" as a specific fourth category in addition to ecology, production and cognition. As such, new studies of gender and environmental history have attempted to blend both women and men into the discussion of the environment.

The focus on a global environment has existed in terms of concern over its destruction.¹⁶ However, by looking at popular culture and discourse about the environment it is possible to draw links between cultures. For instance, Cynthia Enloe discusses in *Bananas*, *Beaches & Bases* how the establishment of military

¹³ They emphasize the study of the spiritual relationship of nature and women, particularly that of goddess-worshippers and religious-based nature matriarchies. See, Charlene Spretnak, "Critical & Constructive Contributions of Ecofeminism" in *Worldviews and* Ecology, Edited by Peter Tucker and Evelyn Grim (Philadelphia: Bucknell Press, 1993) 181-189.

¹⁴ Carol Bigwood argues in *Earth Muse* that phallic structures built in society are meant to continually remind women of male dominance. Greta Gaard agrees as advanced by her discussion in *Ecofeminism: Women, Animals & Nature* by looking at the connections made between the life cycles of women and animals. Carol Bigwood, *Earth Muse: Feminism, Nature, and Art* (Philadelphia: Temple University Press, 1993), and, Greta Gaard, *Ecofeminism: Women, Animals, Nature* (Philadelphia: Temple University Press, 1993).

¹⁵ She continues this discussion from an American perspective in *Ecological Revolutions*. Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution* (New York: Harper & Row, 1989). See also: Carolyn Merchant, *Ecological Revolutions: Nature, Gender, and Science in New England* (Chapel Hill: University of North Carolina Press, 1989).

¹⁶ Bill McKibben, *The End of Nature* (New York: Random House Trade Paperback, 1989).

bases throughout the world has influenced the perception of women and production in those areas.¹⁷ Meanwhile, Alexander Wilson connects what he calls "the culture of nature" to this global discourse in his discussion of "Disney to Exxon Valdez."¹⁸ While most of his discussion is related to American impact, it does portray the importance of discussing larger disasters or developments that impact the environment and the surrounding culture created from the disaster. Similarly, Gregg Mitman describes in *Reel Nature* how popular culture's portrayals of nature in film and television have impacted not only the American perception of nature but also the global perception of nature.¹⁹

Probably the best-known study illustrating links between culture, destructive objects such as the atom bomb, and the environment is Elaine Tyler May's *Homeward Bound*.²⁰ May's work dissects the Cold War environment that lead to the gendering of atomic bombs, however, she does not delve deeply into the prevalence or everyday use of this gender assignment during and past the Cold War. Following May's lead are two works on international gender topics, violence, culture and natural disasters. First, Claudia Felten-Biermann's "Gender and Natural Disaster" emphasizes the importance of studying sexual violence in

-

¹⁷ Cynthia Enloe, *Bananas, Beaches and Bases: Making Feminist Sense of International Politics*, Updated Ed. (Berkeley: University of California Press, 2000).

¹⁸ Alexander Wilson, *The Culture of Nature: North American Landscape from Disney to the Exxon Valdez* (Cambridge: Blackwell, 1992).

¹⁹ Mitman looks at the Discovery Channel's programming such as, "Shark Week." Gregg Mitman, *Reel Nature: America's Romance with Wildlife on Films* (Cambridge: Harvard University Press, 1999).

²⁰ Elaine Tyler May, *Homeward Bound: American Families in the Cold War Era* (New York: Basic Books, 2008).

post-disaster areas particularly after the Indian Ocean tsunami.²¹ Maureen Fordham and Anne-Michelle Ketteridge's, "Men Must Work and Women Must Weep," opens up a discussion of everything environmental historians have tried to accomplish by studying gender.²² It examines how perception of disaster plays an important role in the development of post-disaster stereotypes on gendered categories.

Reviewing ideas about where gender and environmental history should go and where it has been it is possible to see how studies have been impacted by the ecofeminist strain of thought. Through ecofeminism and other emphasis on the study of women's connection in environmental history there has been increased scholarship on women's role in nature and how the perception of nature impacts popular culture. Most importantly, the facets of ecofeminism taken in context with gender history have the ability to push the boundaries of women's history, gender history, and environmental history, and truly start to show how nature and gender are determinately linked.²³

Why Ecofeminism Matters To Hurricane History

My dissertation, drawing on all of these areas — the history of hurricanes, environmental history, and gender and environmental history — significantly adds to this discussion. Throughout the text I argue that hurricane histories have

²¹ Claudia Felten-Biermann, "Gender and Natural Disaster: Sexualized violence and the tsunami," *Development* 49 (2006) 82–86.

²² Maureen Fordham and Anne-Michelle Ketteridge's, "'Men Must Work and Women Must Weep': Examining Gender Stereotypes in Disasters," *Social Construction of Gendered Vulnerability* (Westport, CT: Greenwood Publications): 81-94.

²³ Virginia Scharff, *Seeing Nature Through Gender* (Lawrence, KS: University Press of Kansas, 2003).

the potential to examine all subsets of environmental history, including ecofeminist ideas. They illustrate the social construction of nature as well as how societies have adapted to natural forces. It is because of these very broad areas of study that the potential to fully expand on popular discourse about environmental history would benefit from a study on hurricanes as both a cultural and natural phenomenon.

The Gendered Hurricane: An Elusive Historical Figure

Nearly all hurricane historians touch briefly on hurricane naming practices. All acknowledge that naming practices began prior to first interaction with Europeans and have changed over time, and that naming practices were eventually regulated by the U.S. Weather Bureau or the World Meteorological Organization. While some historians such as Raymond Arsenault and Ted Steinberg have mentioned the feminization of hurricane names by the U.S. Weather Bureau briefly, the naming process is only described in the context of the post-World War II era and often relegated to footnotes in larger works.²⁴ With the addition of male names to the once all-female list, however, hurricane-naming history has ceased to be an issue of interest for historians.

Environmental history still lacks a discussion of how the interplay of gender and hurricanes changed after male names were included on the list. Did hurricanes become in name and description equally gendered hurricanes? Do

²⁴ Raymond Arsenault, "The Public Storm: Hurricanes and the State in Twentieth-Century America," in Wendy Gamber, Michael Grossberg, and Hendrik Hartog, eds., *American Public Life and the Historical Imagination* (South Bend: University of Notre Dame Press, 2003), pp. 274-275; and, Ted Steinberg, *Acts of God: The Unnatural History of Natural Disaster in America* (Oxford: Oxford University Press, 2000) 67-68.

female-named hurricanes have stronger gendered descriptors? Failing to chart these discussions, historians have missed two critical parts of hurricane history: how and why hurricanes became gendered in the first place, and how the gendering of storms has evolved in modern usage. This dissertation incorporates these two missing links into traditional hurricane history. Furthermore, there is no specific study that analyzes hurricane names in terms of how they reflect society around them over time.

In this dissertation I not only bring in discussions raised by these historians but also examine the major shift in naming practice taking place at the same time as the rise of the environmental movement. By examining hurricanes, natural forces that have been transformed into gendered objects, I probe critical insights to American culture, expanding on traditional narratives of environmental history through the utilization of gender and cultural theory. Drawing from postmodern theorists such as Michel Foucault, this dissertation illustrates the discourse of cultural power versus actual power that is in a constant state of renegotiation.²⁵

While historians like Elaine Tyler May illustrated the prevalence of gender assignment to specific objects during the Cold War era, it is unclear just how prevalent these gendered descriptions were in everyday society or how long they

²⁵ Michel Foucault argues that "power is everywhere" and each society has a set of "truths" that "are the result of scientific discourse and institutions, and are reinforced (and redefined) constantly through the education system, the media, and the flux of political and economic ideologies." In this case, the names given to hurricanes and used to describe them are a reflection of the power structure of a particular time period. They reveal who is in power – both in naming the storms themselves and in using descriptions in the mass media. As a result, how these names and terms are debated and eventually change over time unmask larger shifts in power structures in society. Michel Foucault, as quoted in *The Foucault Reader: An Introduction to Foucault's*

Thought, Edited by Paul Rabinow (New York: Penguin Press, 1991).

continued. At the same time, Margot Canaday's cutting-edge discussion of the perception and regulation of homosexuality in the U.S. through state policing tactics can easily be expanded to examine the role of the state in defining and controlling all forms of deviant sexuality through subliminal mechanisms such as hurricane names and descriptions.²⁶

Building off May and Canaday's works, one of the most critical insights this dissertation provides is its statistical proof of the development of changing gendered terms and their use in popular culture. As a result, on an even deeper level, this dissertation illustrates something that has never been done before – it examines the reasons for introduction of gendered terminology by state-run organizations and the spread of these gendered terms and their impact on American society over the course of half a century. Through this study of the history behind calling a hurricane "no lady" or a "bitch," common in our popular culture for more than half a century, it is evident that mid- to late- twentieth century hurricanes became a canvas upon which anxiety about women was expressed. As this dissertation illustrates, descriptions of hurricanes did not simply reflect the periods in which they were named and described, but also helped produce images of women that were politically useful to men and the state when they felt threatened by female sexuality and feminism. Due to this, the feminization of hurricanes has created and sustained a misogynistic, pervasively American form of vilification of women in media portrayals that continues to this day.

²⁶ Margot Canaday, *The Straight State: Sexuality and Citizenship in Twentieth-Century America* (Princeton: Princeton University Press, 2009).

A BRIEF OVERVIEW OF RESEARCH METHODOLOGY

This work is based on a previously tested methodology that uses newspapers as the primary source of comparative analysis. Broadly, the dissertation includes an 8,915 article study of twelve U.S. cities that serve as distributors of popular discourse about impending hurricanes. These cities include: Atlanta, Baltimore, Biloxi, Charleston, Houston, Los Angeles, Miami, Mobile, New Orleans, New York, Raleigh, and Richmond (as illustrated in Figure 1). Six cities in the Caribbean, Mexico, and U.S. territories are also included. They are: Havana, Cuba; Kingston, Jamaica; Mexico City, Mexico; Nassau, the Bahamas; Port-Au-Prince, Haiti; and San Juan, Puerto Rico.



FIGURE 1. Map of cities studied in dissertation.²⁷

²⁷ "Map of cities studied in dissertation," Created by author, *Google Maps*, August 7, 2012.

As examined in my master's thesis, *All in a Name? Gender-Canes*, newspapers provide a substantially consistent source of information about the vernacular used by a population during continuing time periods.²⁸ While other forms of media were consulted as potential sources of study, newspapers served as a consistent place to take the temperature of cultural change – primarily because they were fixed entities with the most available access for such a large study.²⁹ My initial research showed that the cities selected for the study all had commentary published on the hurricane naming change in the 1970s to equal-sexed naming, have been targets of storms themselves, or were major centers for information distribution making them key places to look for typical hurricane reaction at other time periods.

It was my belief that if I was studying how gender use has changed I needed measurable statistics and a correlating database. As a result, the dissertation analyzes hurricanes that have been selected by the National Weather Bureau as playing an integral role in popular memory in the United States (See Table 1). Ranging from 1954 (the first full year of female-named hurricanes) to Hurricane Ike in 2008, the National Weather Service's "notable hurricanes" list includes a total of 26 major U.S. storms in the post-1954 period.

²⁸ Elizabeth Skilton, *All In A Name? Gender-Canes*, MA thesis, Tulane University, December 10, 2009.

²⁹ Due to library and archive storage of newspaper microfiche, newspapers were the best source possible to use for what turned out to be an international study of gender, hurricanes, and popular culture. Preserved television footage for particular hurricanes that did not severely impact a region, for instance, was often incomplete and subjected to station storage abilities; meanwhile, newspaper pages from the selected dates were always preserved.

TABLE 1. List of hurricanes studied in dissertation

Year	Hurricane	Year	Hurricane
1954 1954 1954 1955 1955 1957 1960 1969 1972	Carol Edna Hazel Connie Diane Audrey Donna Camille Agnes David	1995 1998 1999 2000 2001 2003 2004 2004 2004 2004	Opal Mitch Floyd Keith Iris Isabel Charley Frances Ivan Jeanne
1983 1988 1989 1992	Alicia Gilbert Hugo Andrew	2005 2005 2005 2005 2008	Dennis Katrina Rita Ike

Source: Hurricanes studied in the dissertation were selected from the National Weather Service's "notable hurricanes" list. This author has added two storms to this list that provide additional insight to hurricane naming history. "Hurricanes in History," NOAA National Hurricane Center, Last accessed on August 17, 2012, http://www.nhc.noaa.gov/outreach/history/.

The National Weather Service's list is based on statistics such as storm strength, impact, and public perception.³⁰ By studying "major" storms in multiple areas of the country, trends for gender use became visible. Also, these hurricanes provide the most "normal" reaction to an impending deadly storm rather than a smaller hurricane as well as differences in terms of region and

³⁰ The National Weather Service "notable hurricanes" list (source reference in Table 1) was compiled based on data from a variety of sources that this author cross-referenced when determining which hurricanes would be included in the dissertation data set. These sources include: the Archives of the National Hurricane Center; the National Hurricane Center, *Monthly Weather Review; Weatherwise Magazine;* the U.S. Department of Commerce's Climatological Data National Summary; Ivan Ray Tannehill, *Hurricanes*, (cited previously); Erik Larson, *Isaac's Storm*, (cited previously); Gordon Dunn and Banner Miller, *Atlantic Hurricanes* (Baton Rouge: Louisiana State University, 1964); Paul Hebert, Jerry Jarrell and Max Mayfield, "The Deadliest, Costliest, and Most Intense United States Hurricanes of This Century (and Other Frequently Requested Hurricane Facts)," NOAA Technical Memorandum, NWS TPC-1 (Washington: U.S. Department of Commerce); and, Eric Blake, Christopher Landsea, and Ethan Gibney, "The Deadliest, Costliest, and Most Intense United States Tropical Cyclones From 1851 to 2010 (and Other Frequently Requested Hurricane Facts), NOAA Technical Memorandum, NWS NHC-6 (Miami: National Weather Service, 2011).

impact strength. In the case of hurricanes, a multi-day affair, consistency was key to statistical tracking.

To narrow the parameters of my study I chose to analyze the hurricanes selected in a five-day period for each storm. This allowed for a conclusive analysis of two days leading up to a major storm, the day the storm hit with the most force, and two days following a storm to measure reaction. I chose to stick to a set of days across all of my newspapers to serve as a control mechanism for the statistics of public reaction across all newspapers.

While this method was effective in providing consistent statistics that were easy to collect for such a wide time period and expansive geographic study area, it did provide some complications. First and foremost, hurricanes are not static disasters. They move, and frequently. As a result, they often affect multiple places in multiple days. Unfortunately, this makes limiting the study of them very complicated; the five-day periods chosen for each storm had to account for this fluctuation. To deal with this methodological problem, I set my five-day period by the most affected area's impact date. For statistical consistency I then applied the same date range to all city newspapers in the study. I also collected material for other less-influential impact dates and cities to discuss within the text of the dissertation. This allowed for significant analytical interpretation of gender in a cross-cultural controlled statistical study.

After three years of collection, the 12-city U.S. newspaper hurricane data set includes 8,915 articles (See Table 2 on following page). The total number of articles for each city in the study only includes articles that discuss hurricanes,

not the total number of articles in each newspaper during the selected time periods.

TABLE 2. Total number of articles included in dissertation's U.S. newspaper data set

U.S. city *	Newspaper title	Number of articles
Atlanta, GA	Journal-Constitution **	615
Baltimore, MD	Sun	385
Biloxi, MS	Sun Herald ***	672
Charleston, SC	Post & Courier ****	659
Houston, TX	Chronicle	988
Los Angeles, CA	Times	476
Miami, FL	Herald	1,152
Mobile, AL	Register *****	1,068
New Orleans, LA	Times-Picayune *****	842
New York City, NY	Times	961
Raleigh, NC	News & Observer	653
Richmond, VA	Times-Dispatch	444
Total number of article	es * 8,915	

Note: These totals include the number of newspaper articles referencing the hurricanes studied, not the number of newspaper articles overall.

^{*} Excludes the Star and El Mundo of San Juan, Puerto Rico.

^{**} Includes incorporated Constitution.

^{***} Includes incorporated Daily Herald.

^{****} Includes incorporated News & Courier.

^{*****} Includes incorporated Press-Register.

^{******} Includes incorporated Daily Picayune.

For statistical simplicity throughout the dissertation, I split these 12 cities into geographic regions including: the Northern and Western U.S., the Upper South, and the Gulf South. The Gulf South Region as defined in my dissertation includes: Biloxi, Houston, Miami, Mobile, and New Orleans. The Upper South Region is defined as: Atlanta, Charleston, Raleigh, and Richmond. Finally, the Northern and Western Region includes: Baltimore, Los Angeles, and New York City. I found that these regions react to hurricanes in distinct ways, and by splitting up the statistics, I am able to highlight their differences (See Figure 2 below).

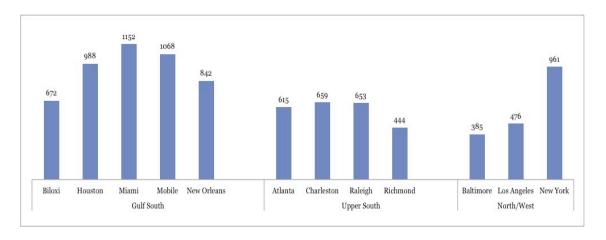


FIGURE 2. Number of articles in U.S. newspaper data set, separated by region.

A variety of newspapers from the Caribbean, Mexico, and a U.S. territory were also consulted for my dissertation. Selected primarily according to availability and geographic position, these newspapers provided a broader framework to compare gender and popular culture references to hurricanes. These newspapers also allowed me to compare linguistic variations between dialects and languages. (See Table 3 for list of foreign newspapers)

TABLE 3. Foreign and U.S. territory newspapers included in dissertation data set

Country/Territory	City	Newspaper title	Language
Bahamas	Nassau *	Daily Tribune Herald	English English
Cuba	Havana **	Granma Granma International Diario de la Marina	Spanish English Spanish
Haiti	Port-au-Prince	Le Nouvelliste	French
Jamaica	Kingston	Gleaner	English
Mexico	Mexico City	El Universal	Spanish
Puerto Rico	San Juan ***	El Mundo El Nuevo Dia Star	Spanish Spanish English

Notes: (1) Due to incomplete availability of foreign newspapers through Inter-Library Loan and at the Library of Congress, many newspapers were blended to create a complete study of the foreign cities selected for the dissertation. (2) While a territory of the U.S., San Juan, Puerto Rico, is included in the foreign newspaper study due to its geographic location and cultural perspective.

Due to the complexity of my analytical process and time constraints of my dissertation completion schedule I altered my research method when including these foreign cities. Instead of statistically tracking the variables used in my U.S. newspaper study, I opted for a larger qualitative analysis of my Caribbean, Mexican, and U.S. territory newspapers. For example, I looked for consistent trends in the use of names, gender, and hurricane depictions that I then contrasted with information gained from my U.S. newspaper study. This allowed

^{*} The Nassau Herald was used to complete statistics from 1958 through 1962; the Nassau Daily Tribune provided all other data in study.

^{**} Havana's *Diario de la Marina* was consulted until 1960; *Granma* from 1965 through 2002; and *Granma International* from 2003 to 2008.

^{***} San Juan's Spanish-language newspaper, *El Mundo*, was available through 1979; *El Nuevo Dia* was consulted from 1983 to 2003; the English-language, *Star*, was referred to intermittently to compare Spanish references to storms to English.

for faster collection, analysis and translation of these newspapers which granted me the ability to include the preliminary findings in this dissertation.

In addition to material gained from multiple archives including a previously collected database of over 2,000 political cartoons, bumper stickers, posters, and other memorabilia, the decision to use newspapers as my primary source has provided an extremely fruitful basis of study for my dissertation.³¹ Through the newspapers collected I have been able to track a movement of cultural ideas throughout the U.S. as well as how it has spread globally.

From Camille to Katrina: A Road Map of the Dissertation

In addition to this brief introduction, my dissertation includes ten chapters, split into thematic parts. "Part I: Gendering the Wind," traces the introduction of the feminized naming process from initial conception to popular usage. Chapter 1, "Weather is the Nation's Business: Meteorological Titans and the Cult of American Meteorology," introduces the definitive change in U.S. meteorology and meteorological interests during and after World War II. It describes how the fundamental perception of the weather and control of reports about it altered with war and peacetime needs. Postwar, the weather became "the nation's business," and a major focus of meteorological concern drew attention to hurricanes.³² The chapter then describes how U.S. meteorology, like other

³¹ Please see the Chapter 3's subsection, "A Cone of Probability: Researching Moving Targets," for a lengthier explanation of my methodological decisions for this dissertation and examples.

³² Weather Is The Nation's Business: A Report of the Advisory Committee on Weather Services to The Honorable Secretary of Commerce, 1 December 1953, Box 4, General Correspondence of the Weather Bureau, 1951-55, Record Group 130, National Archives at College Park, College Park, Maryland.

American goods, spread throughout the globe taking with it common definitions, practices, and personnel.

Chapter 2, "They Call the Wind Maria: Feminizing the Hurricane," dissects the construction of a gendered hurricane in the context of meteorological and cultural change. In this chapter, I review the history of hurricane naming processes up until the introduction of a U.S. military influenced naming system. Starting with Atlantic explorers and the first translated indigenous documents discussing interaction with hurricanes I move forward through time to the establishment of a federally controlled Weather Bureau in the U.S.³³ I dissect the major questions of how sexless balls of wind became gendered objects through a look at definitions of gender, the environment, and cultural history.

Chapter 3, "From Bad Girls to Bombshells: Sexual Containment, the Hurricane, & the Cold War," discusses the post-World War II shift in America's cultural climate and its larger effect on the global environmental discourse. With strong ties to environmental change, cultural shifts deeply affected the relationship of gender, nature, and America's wars abroad. Expanding on Elaine Tyler May's discussion of the atom bomb and bombshells, my work explains how gendered marketing, sex-segregated expectations, and Cold War tensions all played a role in the gendering of natural forces, particularly hurricanes.³⁴ This chapter then delves deeply into the methodological decisions of the dissertation

³³ See these texts for discussion on early hurricanes in the Caribbean and portrayals of them in European texts: Ralph Bohun, (cited previously); William C. Redfield, *On The Several Hurricanes of the Atlantic, And Their Relation to the Northers of Mexico And Central America With Notices of Other Storms* (New Haven: B. L. Hamlen, 1846); and, Henry Piddington, *Conversations About Hurricanes For The Use Of Plain Sailors* (London, 1853).

³⁴ Elaine Tyler May, (cited previously).

to explain how the statistics for this dissertation were collected before discussing how the official hurricane-naming system was received by the American public.

Chapter 4, "It All Began With Alice: The Bad Girls of '54," examines the introduction of the female-only naming system in popular culture during the first two years of its usage. Reviewing reaction to the system in newspapers, it examines the defense and opposition to the new system throughout the country. Meanwhile, Chapter 5, "Ladies No More: The Changing Image of the Feminized Hurricane," illustrates how the adopted feminized characteristics of a gendered hurricane spun out of control from 1957 to 1969 due to an increase of media coverage and consumption. Built on a system of the iconocization of women and a feminized homefront, threatening hurricanes, much like threatening women working in the postwar era, needed to be "tamed." As a symbol of sexual fear, the hurricane became an avenue for expression against these sexualized, uncontrollable obstacles leering outside a conservatively constructed, maledominated American home. But this feminized "American homefront" was not the only region that was affected by the feminization of hurricanes. I also argue that increasing American domination, both globally and culturally, had a direct impact on the perception of the relationship of nature and gender throughout the globe. The U.S. decision to change the naming process of hurricanes not only affected the U.S., it also affected the Caribbean, Mexico, and Central and Latin America, and eventually, the world. With increased emphasis on larger U.S.-Caribbean diplomatic policy in the post-World War II era, American domination

³⁵ Robert B. Westbrook, "'I Want a Girl, Just Like the Girl That Married Harry James': American Women and the Problem of Political Obligation in World War II," *American Quarterly* 42, no. 4 (December 1990): 587-611.

of weather tracking and forecasting increased. While the U.S. Weather Bureau had been predominantly tracking hurricanes through the Gulf Coast for years prior to WWII, there was a definitive increase in consumption of U.S. Weather Bureau meteorological announcements.³⁶

With technological advancements acquired during WWII, the U.S. Weather Bureau became the preeminent and dictatorial force of meteorology tracking and reporting for the region. As the U.S. dominated the newly formed subset of the United Nations' World Meteorological Organization, the U.S. Weather Bureau's adoption of a gendered naming system subsequently forced implementation of a feminized naming process everywhere.³⁷ In addition to hurricanes, tropical cyclones, typhoons, and other weather fronts soon became named after females as well.

"Part II: The Problem With A Name," shifts the dissertation's focus from one of explaining why the naming system was introduced to what happened after it assumed popular usage. Much like Betty Friedan's concept of a hidden, but evident societal problem, the hurricane, like other sexualized objects in the postwar era became subject to heated debate.

_

³⁶ Works on early U.S.-Caribbean Weather Bureau and meteorological relations: David M. Ludlum, *Early American Hurricanes*, 1492-1870 (Boston: American Meteorological Society, 1963); Oliver L. Fassig, *Hurricanes of the West Indies*, U.S. Weather Bureau Bulletin X (Washington, D.C.: U.S. Government Publications, 1913); Stuart B. Schwartz, "The Hurricane of San Ciriaco: Disaster, Politics, and Society in Puerto Rico, 1899-1901," *The Hispanic American Historical Review* 72, no. 3 (August 1992): 303-334; Sherry Johnson, "El Nino, Environmental Crisis and the Emergence of Alternative Economies in the Hispanic Caribbean in the 1760s-1770s," *William and Mary Quarterly* 62 (July 2005): 65-410; and, Ivan Ray Tannehill, *Hurricanes, their nature and history: particularly those of the West Indies and the southern coasts of the United States* (Princeton: Princeton University Press, 1956).

³⁷ The World Meteorological Organization was founded in 1950 as a specialized agency under the United Nations. The U.S., especially, played a major role in shaping it in terms of hurricane forecasting in the early years.

Chapter 6, "Cease & Desist: Roxcy Bolton Says NOW is the Time for Change," examines the movement towards equal-gendered hurricanes through a specific look at the rise of the Feminist, Ecofeminist and Environmental Chapter six uses a key figure, Roxcy Bolton, to analyze the movements. intersection of the Feminist and Environmental movements. A Southern-bred Feminist hailing from hurricane prone Mississippi and Florida, Bolton took up the case against sexist hurricane names that vilified women through storm descriptions during the 1970s. Arguing that weathermen were sexist in their decision to use only female names, Bolton suggested an equal-gendered hurricane naming system. She even went so far as to propose the name "hurricane" be changed to "himmicane." Bristling with protest, weathermen and reporters everywhere argued for the legitimacy of a feminized hurricane stating that it was really, "no slur on women," and that there was no better system of naming that inspired greater fear than that of an anxious, erratic, scorned woman.39

While Bolton and other feminist debates with weathermen addressed in this chapter are a compelling story by themselves, the larger issues addressed are shifting cultural anxieties about liberated women and the impact on hurricane naming practices. Increased comparisons between the Feminist Movement and the feminized hurricane grew as the 1970s continued. Chapter 7, "It's Raining Men: Juanita Kreps Steps In," explains the progression of this sexualized debate

³⁸ "Hurricanes—no slur on women," *The Irish Times*, May 27, 1971; and, Don McLeod, "Meet the Himmicane: Liberated Wind That Still Blows No Good," *The Times-Picayune*, May 13, 1978.

³⁹ "Female of Species Not More Deadly?" Los Angeles Times, January 21, 1972.

in the media throughout the world. Attributing feminist naysayers to a faction of the "Women's Lib. Storm," weathermen held on to feminized hurricane names as if fighting the Feminist Movement themselves.⁴⁰ The dualistic depictions of the hurricane as similar to the "Women's Lib. Storm," proves that mid- to late-twentieth century hurricanes became a canvas upon which anger at women was thrust, particularly during the Feminist Movement. As part of the global feminist movement, Australia became the first country to switch its female-only naming system for all tropical storms to a male-female system in 1975. While a marked shift from previous naming policy, the Australian decision was directly influenced by previous U.S. feminist protests. Nearly three years later, in 1978, the U.S. Weather Bureau implemented its own equal-gendered, alternating male-female naming system.

In addition to discussing U.S. and Australian naming changes, the chapter examines the progression of the debate over these concerns about "liberating wind" throughout the larger world. I analyze whether other countries expressed similar concerns about feminists, language descriptors of "stormy women" and gender equality, or whether it was predominantly an American (and U.S.-influenced Australian) dispute. I explain how that the equal-gendered hurricane naming practice change implemented in 1978 was no longer a singularly U.S.-based decision like it was in the 1950s. The U.S. Weather Bureau had decided to tentatively change the naming process for storms related to the West Coast, corralling Mexico to do the same. A year later members of the U.S. Weather Bureau formally requested an overhaul of the global naming system through the

⁴⁰ Art Buchwald, "Stormy Women," The Washington Post, April 27, 1972.

World Meteorological Organization. The role the U.S. played in introducing this concept of an equal-gendered hurricane naming system and the "testing" process for it on the West Coast of the U.S. before larger global implementation was another example of continued U.S. domination of meteorological forecasting and gendered cultural description. ⁴¹ Throughout discussion of the shift towards and reaction to this new system the chapter poses questions about just how liberated cultural definitions of gender really are and what types of cultural norms are disseminated through governmental and mass media sources.

Chapter 8, "Misters, Monsters, & Menaces: Introducing Bud," examines the introduction of the male-female naming system past 1978. Dissecting the use of gendered phrases with both male and female-named storms, the chapter argues that use of gender references with storms did not die out after the introduction of male names. In fact, the gender references used illustrate larger shifts in cultural definitions of male and female gender roles at the time.

"Part III: The 21st Century Hurricane," is the final part of the dissertation that examines "present" perceptions of hurricanes in historical context. Chapter 9, "The Storm of the Century of the Week: Media and the Modern Storm," accounts for the growing influence of mass media and a digital age in storm perception and the creation of cultural memory. It takes into account modern news sources, frenzied hype of storms, and the criticism of weather bureau services. In the chapter, I argue that modern media has had a significant impact on the resurgence of a hyper-sexualized identity of storms. This hyper-

 $^{^{\}rm 41}$ "Hurricane Watchers Now Prepare for...Bud, Hector, Sergio," *The Washington Post*, May 13, 1978.

sexualization has led to the creation of very explicit perception of the popular memory of Hurricane Katrina.

The final chapter, Chapter 10, "Katrina You Bitch!: Popular Culture & the Hurricane" examines relevant questions of disaster capitalism, hyper-media coverage of storms, reaction to federal and governmental failures, and post-disaster coping mechanisms. Finally, it reflects on whether reaction to Hurricane Katrina was a singular phenomenon or not.⁴² I explain how New Orleans, specifically, reacted to the storm through the harnessing of Katrina's gender. From calling the storm a "bitch" in addition to describing it as a monster, to printing t-shirts with smoldering sexualized descriptions of a female-named storm giving the "best blow-jobs," the restoration of civic order was framed in very feminine terms.⁴³

How Katrina was perceived on a global scale is the final question of this chapter. I argue that it is easily known that Katrina was referred to as a gendered female storm in other parts of the world. Finally, I reflect on whether the storm was conclusively called a "bitch." I argue that Hurricane Katrina is evidence of persistent dissemination and consumption of gendered American descriptions of hurricanes throughout the world in the Twenty-First Century, over half a century after initial introduction.

⁴² Naomi Klein, *The Shock Doctrine: The Rise of Disaster Capitalism* (New York: Picador, 2008).

⁴³ "Katrina Gave Me A Blow Job I'll Never Forget," T-shirt, As seen by author on Bourbon Street, New Orleans, LA, August 20, 2007.

PART I GENDERING THE WIND

CHAPTER 1

WEATHER IS THE NATION'S BUSINESS:

METEOROLOGICAL TITANS & THE CULT OF AMERICAN METEOROLOGY

Tucked in the correspondence files for Record Group 130 at the National Archives at College Park is a printed pamphlet with the title, "Weather Is The Nation's Business." At first glance it appears as another annual government publication justifying the need for a governmental organization. However, this document is anything but ordinary. A published report of the Advisory Committee on Weather Services to the Secretary of Commerce dated December 1, 1953, "Weather Is The Nation's Business" reviews the changes in American meteorology from the 1890s to 1953. Within its pages are definitions of the "current" state of the National Weather Service's budget, personnel, practices of observations, instruments used, climatology forecasting and communications services, and the evolving nature of research and development in both the private and public fields of meteorology.

The report's purpose was to offer a list of suggestions for the future and to reflect on the growing public demand for American meteorology. Yet the underlying sentiment portrayed throughout the report is not one of unadulterated excitement about these new fields of study and increased demand

_

¹ "Weather Is The Nation's Business: The Report of the Department of Commerce Advisory Committee on Weather Services to The Honorable Secretary of Commerce," (Washington: U.S. Government Printing Office, 1953); henceforth referred to as WITNB.

for services. Instead, the report's tone is one of concern over the future of the Weather Bureau and its responsibilities during the dramatically shifting culture of the post-World War II era.

When reviewing the report, immediate questions arise over what radical shifts have set this report's construction in motion. Why, nearly a decade postwar did this report come out? What "shifting demands" made weather, and reports about it, "the nation's business" in 1953? And, most importantly for this dissertation, why does this matter in the history of hurricane naming? To answer these questions, it is necessary to do as notable historian U. B. Phillips aptly stated and, "begin by discussing the weather" – or the study of it.² By examining the origins and rise of the U.S. Weather Bureau it is possible to see how it became an important aspect of U.S. imperialism influencing the definitions of weather, particularly hurricanes, throughout the world.

A HISTORY OF AMERICAN METEOROLOGY

It is in this last twenty years there has been the birth of a new profession — the profession of meteorology — in private practice, in the Armed Services, and in other civilian agencies of the government, such as Soil Conservation, Reclamation, Flood Control, etc. — "Weather Is The Nation's Business," 1953³

From a farmer documenting rainfall to official recording of storms that have passed through, interest in the weather has existed for centuries. However,

² It should be noted that U. B. Phillips was discussing the weather in the South as a distinctive factor in its historical uniqueness, thus I use this phrase loosely here. Ulrich Bonnell Phillips, *Life and Labor in the Old South* (Boston: Little, Brown, & Co., 1929) 3.

³ WITNB, 1.

the control of weather services from governmental and private agencies can be viewed as evolving in two primary ways. First, evolution of weather reporting and control can be traced through development of governmental organization. Second, it can serve as a reflective mechanism of cultural and scientific change.

The introduction of the telegraph in the 19th century directly impacted the organization and development of professional meteorology. Controlled by the Smithsonian Institution from 1849 on, the telegraph allowed for quick relaying of messages throughout the U.S. about everything from temperatures to storms in different regions. With funding for standardized weather instruments provided by the Smithsonian, the creation of a weather-reporting network was soon realized. As explained in the initial report for the support of meteorological use of the telegraph, "the citizens of the United States [were] now scattered over every part of the southern and western portions of North America," thus, "the extended lines of the telegraph [would] furnish a ready means of warning the northern and eastern observers to be on watch for the first appearance of an advancing storm." As a result, these telegraph lines would, "solv[e] the problem of American storms."

As described in "Weather Is The Nation's Business," the introduction of synoptic meteorology (i.e., the telegraph) was revolutionary. Because of the

^{4 &}quot;Summary prepared for the section of history, World's Congress of Meteorology, Chicago 1893," as seen in, Smithsonian Institution, Board of Regents, "The Meteorological Work of the Smithsonian Institution," *Annual Report of the Board of Regents Showing the Operations, Expenditures, and Condition of the Institution* (Washington: Government Printing Office, 1893) 89-93, United States National Museum, last accessed through Google Books on October 4, 2012, http://books.google.com/books?id=tnjfe4vEBGwC&pg=PA639&hl=en#v=onepage&q&f=false.

⁵ Ibid, 89.

⁶ Ibid, 89.

telegraph, "for the first time it became practicable to collect reports of the current weather over a wide area." Most importantly, it was possible "to see that weather is more than a local phenomenon," and instead, affects the nation at large. Between the 1840s and 1860s, a network of unofficial weather observers grew. By 1860, over 500 stations reported regularly to the *Washington Evening Star*, with daily weather observations to be compiled and printed. However, this unofficial weather network stalled during the Civil War.

On a governmental level, as historian James Rodger Fleming argues, the control of the weather had always been yearned for by powerful entities for militaristic purposes.¹⁰ Fleming argues that the U.S., a developing powerful entity, was no different. By the Civil War, ideas about the importance of organized weather reports were recognized as reports about the effect of gunpowder and rain circulated. It was well known that weather affected battles, but the potential to use it as a military tactic was a new theory that escalated interest in developing meteorology for militaristic purposes.

While Fleming's argument is correct in explaining the reason behind initial interest in controlling the weather for military purposes, it misses out on a crucial contextual element. Physical control of the weather was not the only way governments sought to dominate it. Control of information about the weather including the documentation, transmittance of reports, and recording of past

⁷ WITNB, 33.

⁸ WITNB, 33.

⁹ "Evolution of the National Weather Service Timeline," NOAA Online, last accessed August 25, 2012, http://www.nws.noaa.gov/pa/history/timeline.php.

¹⁰ James Rodger Fleming, *Fixing the Sky: The Checkered History of Weather and Climate Control* (New York: Columbia University Press, 2010).

incidents, had just as much impact, if not more. How the U.S., as governing body, sought to control the weather through organized effort and in which time periods major change in weather reporting control occurred illustrates a larger perspective on interest in global influence and broader U.S. culture.

As a direct result of the increasing significance of controlled weather tracking post-Civil War, a joint Congressional resolution was passed into law in 1870 under President Ulysses S. Grant.¹¹ The resolution set up a division of national weather service within the U.S. Army Signal Service's Division of Telegrams and Reports for the Benefit of Commerce. In a report issued in 1871, the U.S. Signal Corps specified new standardized methods of weather reporting and signaling that would be implemented for all 55 stations in 12 regions controlled by the national weather service.¹² It also included a provision for standardized, "cautionary signaling," or the waving of a red flag with a black square by day and red light by night, warning of bad weather.¹³

U.S. weather reporting responsibilities changed yet again with the passage of the Organic Act of 1890.¹⁴ At the request of President Benjamin Harrison the weather service was transferred from Signal Corps jurisdiction to the newly formed U.S. Weather Bureau under the Department of Agriculture. This officially established a separate and fully funded weather service whose responsibilities

¹¹ WITNB, 8.

[&]quot; WIIND, o

¹² War Department, "Practical Use of Meteorological Reports and Weather Maps," Office of the Chief Signal Officer, Division of Telegrams and Reports for the Benefit of Commerce, (Washington: R. Beresford Printer, 1871) 9-10, last accessed through National Archives Open Library on October 3, 2012, http://openlibrary.org/books/OL23453755M/The_Practical_Use_of_Meteorological_Reports_and_Weather_Maps.

¹³ War Department, 65-71

¹⁴ Organic Act of 1890, as discussed in WITNB, 2.

were recognized as important to national and international needs. As specified under the act, the U.S. Weather Bureau was now responsible for:

the forecasting of weather, the issue of storm warnings, the display of weather and flood signals for the benefit of agriculture, commerce, and navigation, the gauging and reporting of rivers, the maintenance and operation of sea-coast telegraph lines and the collection and transmission of marine intelligence for the benefit of commerce and navigation, the reporting of temperature and rainfall conditions for the cotton states, the display of frost and cold wave signals, distribution of meteorological information in the interest of agriculture and commerce, and the taking of such meteorological observations as maybe necessary to establish and record the climate conditions of the United States, or as are essential for the proper execution of foregoing duties.¹⁵

When the U.S. branched out during the Spanish-American and Philippine-American Wars in the late 1890s and early 1900s, President William McKinley ordered the U.S. Weather Bureau to establish a specified hurricane-warning network in the West Indies in 1898.¹⁶ With the establishment of weather stations in Cuba, Hawaii, and the Philippines, the U.S. system of weather prediction spread along with U.S. imperial interests. However, while this investment in the new territories was monumental, it was hindered by limited staffing and slow technological communications.¹⁷

¹⁵ WITNB, 49.

 $^{^{\}rm 16}$ "Evolution of the National Weather Service Timeline," <code>http://www.nws.noaa.gov/pa/history/timeline.php.</code>

¹⁷ Works on early U.S.-Caribbean Weather Bureau and meteorological relations: David M. Ludlum, *Early American Hurricanes*, 1492-1870 (Boston: American Meteorological Society, 1963); Oliver L. Fassig, *Hurricanes of the West Indies*, U.S. Weather Bureau Bulletin X (Washington: U.S. Government Publications, 1913); Stuart B. Schwartz, "The Hurricane of San Ciriaco: Disaster, Politics, and Society in Puerto Rico, 1899-1901." *The Hispanic American Historical Review*. Vol. 72, No. 3 (August 1992): 303-334; Sherry Johnson, "El Nino, Environmental Crisis and the Emergence of Alternative Economies in the Hispanic Caribbean in the 1760s-1770s," *William and Mary Quarterly* (July 2005): 365-410; and, Ivan Ray Tannehill, *Hurricanes, their Nature and History: Particularly those of the West Indies and the Southern Coasts of the United States* (Princeton: Princeton University Press, 1956).

By the 1900 Galveston Storm, the U.S. system of weather reporting and tracking by telegraph was well established, but limited. As a result, reports of storms and their effects often had extreme lag time, especially coming from areas devastated by disaster. Similarly, weather reports were often limited to short-range forecasting, as long-range prediction techniques did not exist. In the 1920s and 30s, subsequent problems with massive river flooding, drought and soil exhaustion issues, combined with a slew of technological advancements in modern aviation forced the public to focus on the necessity of a more modernized and better-funded meteorological organization. In 1936, a Hurricane Warning Service was established in Jacksonville, Florida, in a direct attempt to avert disasters such as the Labor Day Storm of 1935.

_

¹⁸ Patricia Bellis Bixel and Elizabeth Hayes Turner discuss the problem of reporting storm damage from Galveston, Texas, after the 1900 Galveston Storm. Patricia Bellis Bixel and Elizabeth Hayes Turner, *Galveston and the 1900 Storm* (Austin: University of Texas Press, 2000).

¹⁹ Several storms drew attention to the necessity of weather reporting during the period of the 1890s through 1940s. They include: the Hurricane of October 1893, that cost several thousand lives when it passed west of Mississippi Passes; the 1900 Galveston Storm in which 6-8000 lives were lost; the September 1915 New Orleans storm; the 1919 Corpus Christi storm that came with severe flooding; the 1933 Brownsville, Texas, storm which was noted as especially severe; and the 1935 Labor Day Storm that devastated the Florida Keys, drowning hundreds. These storms were discussed in, "Hurricane Plan 1942," Office, District Coast Guard Officer, Eight Naval District, New Orleans, Louisiana, April 24, 1942, in "Hurricane Warning Service 1942," Record Group 130, National Archives at College Park, College Park, Maryland. For an example of problems with river flooding see, John Barry, Rising Tide: The Great Mississippi Flood of 1927 and How It Changed America (New York: Simon & Schuster, 1997); and, Marlene Harvey Wilmot, Bluff-to-Bluff: The 1935 Republican Valley Flood (Greeley: Wilmot Ventures, 1995). Discussion on soil exhaustion and the subsequent Dust Bowl can be found in: Albert Cowdrey, This Land, This South: An Environmental History (Lexington: University Press of Kentucky, 1995); Donald Worster, Dust Bowl: The Southern Plains in the 1930s (Oxford: Oxford University Press, 2004); and, Pete Daniels, Breaking the Land: The Transformation of Cotton, Tobacco, and Rice Cultures Since 1880 (Champaign: University of Illinois Press, 1986). Finally, for more on civil aviation advancements see: Roger Bilstein, Flight in America: From the Wrights to the Astronauts, 3rd edition (Baltimore: Johns Hopkins University Press, 2001).

²⁰ "Special Appropriation provision (1936) for Hurricane Warning Service; teletype circuit connecting points on the Gulf—Florida to Texas," in C. C. Clark to Chief of Bureau, "Basic Laws Pertaining to Weather Bureau Hurricane Warning Service," May 11, 1944, General Correspondence of the Weather Bureau, 1942-45, Record Group 130, National Archives at College Park, College Park, Maryland.

However, hurricanes were not the only focal point of meteorological interest. As described in "Weather is the Nation's Business," a new "scientific method of meteorological analysis known as air mass analysis was being adopted by meteorologists throughout the world."²¹ While the U.S. participated in these new meteorological standards, U.S. meteorology lagged behind other countries. In 1940, in an attempt to refocus energy, the Weather Bureau was transferred from the Department of Agriculture to the Department of Commerce under the Reorganization Plan No. IV.²² This transfer, according to "Weather is the Nation's Business," "recognized that the role of the Weather Bureau in the general economic life of the nation required great emphasis in non-agricultural fields," particularly in civil aviation.²³

On December 7, 1941, the bombing of Pearl Harbor, Hawaii, not only shifted the U.S. from a position of isolationist democracy, but firmly confirmed the U.S. extensive revision on the position of isolationist meteorology. While the U.S. had always been a part of world meteorological organizations like the International Meteorological Organization, its position was dramatically altered during World War II. With the advent of massive mobilization during the war, the U.S. went from being meteorological followers to leaders, soon dominating the sphere of global meteorology.

²¹ WITNB, 8.

²² "Reorganization Plan No. IV of 1940," 5 F.R. 2223, 54 Stat. 1238, by act June 4, 1940, ch. 231, §1, 54 Stat. 230.

²³ WITNB, 9.

THE END OF ISOLATIONISM: METEOROLOGY DURING WORLD WAR II

As the largest mobilization of people and organizations in U.S. history, U.S. meteorological interests at home and at war altered drastically between 1941 and 1945. After the bombing of Pearl Harbor, the increased importance of the Pacific Theater brought the war "home." On December 26, 1941, Executive Order No. 8991, was issued, "providing for coordination of meteorological facilities in the prosecution of the war."²⁴ The vulnerability of both troops at sea and the public in Western U.S. coastal cities made a convincing argument for increased meteorological control and weather reporting.

A major change that occurred during WWII was the reorganization of Weather Bureau services and personnel. Consolidated under a joint Army-Navy task force, the overall system of weather reporting and its focus shifted.²⁵ No longer focused primarily on weather reporting for U.S. mainland and territory areas, the attention of weather reporting turned from day-to-day agricultural and homeland to long-range and militaristic forecasting. In fact, all major weather reports throughout the country were soon censored, causing radio silence on all weather reporting to help prevent enemy knowledge of potentially dangerous systems that would put the U.S. at a disadvantage and vulnerable to attack.²⁶

As the Pacific Theater became a crucial battleground, the importance of combating meteorological risks that confronted military forces at sea was

²⁴ "Thirtieth Annual Report of the Secretary of Commerce, 1942," Box 3, General Correspondence of the Weather Bureau, 1942-45, Record Group 130, National Archives at College Park, College Park, Maryland, henceforth referred to as "Annual Report 1942."

²⁵ Ibid.

²⁶ Ibid.

underscored. Focus of this new attention soon turned to the forecasting of large storm systems, and more particularly, hurricanes and tropical cyclones that affected troops and personnel in the theater.

Due to mobilization efforts, the number of Weather Bureau personnel during the war grew exponentially. From 1942 to 1945, the number of Weather Bureau employees grew by 14 percent, with 5,000 new employees (See Table 4). While a majority of individuals left the Weather Bureau to commission directly into the military during the war, the Weather Bureau made sure to note in its records the number of unpaid or volunteer workers that helped report on weather throughout the country. The increased number of volunteers directly related to an increase in emphasis on weather related services and the importance of accurate reporting during the war.

TABLE 4. Number of U.S. Weather Bureau employees, 1942 – 1945

Year	Number employed	Employment status *
1942	11,716 3,927	Paid
	7,789	Unpaid/volunteer
1943	11,702 3,877 7,825	Paid Unpaid/volunteer
1944	16,888 564 5,385 2,795 10,142	Departmental employees Full-time field employees Part-time field employees Unpaid cooperators
1945	≥ 16,914 426 9,789	Commissioned personnel Cooperators & part-time

Sources: "Annual Report," 1942, 1943, 1944, and 1945, (cited previously); "Annual Report," 1946, 1947, 1948, and 1949, Box 4, General Correspondence of the Weather Bureau, 1946-50, Record Group 130, National Archives at College Park, College Park, Maryland; and, "Annual Report," 1950-1951, Box 6, General Correspondence of the Weather Bureau, 1951-1955, Record Group 130, National Archives at College Park, College Park, Maryland.

In addition to unspecified employees and volunteers, the Weather Bureau specifically sought out women workers during the war to fill holes in its paid employee positions. In 1942, realizing the number of employees commissioning, the Weather Bureau issued a call to women workers stating that, "although there has been much prejudice against and few precedents for employing women generally for professional work in meteorology," the Weather Bureau was now

^{*} Position listed in some reports, not in others.

^{**} No information on this figure was provided in the Annual Report for this year.

^{***} This date range is calculated from information in the Annual Reports from the preceding and subsequent years.

welcoming all applications. As proposed in the announcement, these jobs would be, "an opportunity to join the vanguard of the many women who [would] find careers in meteorology," in the future.²⁷ In response to this call for women workers, between 1941 and 1945 the number of documented women working in meteorology positions increased from 2 to nearly 2,000. (See Table 5)

TABLE 5. Number of women employed by the U.S. Weather Bureau during WWII

Year	Number employed	Position *
1941	2	Observation and forecast
1942	2	Observation and forecast
1943	650	
1944	1,000	Sub-professional observer
1945	1,074 - 2,074 **	

Sources: "Annual Report," 1942, 1943, 1944, and 1945, Box 3, General Correspondence of the Weather Bureau, 1942-45, Record Group 130, National Archives at College Park, College Park, Maryland.

Female meteorology positions often included junior observers or clerical work. Due to this, new female employees did experience training in meteorological techniques and measurement systems.

^{*} Position listed in some reports, not in others.

^{**} This date range is calculated from the Annual Report for 1945. It states that there were 1,074 new female employees hired during the fiscal year, but does not state whether the existing 1,000 female employees were retained or relieved of their position.

²⁷ "Opportunity For Women In Meteorological Work," 1942 Announcement, Weather Bureau as cited by: "Women in the Weather Bureau During World War II," NOAA History: A Science Odyssey, Last updated June 8, 2006, http://www.history.noaa.gov/stories_tales/women6.html.



Regional Office observation training class. "Women in the Weather Bureau During World War II," NOAA History: A Science Odyssey, Last updated June 8, 2006, http://www.history.noaa.gov/stories_tales/women6.html.

Much like Rosie the Riveter and Wendy the Welder, the female meteorologist became a notable female war character.



Weather women plotting weather maps, St. Louis, Missouri, 1945. "Women in the Weather Bureau During World War II," NOAA History: A Science Odyssey, Last updated June 8, 2006, http://www.history.noaa.gov/stories_tales/women6.html.

Overall, this expansion in meteorological personnel, both male and female, inevitably created a larger network of weather informants. Coupled with increasing importance placed on standardization of weather tracking, the training of all personnel during the war escalated. As a result, many male employees received graduate-level training in their fields.

Throughout the war, major technological advancements in meteorological science took place as emphasis on weather reporting continued to increase. Along with the introduction of radar systems, new standards of weather reporting were applied. Primarily due to the military influence, codes, cyphers, and designations of broad weather tracking networks impacted the way weather reporting was structured.²⁸ With increased interest in weather reporting, the potential to use dangerous storms and prediction of them as "natural" weapons was soon suggested.²⁹ The idea was that a storm could be controlled not only through prediction, it could also be potentially controlled in its movement. However, technologically, the U.S. was not advanced enough during the war to attempt any major experimentation.

By the end of the war, the Weather Bureau as it had existed before the war was significantly altered. As a mobilized force, weather services were better organized, funded, and physically staffed than ever before. With major "wins" in forecasting battle circumstances such as the invasion of Normandy in 1944,

²⁸ For an example of codes and cyphers used during war see: "Hurricane Warning Service—1942—Folder #2, TROPAD Code," General Correspondence of the Weather Bureau, 1942-45, Record Group 130, National Archives at College Park, College Park, Maryland.

_

²⁹ Fleming, Chapters 4 & 5.

which was predicated by accurate prediction of wind and tide position, at the close of the war, the Weather Bureau was lauded for its achievements.³⁰

AFTER THE WAR: THE SPREAD OF U.S. METEOROLOGY

With the end of World War II, the Weather Bureau faced similar problems of demobilization as other wartime organizations. Questions of how weather reporting would be refocused from wartime censorship to peacetime needs arose. However, practices of standardization of weather reporting were quickly carried over into the postwar era.

With the lifting of censorship bans in 1944, the number of Weather Bureau publications quickly surpassed pre-war standards.³¹ As a result, weather related articles, maps, and other material permeated nearly every facet American culture in the postwar era. Similarly, the demand for weather services like reporting and daily forecasting increased dramatically.

For example, major newspapers in select cities like New York City, Newark, and Providence began publication of daily weather charts produced by the U.S. Weather Bureau.³² These charts, transmitted through wirephoto, were a first for the Weather Bureau, showcasing the daily weather forecast in particular regions as well as around the U.S. Due to the popularity of the daily weather charts, by

³⁰ Harold A. Winters, et. al., *Battling the Elements: Weather and Terrain in the Conduct of War* (Baltimore: Johns Hopkins Press, 1998).

³¹ "Restrictions were relaxed on November 1, 1944," according to Weather Bureau reports. "Annual Report, 1944," 10.

^{32 &}quot;Annual Report, 1944," 10.

June 1944 requests were received by a growing number of other newspapers.³³ By 1945, nearly every daily newspaper began printing weather information on the front page. At the same time, the Weather Bureau provided weather forecasts 4 or 6 times daily for 700 to 800 radio broadcasting stations throughout the country. Two years later in 1947, it was noted that over 157 commercial radio stations were broadcasting live directly from Weather Bureau offices.³⁴ The Weather Bureau also set up an automatic telephone service in major cities, which received over 250,000 calls per day during bad weather conditions. As succinctly stated the Weather Bureau, "through its forecasting services probably touches directly the immediate needs of more people of the United States than do all other federal services combined, with the single except of the Post Office."³⁵

Despite this demand for weather services, the Weather Bureau faced an enormous problem in the post-World War II era – the development of the field of private meteorology.³⁶ As a public service, the Weather Bureau had a hard time retaining its workers as the private meteorology field developed.³⁷ During the period immediately following the war, demands increased while workers decreased. The Weather Bureau, recognizing this problem, began to focus on

^{33 &}quot;Annual Report, 1944," 10.

³⁴ "Annual Report, 1947," 2.

 $^{^{35}}$ F. W. Reichelderfer, Letter to The Undersecretary, "Use of the Weather Bureau's Output," July 25, 1945, in General Correspondence of the Weather Bureau, 1942-45, Record Group 130, National Archives at College Park, College Park, Maryland.

³⁶ "Material for Karl Stefan on Weather Service In Relation to Post-War Problems," General Correspondence of the Weather Bureau, 1942-45, Record Group 130, National Archives at College Park, College Park, Maryland.

³⁷ As described in the "Annual Report of 1944," Weather Bureau, "recruitment and training have been a major problem, and turnover in personnel has been large incident to release of employees for military service." "Annual Report, 1944," 1. Also discussed as a continuing issue in WITNB, 38.

recruitment. By the mid-1950s, they had surpassed employment statistics for the peak of WWII (See Table 6).

TABLE 6. Number of U.S. Weather Bureau employees, 1945 - 1951

Year	Number employed	Employment status *
	_	
1945	≥ 16,914	
	426	Commissioned personnel
	9,789	Cooperators & part-time
1946	14,748	
	4,243	Full-time
	3,069	Part-time
	7,436	Unpaid cooperative observer
1047	16 666	
1947	15,555 4,744	Full-time
	3,065	Part-time
	7,746	Unpaid cooperative observer
	/	Chpara cooperative observer
1948	<u>></u> 15,555 **	
1949	14,766 – 16,061 ***	
	3,176	Paid cooperative observer
	6,576	Unpaid cooperative observer
1950	16,333	
	4,521	Full-time
	3,372	Part-time
	8,440	Cooperative observer
1951	16,346	
	4,516	Full-time
	3,380	Part-time
	8,450	Cooperative observer

Sources: "Annual Report," 1945, (cited previously); "Annual Report," 1946, 1947, 1948, 1949, and 1950, Box 4, General Correspondence of the Weather Bureau, 1946-50, Record Group 130, National Archives at College Park, College Park, Maryland; and, "Annual Report," 1950-1951, Box 6, General Correspondence of the Weather Bureau, 1951-1955, Record Group 130, National Archives at College Park, College Park, Maryland.

^{*} Position listed in some reports, not in others.

^{**} No information on this figure was provided in the Annual Report for this year.

^{***} This date range is calculated from information in the Annual Reports from the preceding and subsequent years.

To help assuage these increasing demands, the Weather Bureau began programs to train personnel in Latin America and the Caribbean. The Latin-American Training Program begun during World War II and held in Colombia and New Orleans, eventually trained over 400 weather reporters using American meteorological textbooks and terminology.³⁸ In addition to Caribbean and Central and Latin American training programs, the U.S. trained personnel in other parts of the world, as well.³⁹ For instance, in the Philippines, the U.S. set up several new weather stations, provided meteorological supplies, and trained and oversaw observers. This training, along with other attempts at reinvigorating U.S. control over meteorology in these regions, led to the standardization and spread of American meteorological terms and weather reporting practices.

As showcased in an image from a scrapbook of U.S. Weather Bureau operations in Manila, the Philippines, following World War II, weather officials are shown standing in front of a Weather Bureau station. Using a balloon to take air measurements, the equipment, techniques, and even structural facility are U.S.-influenced and physically provided.

³⁸ "Annual Report," 1942, 1943, 1944, and 1945 (cited previously).

³⁹ "Un Proposed Establishment of a Radiosonde Station Un Guadalupe Island," Mexican Meteorological Project File, General Correspondence of the Weather Bureau, 1946-50, Record Group 130, National Archives at College Park, College Park, Maryland; and, "Brief History of Mexican Meteorology Service, 1949," General Correspondence of the Weather Bureau, 1946-50, Record Group 130, National Archives at College Park, College Park, Maryland.



Weather Bureau Station in The Philippines, 1947, "U.S. Weather Bureau, Manila," Pg. 30, General Correspondence of the Weather Bureau, 1946-50, Record Group 130, National Archives at College Park, College Park Maryland.

However, this was not the only photograph taken of U.S.-influenced meteorological stations. Several pictures of facilities in various regions throughout the world mimic these qualities.

"THE PUBLIC STORM PERIOD"

Historian Raymond Arsenault has suggested that a pivotal shift in how Americans (and others) understood and discussed the weather occurred after World War II. Arsenault explains this as the shift from the "private storm period" to the "public storm period." Developing this concept further, he states that Americans before World War II experienced and discussed storms in "private" because technology available for weather prediction and discussion was limited to a select few or regional restriction. After World War II, with the advent of

modern technology and increased emphasis on nation-wide weather reporting, the "private storm" experience was replaced with a "public storm" one.⁴⁰

When combining Raymond Arsenault's theory of a shift from the private to public storm period with James Rodger Fleming's explanation of the interest in meteorology for militaristic purposes, it is possible to contextualize the development of the Weather Bureau in the 1950s. By 1951, the U.S. Weather Service was established as an official government organization, not as a subsidiary of an existing military force. This move to an independent organization recognized the increasing appreciation for weather reporting throughout the U.S. Part of this appreciation was influenced by the expanding recognition of weathermen's reports and the intensifying desire to predict and warn of impending storms. 41

Similarly, the technology used by weathermen allowed them to predict oncoming storms with much more precision than previous forecasts. Emphasis on hurricanes and the ability to report preemptively about them changed enormously with the introduction and use of hurricane tracking planes. ⁴² By the late 1940s, the U.S. had established the "Hurricane Hunters," a branch of the

⁴⁰ Raymond Arsenault, "The Public Storm: Hurricanes and the State in 20th Century America," in Wendy Gamber, Michael Grossberg, and Hendrik Hartog, eds., *American Public Life and the Historical Imagination* (South Bend: University of Notre Dame Press, 2003) 262-292.

⁴¹ Mark DeMaria, "A History of Hurricane Forecasting for the Atlantic Basin, 1920-1995," *Historical Essays on Meteorology, 1919-1995*, Ed. by James Rodger Fleming (Boston: American Meteorological Society, 1996) 263-306.

⁴² Roy Leep, "The American Meteorological Society and the Development of Broadcast Meteorology," *Historical Essays on Meteorology*, 1919-1995, Ed. by James Rodger Fleming (Boston: American Meteorological Society, 1996) 481-507.

Weather Bureau devoted completely to tracking hurricanes and reporting statistics.⁴³

In 1947, hurricane hunting also came to represent political domination. The implementation of Project Cirrus was the first attempt at modifying hurricanes. It was suggested that by dropping dry ice into the hurricane's eye it might lessen the effects of a storm in the hopes of using it as a weapon. Tested on Hurricane King in 1947, the project was heralded as momentous first attempt at hurricane modification.⁴⁴ However, the resulting effects were detrimental. The altered Hurricane King changed direction after modification and hit Savannah, Georgia, producing massive rainfall. Protest of the project through lawsuits quickly ended it.⁴⁵

At the same time as a shift in meteorological policy and organization was taking place, a change in the delivery of information about the weather occurred. With the spread of new media, the "weatherman" became a recognizable figure in American life. While newspapers had consistently printed weather reports and predictions for years from regionally known weathermen, the television brought weather prediction into a new realm.

Because of censorship during World War II, the American public had been starved of all weather reporting during the war. When restrictions were lifted after the war, there was a definitive increase in demand for any and all reports. Weather had always been a part of Americans' lives, but with daily newspaper

⁴³ Ivan Ray Tannehill, *The Hurricane Hunters* (New York: Dodd Mead, 1955).

⁴⁴ Fleming, 177-179.

⁴⁵ Bob Sheets and Jack Williams, *Hurricane Watch: Forecasting the Deadliest Storms on Earth* (New York: Vintage Books, 2001).

reports, prediction possibilities turned weather reporting into a glorified sport. The weather reporter, himself, also became a focus of attention. Because of this increased exposure to meteorologists in general, a cult of meteorology developed. Quickly becoming meteorological titans with their chalkboards and weather maps, weathermen became "favorites" of local and national newscasts, often judged for their predictions, but rarely for their rhetoric.



P. J. "Hawf" Hoffstrom, delivered weather reports on KSTP for St. Paul, Minnesota, from the "Weather Tower," starting in 1948. "Television Weather," Exhibit, Minnesota Historical Society Online, last accessed on October 1, 2012, http://www.mnhs.org/exhibits/weather/section5.htm.

The television, in addition to newspapers, as a medium of communication, significantly affected the way Americans thought and talked about the weather, particularly hurricanes. While often jovial in everyday reporting, like the spots for the "Weather Man" that appeared throughout the country, other weather reporting was given serious attention.



"Weather Man," Produced by Miami, Florida, company, Soundac, in the 1950s, for television spots throughout the U.S. Discussed in "Weather on the Air: Exploring the History of Broadcast Meteorology," blog, posted March 25, 2010, http://weatherontheair.com/2010/03/25/who-else—but-the-weatherman/.

With the ability to see a meteorologist tracking a hurricane on a graph, live on the television, in addition to written tirades in newspapers, Americans became fascinated with meteorology. Like a great sports game, they watched their TVs with extreme attention, waiting for the next play-by-play handed to them by weathermen. Along with the introduction of new organization controlling weather reports, a standardization of weather reporting was spearheaded by figures such as the chief meteorologist for the National Weather Service, Grady Norton.

Yet, as explained in "Weather Is The Nation's Business," with the popularity of weather services sky-rocketing in the postwar era, the demand for private meteorology also increased. While the field of private meteorology had been developing slowly with modern aviation concerns, the postwar surge in demand was directly linked to the increased demand for weather services in television and other media reporting. This field, however, was problematic for

the Weather Bureau as it was harder to regulate the weather reporting done by private organizations.

THE CULT OF AMERICAN METEOROLOGY

Because of all of this, consumption of weather reports, particularly on hurricanes, effectively changed not only in the U.S. but elsewhere, as well. After increased efforts to bolster meteorological might, the U.S. Weather Bureau became the predominant source of weather reporting in the Western Hemisphere. Like other American consumer goods throughout the globe, American weather descriptions became a product. This product, commodified, represented American perception of hurricanes, including the ways hurricanes were described and discussed. The investment in the spread of commodified weather descriptions went hand in hand with the belief that domination politically equaled control culturally.

In addition to impacting stateside weather reporting, the U.S. began dominating news reporting about weather in other parts of the world. In the Caribbean and Central and Latin America, daily weather reporting was often an adaptation of U.S. issued weather reports or often times a direct copy of the reports. As such, any descriptions given by U.S. meteorologists were often copied in other reports.

Described in "Weather Is The Nation's Business," the Weather Bureau, "because of its thoroughness, extent and progressiveness is looked to as the representative of the United States for world leadership in the meteorological field." In fact, "although several of the other larger countries are viewed in the

same manner most of the Nations in the Western Hemisphere place considerable emphasis on the decisions and actions of the Weather Bureau especially as they may relate to international activities."⁴⁶

This system of direct cultural transference was a form of unofficial ecological imperialism, as forms of weather reporting throughout the world shifted towards a more mechanized system that was dominated by U.S. sources. For the importance of this dissertation, this cultural transference can most easily be seen in the linguistic descriptions that were used when describing hurricanes and other natural forces. The effect of this system would be seen for years to come.

WEATHER IS THE NATION'S BUSINESS

By the time the U.S. Weather Bureau published its 1953 report, "Weather Is The Nation's Business," dramatic changes in the way weather was discussed and documented had swept throughout the U.S. and other countries that based their meteorological descriptions on U.S. weather reports. With increased technology, media outlets for discussion, and a cult-like group of followers who raptly waited for the next major report to be issued or simply watched it via their nightly televised news forecast, weather in the U.S. had truly become the nation's business. How this culture of meteorology would shape or be impacted by the post-World War II era, though, was still to be fully determined.

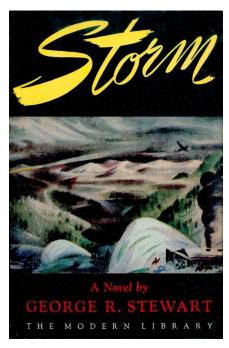
__

⁴⁶ WITNB, 55.

Throughout the pages of "Weather Is The Nation's Business," it is obvious that the Weather Bureau was nervous about the massive changes that had occurred. The demand for weather services, field of private meteorology, loss of personnel, and seemingly uncontrollable standardization issues had created enormous pressure. Yet, the final conclusion reached by the report was to suggest sweeping and specific changes to Weather Bureau structures and functions. "In a highly commendable effort to do all things for all men, the Weather Bureau sometimes loses sight of the point where government should stop in providing specialized service," it stated. Instead, "a redefinition of the functions of the National Weather Service must be made." The solution — to act more like a governing body for private meteorology — regulating, overseeing, and standardizing the discussion of weather services. The only thing that would remain solely in the Weather Bureau's hands would be the "issuance of severe storm warnings endangering life or widespread damage to property," including the identification and naming of storms, particularly that of the hurricane.⁴⁷ Over time, this power would play a significant role in constructing and spreading the raging figure of the feminized hurricane globally.

47 WITNB, 2.

CHAPTER 2 THEY CALL THE WIND MARIA: FEMINIZING THE HURRICANE



Storm, George R. Stewart, The Modern Library, 1941.1

"The characters of this book — including Maria — are imaginary," states the copyright page of George Rippey Stewart's 1941 novel, *Storm*.² With that peculiar notation in the front of the book, Stewart's *Storm*, about a California-bound hurricane named Maria, quickly became a sensation. Within the first year

¹ George Rippey Stewart, *Storm* (New York: The Modern Library, 1947) cover.

² Stewart, Storm (New York: Random House, 1941).

of its publication, the book became a bestseller and was swiftly assigned to "book-of-the-month" clubs throughout the U.S.³

With a book tour planned and what was quickly becoming a blockbuster, Stewart, a University of California-Berkeley English professor, was set to have it all in November 1941. But on December 7, 1941, Pearl Harbor was bombed, effectively setting off U.S. entry into World War II. What could have been a crushing blow to the promising literary classic only increased its sales as the U.S. entered the Pacific Theater and labeled storms after the book's proposed female-only naming system during the war. Consequently, following the war, *Storm* was republished by two leading publishing houses, The Modern Library and Penguin, eventually selling millions of copies worldwide. *Storm* remains the preeminent novel about a hurricane today.

When reviewing *Storm* in the popular press, the immediate question arises over why a book about an imaginary hurricane named Maria became a national bestseller. The simple answer is that Storm was published at a critical moment in history when the naming of storms became a military necessity. The female-only storm naming list that the military implemented parallels the naming custom used in the book. Because of this, hurricane historians, newspaper reporters, and the Weather Bureau all credit Stewart's naming method as initiating the hurricane naming system that is used today.

³ "Books — Authors," New York Times, September 17, 1941: 21.

While hurricane naming, and its subsequent gendering, is directly related to the excitement garnered by *Storm*, Stewart's idea to name his storm "Maria," is more complex than just a simple affixation of a name for linguistic flair. *Storm* was part of a centuries-old cultural discussion on storm naming customs that reached its peak during significant shifts in American culture. Review of this history provides insight into the development of global meteorology, international relations, U.S. popular culture, and a debate over the spheres of gender acceptable at war and at home. It is only after contextualizing these factors that *Storm's* impact can be realized.

TALKING ABOUT THE TEMPEST

From huracáns to tempests, early hurricane naming practices provide the basis for understanding how hurricanes became gendered. It is broadly known that early indigenous Taino and Aztec descriptions of hurricanes used by "malevolent" Gods and "powerful demons" were asexual.⁴ Similarly, when Spanish colonists in the Caribbean began to use the native word, "huracán," to describe the "malignant forces that took the form of winds of awesome proportions and destructive power," they did not indicate a specific sex with

⁴ For a depiction of hurricanes from native populations see the cover of Matthew Mulcahy, Hurricanes and Society in the British Greater Caribbean, 1624-1783 (Baltimore: Johns Hopkins University Press, 2006). See also Christopher Columbus in Richard Hakluyt, "Narrative By Christopher Columbus: Navigations, Voyages, Traffiques and Discoveries of the English Nation in America," The Principle Navigations, Voyages, Traffiques and Discoveries of the English Nation, Vol. 12 (Edinburgh: E & G, 1884); "Narrative by Bartolomé Las Casas," Tears of the Indians: Being an Historical and True Account of the Massacres and Slaughters of Above Twenty Millions of Innocent People: Committed by the Spaniards in the Islands of Hispaniola, Cuba, Jamaica &c., As Also, in the Continent of Mexico, Peru & Other Places of the West Indies, To the Total Destruction of Those Countries, Translated by J. Philips (London: J.C. for Nath. Brook, 1655); and John Taylor, Newes and Strange Newes from St. Christophers of a tempestuous Spirit, which is called by the Indians a Hurry-Cano or whirlewind (London, 1638).

hurricanes — they instead simply employed the name the indigenous population gave this natural force.⁵ While numerous spellings of huracán reflect gendered endings, the overall descriptions of the word remain sexless, leading to the conclusion that gender designation was a translation inconsistency, not an original gendering. References to "great storms" or "threatening huracáns" were as close as colonialists came to current descriptions of hurricanes.

With the translation of indigenous documents into the English language for publication as early as 1555, new forms of the word, "huracán," appeared with no sex or gendered association assigned.⁶ Early naming practices reflected Eurocentric notions of settlers, associating hurricanes with retribution for communal sins and naming revolved around Saint's Feast days as a way of appearing God.⁷ European scientists and historians like Ralph Bohun (1671) tried to describe hurricanes, or whirlwinds, in reference to other worldly winds using scientific knowledge and religious beliefs. But the understanding of

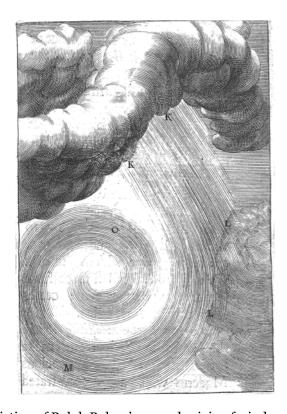
_

⁵ For examples of first transcribed usage see: Caribbean chronicler Gonzalo Fernandez de Oviedo, as he states, "when the devil wishes to frighten [the Indians] he threatens them with huracán, which means storm." Gonzalo Fernandez de Oviedo, *De la natural historia de las Indias*, Edited by Enrique Alvarez Lopez (Madrid, 1942) 84-85. See also: Louis Pérez, *Winds of Change: Hurricanes and the Transformation of Nineteenth Century Cuba* (Chapel Hill N.C.: University of North Carolina Press, 2001) 17.

⁶ Some forms of the word included, "herycano, furicano, huricano, hurricane, heuricane, and huracán, before assuming its present form, 'hurricane,' in the late seventeenth century." As printing became popular as well with the invention of the Gutenberg Printing Press it should be noted, that there is some concern over how much the Spanish derivation of the word denotes a masculine or feminine gender associated with the end of the word. For instance "Hurrycano"—"o" ending could be defined as masculine. It is the opinion of this author, though, that based on inconsistency in published terminology used to describe hurricanes, the masculine or feminine sex association was of little to no concern as more concern was placed on describing hurricanes in general to unfamiliar European readers. Thus, the masculine "o" was simply a spelling choice reflected by inconsistent translation. Pérez, 19.

⁷ Major storms that struck on a particular saint's feast day in Catholic regions were also named for that saint. This sensibility of storms as retribution for communal sins still exists today (as discussed in Chapter 6). Eliot Kleinberg, *Black Cloud: The Great Florida Hurricane of 1928* (New York: Carroll & Graf Publishers, 2003) 47.

hurricanes was very primitive and gender neutral, with illustrations taken from common shapes found in nature such as the snail (this shape was represented as a hurricane in Bohun's illustration, as marked by "M" and "O") and the snake (used to illustrate a tornado, as marked by "K").



Depiction of Ralph Bohun's second origin of winds, 1671.8

Officially, literary works defined hurricanes as "tempests." Dating back to the thirteenth century, a tempest meant a strong gust of wind that is usually

⁸ Bohun's description of these winds: "If the Pressure be not directly downwards, but sloping, as from K to L; and there be resisted by some cross winds, or denser Part of the Atmosphere: it often reverts to M, or O, and so generates Whirlwinds and Tornados." Ralph Bohun, *A Discourse Concerning the Origine And Properties Of Wind, With An Historical Account of Hurricanes, and other Tempestuous Winds* (Oxford: W. Hall for Tho. Bowman, 1671) 17-19. For more on the differences between Europeans painting natural phenomena of the New World versus the Old see, Claude Lorrain, "The 1631 Eruption," (1631) for volcanic representation of "wind" and "smoke."

followed by thunder, rain, snow, hail, or lightening.⁹ However, tempests of European origin were not the hurricanes encountered in the New World. Hurricanes, as highlighted in William Shakespeare's 1623 play *The Tempest*, were extreme winds, but not the often-associated temptresses of more modern description.¹⁰

Various spellings of hurricane continued to be prevalent throughout the early colonial period, varying by culture, however descriptions of hurricanes began to take on anthropomorphic qualities, particularly in the U.S.¹¹ When hurricanes directly impacted humans, observers – in both private letters and published literature – were more likely to anthropomorphize hurricanes. The larger the storm impact on growing populations, the more anthropomorphic hurricane descriptions became.¹² For example, Lafcadio Hearn associated the characteristics of human anger to hurricanes. He used popular phrases like

⁹ The Oxford English Dictionary Online dates the term "tempest" to the 1250 English text, "Old Kentish Serm." which states, "So hi were in po ssipe so aros a great tempeste of winde." The origin of the word is French ("tempeste") and does have a gendered-female ending to it. However it is the opinion of this author at this time that the overall storm definition as applied to hurricanes did not carry an official gendered description at the time. "Tempest," and "Tempeste," Oxford English Dictionary Online, 2nd Edition, 1989; Online Version, November 2010, http://www.oed.com.libproxy.tulane.edu:2048/Entry/198906. Earlier version first published in New English Dictionary, 1911.

¹⁰ Although "tempest" is traditionally associated with feminine attributes, the written description of Shakespeare's decision to use this description is portrayed as a method of distinguishing from other references to "huracáns" in his previous works, not in terms of a gendered identity. William Shakespeare, *The Tempest*, Edited by Stephen Orgel (Oxford: Oxford University Press, 1987).

¹¹ "Hurricane" seems to be the common spelling used at least in English texts by 1700. "Hurricane," *Oxford English Dictionary* Online, 2nd Edition, 1989; Online Version, November 2010, http://www.oed.com.libproxy.tulane.edu:2048/Entry/89594. Earlier version first published in *New English Dictionary*, 1899.

¹² M. Dumont, a Louisiana plantation owner writes: "In fact, this tempest was so terrible that it rooted up the largest trees, and the birds unable to keep up, fell in the streets". M. Dumont, 1720-1740, 24, in, *Historical Collections of Louisiana*, vol. 5: Historical Memoirs of Louisiana, From the First Settlement of the Colony to the Departure of Governor O'Reilly in 1770, With Historical and Biographical Notes (New York: Lamport, Blakeman and Law, 1853) 291.

shrieking, witch-calling, ripping, tearing, heaping, and upturning which can all be associated with actions of angry humans to describe hurricanes. ¹³ These anthropomorphic descriptions opened the window for the introduction of gender.

Little changed in the naming of hurricanes from the eighteenth to late nineteenth century. The naming practice in place tended to reflect chronological time periods and geographic location, such as the Hurricane of 1722 or the Last Island Hurricane of 1856.¹⁴ While this system of storm naming was acceptable, discussion of whether there was a better system was a question raised anytime there was a multiple storm season. As a result of these questions, many different systems were tested over the years. But modern sex-based naming practices were not suggested until the late 1800s with Australian meteorologist, Clement Wragge.

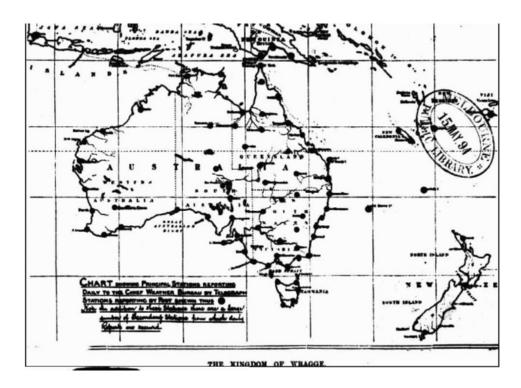
THE KINGDOM OF WRAGGE

As Chief Meteorologist of the newly formed Queensland Weather Bureau in the late 1880s, Clement Wragge was well aware of his position in a shifting meteorological world. With the formation of meteorological organizations throughout the world during the late 1800s, Australia was no different than other

¹³ Lafcadio Hearn, *Chita: A Memory Of Last Island* (New York: Harper Brothers Publishers, 1889) 28.

¹⁴ For more on the Hurricane of 1722 see: Ari Kelman, *A River and Its City: The Nature of Landscape in New Orleans* (Berkeley: University of California Press, 2003) Chapter 1; John G. Clark, *New Orleans*, 1718-1812: *An Economic History* (Baton Rouge: Louisiana State University Press, 1970); Charles Edwards O'Neill, "The French Regency and the Colonial Engineers: Street Names of Early New Orleans," *Louisiana History: The Journal of the Louisiana Historical Association*, Vol. 39, No. 2 (Spring 1998) 207-214; and, Pierre François Xavier de Charlevoix, 1682-1761, 69-70, in, *History and General Description of New France*, Vol. 6, Translated and Edited by John Gilmary Shea (New York: Francis P. Harper, 1900) 256. For more on the Last Island Hurricane of 1856 see: Bill Dixon, *Last Days of Last Island: The Hurricane of 1856, Louisiana's First Great Storm* (Lafayette: University at Lafayette Press, 2009).

major countries in establishing national weather services. However, as a part of the establishment of Weather Bureau districts in the then-divided nineteenth century Australia, Wragge did not believe his work to be constrained by the regional boundaries of territories. ¹⁵ Instead, his realm of weather tracking stretched throughout all of Australia and its subsidiary region. As humorously mocked by the media, Wragge's meteorological "kingdom" was unrestrained. ¹⁶



"The Kingdom of Wragge."17

_

¹⁵ Neal Dorst, "They Call the Wind Mahina: A History of the Naming of Tropical Cyclones," Talk given October 23, 2012, Atlantic Oceanographic and Meteorological Laboratory, Coral Gables, Florida. Talk was attended virtually through "Go-To-Meeting" by author and was prompted by four months of correspondence regarding author's dissertation research.

¹⁶ "The Kingdom of Wragge," courtesy of the Melbourne Public Library, as sent in email correspondence with NHC Historian, Neal Dorst, September 12, 2012.

¹⁷ Courtesy of the Melbourne Public Library, as sent in email correspondence with NHC Historian, Neal Dorst, September 12, 2012.

Thus, when Wragge, the "well-known lecturer on the weather," decided to introduce a new system of cyclone and tropical storm naming after Hebrew letters and Greek gods in 1894, the Australian press questioned his right to do so but agreed to test Wragge's system.¹⁸ However, in 1896, Wragge became bored with mythology and letter-based systems and soon started naming storms after females exclusively. The Australian press, which followed Wragge's musings initially, quickly commented with fervor on the subject. "One observes with great pleasure the new departure recently made by the Chief Weather Bureau in regard to the nomenclature of atmospheric depressions," stated one opinion columnist known as "Allegreto." In fact, "it is hoped that Flora and Irene are only the beginning of a series of feminine names which will help to give a personal interest to the disturbances," he continued. But most of all Allegreto cautioned that Wragge should contact women whose names might be used for permission so that they would not be offended.¹⁹ Following the initial naming introduction, Wragge commented that he would only pick "soft dulcet names of the dusky beauties of the South Sea Islands" that "bubbled off the tongue" as an encouragement to Australian mothers to give their daughters stronger names also gained plenty of commentary.²⁰

After a few seasons of naming storms after women, the attention Wragge had garnered throughout Australia heightened interest in the Weather Bureau's actions. But it was not until Wragge decided to start naming Antarctic storms

¹⁸ "Names give hurricanes identity," *The Charleston News & Courier*, September 22, 1989: 4.

¹⁹ Allegreto, "Stenograms," The Queenslander, February 15, 1896: 298.

²⁰ "The Storm-Eline: Gales and Rain on the Coast, Latest Forecast," *The Brisbane Courier*, February 2, 1898: 5.

after senators and representatives of his local government that opposition to Wragge's ideas met with considerable contention. Seen as Wragge's response to recent cuts to the Weather Bureau budget, the debate over Wragge's new legislator-storm naming system rapidly escalated into a war.

This was definitely the case with Cyclone Conroy, named after Representative Alfred B. Conroy, a leading opponent of Wragge's misuse of Weather Bureau funds and meteorological control. After Conroy openly called Wragge a "Hottentot rain god," implying a primitive background and educational upbringing, Wragge named his next cyclone after the representative.²¹

According to the *Brisbane Courier*, Wragge's legislator storm names were met with extreme caution, especially after the Cyclone Conroy incident. ²² Congressman Conroy did not enjoy being referred to as "looking black and suspicious." ²³ As a result, with the consolidation of Australia in 1901, the reorganization of state-run funding, and Congressman Conroy's open opposition to Wragge's scientific integrity, the Brisbane Weather Bureau was shut down in 1902. Soon after, Wragge was fired from the Weather Bureau, and its next chief conscientiously chose to end the naming system indefinitely.²⁴

In reviewing Wragge's influence on the development of storm naming, it is important to note several facts. First, while Wragge's proposed naming system for all tropical storms was short-lived, it was the first attempt at storm naming by an official weather service. As a result, it appeared as a negative example of a

²¹ "The Weather Outlook," *The Brisbane Courier*, August 5, 1902: 4.

²² Ibid, 4.

²³ "The 'Stiger Vortex' In The West," The Brisbane Courier, August 5, 1902: 4.

²⁴ "Vale! Mr. Wragge," The Brisbane Courier, August 5, 1902: 4.

naming system in several meteorological treatises over the next seventy years – a cautionary tale of bureaucratic overreach.²⁵ Therefore, it was not considered a legitimate solution for a storm-naming system until implemented by the U.S. Armed Forces during World War II. Similarly, it is also important to note that while Wragge did use female names for storms, they were not his first choice and he did not use them exclusively. In fact, Wragge chose to do the exact opposite, varying storm naming systems throughout his tenure as Chief Meteorologist.

Similarly, the debate over Wragge's naming system brought to light other issues regarding who has the power to implement a naming system in the first place and what names could be used. Wragge, the Chief Meteorologist for a region of Australia before it was unified, did not have the power to implement a naming system for all of Australia. However, this issue was never considered until Wragge chose to name storms after senators or bureaucratic officials. While discussion was raised over Wragge's choice of female names and Greek gods, it was his decision to use senators that threw his administrative role into question. In choosing senators' names, Wragge's decision was portrayed as malicious and spiteful. Wragge had singled out a group of men who had legitimate societal power and in return, those men quickly responded by suspending Wragge's tenure in a power-related position. The conclusion that is made through Wragge's naming system trial is that the names of those in power, which at that time were all males, or men in general, were not acceptable storm names. This

²⁵ The most notable example of this is found in Sir Napier Shaw's, *Manual of Meteorology* 2nd Edition (Cambridge: Cambridge University Press, 1938). Shaw's manual is seen as the preeminent meteorological manual produced, first in 1919, revised in 1938.

theory on storm names would continue to be a recurring argument throughout all of storm naming history.

THE CREATION OF STORM

In 1938, George Rippey Stewart began working on a new novel about hurricanes and the U.S. Weather Bureau.²⁶ A frequent visitor to the Weather Bureau in San Francisco, Stewart spent two years researching the novel.²⁷ Brushing up on the latest meteorological techniques used to track storms, Stewart carefully constructed his book and its characters to be as accurate as possible. First appearing on the shelves on November 20, 1941, the book sold for \$2.50 and was an instant hit.²⁸

Structurally, Stewart used twelve chapters to describe twelve days of a fictitious hurricane that hit the California coastline. In the first chapter, Stewart describes the experience of a "Junior Meteorologist" who nicknamed storms after females as a way of identifying the vast fronts he was responsible for tracking. As explained in the book, "at first he had christened each new-born storm after some girl he had known — Ruth, Lucy, Katherine." Then the junior meteorologist moved on to naming storms after girls he had not known, adding an "-ia" ending to the names as a way of standardizing various names. ²⁹ The Junior Meteorologist's rationale for using girls' names for storms was that, "a storm

²⁶ Robert van Gelder, "An Interview With George R. Stewart: Few Novels Have Been More Minutely Planned Than Was 'Storm," *New York Times*, December 14, 1941: BR2.

²⁷ Walter Bara, "Life And Times of Howling Maria: An Experiment in Meteorological Biography," *Washington Post*, November 30, 1941: L12.

²⁸ "Books Published Today," New York Times, November 20, 1941: 35.

²⁹ Stewart, Storm, 1941, 12.

lived and grew; no two were ever the same." Thus, his hurricanes in general were very much like humans.³⁰

After introducing the naming system and explaining it, Stewart led his readers through the normal process of tracking storms using the Junior Meteorologist's perspective. While following several storms throughout the states, all named with female names such as Cornelia, Antonia, Felicia, and Sylvia, the meteorologist spotted a new storm front growing in the west.³¹ Marking it down as a "low front," the meteorologist then reflected on what he would internally call the storm. Finally settling on "Maria," the Junior Meteorologist remarked that he found the name to be different than others in the past. Using this revelation as a central element, Stewart writes that, "as if [the Junior Meteorologist] had been a minister who had just christened a baby, he found himself smiling and benign, inchoately wishing it joy and prosperity."³²

As each successive chapter tracked a different day in the progress of the storm, the Junior Meteorologist's descriptions of his "Maria" became increasingly expressive. Throughout the book, Stewart carefully noted that the Junior Meteorologist did not use these names in a public setting, just within his own head. As explained, "not at any price would the Junior Meteorologist have revealed to the Chief that he was bestowing names — and girls' names — upon those great moving low pressure areas." As a result, throughout the book,

³⁰ Ibid, 18.

³¹ Ibid, pgs. 12, 13, and 18.

³² Ibid, 18.

³³ Ibid, 12.

Stewart's audience became accustomed to the Junior Meteorologist's secretive pet naming process.

As if it was a secret among friends, Stewart's meteorologist's naming system and its characterization of Maria became the central climatic revelation of the book. It is only at the end of the novel that the Junior Meteorologist accidentally slipped up in front of his superior, calling the storm "Maria." However, despite the outrage or surprise Stewart's audience was led to expect from the Chief Meteorologist when the Junior Meteorologist revealed this shocking naming system, the Chief Meteorologist also revealed that he named his storms and agreed with the Junior Meteorologist's female-only naming system.³⁴

When reviewing *Storm's* construction, several conclusions can be drawn. First, looking beyond the unique plot line, it is possible to see how Stewart's *Storm* evolved from a culture inundated with disaster-focused novels. For example, Zora Neale Hurston's *Their Eyes Were Watching God* (c. 1937) utilizes a hurricane based on the 1928 Hurricane that broke levees in Lake Okeechobee, Florida, to symbolize race relations in the South.³⁵ Meanwhile, John Steinbeck's *The Grapes of Wrath* (c. 1935) reviewed the plight of tenant farmers during the Dust Bowl and Great Depression era.³⁶ And William Alexander Percy's *Lanterns on the Levee* (c. 1941) became one of the most notable memoirs on the Mississippi River Flood of 1927.³⁷ Stewart, on the other hand, consciously chose

³⁴ Ibid, 234.

³⁵ Zora Neale Hurston, *Their Eyes Were Watching God* (Philadelphia: J. B. Lippincott, 1937).

³⁶ John Steinbeck, *The Grapes of Wrath* (New York: The Viking Press, 1935).

³⁷ Walker Percy, Lanterns on the Levee (New York: Alfred A. Knopf, 1941).

to include all of these disasters within his book. The state of the country described in the book is of one that had experienced extreme drought and while nervous about the impact of flooding with a hurricane, many were excited about the rains that would come with the hurricane. As a result of this context, Stewart's readers cheered as Maria "relieved" the country from its current plight, cementing Maria as a heroic character, as well as an interesting one.

Second, like other classic novels with unforgettable women such as *Gatsby*'s "Daisy," *Storm's* "Maria," was a character specifically constructed to be remembered.³⁸ Within *Storm*, "Maria," and other female-named hurricanes, were the only characters identified by name. The other characters mentioned in the text are referred to by their titles such as "Junior Meteorologist" and "Second Officer."³⁹ Stewart's conscious decision to make "Maria" the main character and to use the naming system as a secret code that the audience lustily awaits public reveal of was both exciting and nerve-wracking.

Finally, and most importantly, Stewart's decision to use a female-only naming process was not a coincidence. Stewart spent years researching meteorological history and observing the everyday workings of the Weather Bureau, including the new technologies and reporting procedures. While the book was heralded for this accurate portrayal and research effort, Stewart's research period also points to a more important conclusion. Primarily, that in the process of doing research on historical meteorology Stewart was introduced to Clement Wragge's naming process from the 1890s in Australia.

³⁸ F. Scott Fitzgerald, *The Great Gatsby* (New York: Charles Scribner Sons, 1925).

³⁹ Ibid, 14 and 10.

As explained in the previous section, Wragge's complicated naming system was mentioned as a cautionary tale in several meteorological treatises over subsequent years. The most prominent of these treatises, Sir Napier Shaw's *Manual of Meteorology*, was published in 1919 and republished in 1938.⁴⁰ As the opening quotation for *Storm*, Stewart quotes Sir Napier Shaw's book, stating that:

Every theory of the course of events in nature is necessarily based on some process of simplification of the phenomena and is to some extent therefore a fairy tale.⁴¹

While Stewart's selection of Maria was all his own, the sex-typed naming system was in fact, Clement Wragge's. Furthering this connection, Stewart even lightly poked at Wragge's plighted system in the climactic section of his novel where the Chief Meteorologist is discussing the Junior Meteorologist's naming system. The Chief Meteorologist comments that he had implemented a similar naming system, but with politicized names from history like Hannibal, Marshal Ney, and Genghis Khan.⁴² It is here that Stewart inadvertently enforces the concept that female names work best as a naming system, something that Wragge had discovered, as well.

Immediately following the release of *Storm* in 1941, Stewart received commendation for his literary contribution. Robert van Gelder of the *New York Times* began his review with the statement that, "few novels have been so

⁴⁰ Shaw, first in 1919, revised in 1938. (cited previously)

⁴¹ Shaw, Vol. I., 1919, 123; in Stewart, preface page.

⁴² Stewart, 234.

minutely planned," as *Storm.*⁴³ Another reviewer, Ralph Thompson agreed with van Gelder, stating that Stewart's story was, "a tour de force, but an honest one, and he manages matters brilliantly from beginning to end." Summing up his review, Thompson argued that if one read Stewart's book, "you will agree that he hasn't been wasting his time," with the multi-year research he undertook to complete it.⁴⁴

The result of Stewart's research paid off, as the book quickly topped bestseller lists and was selected as a "Book-of-the-Month-Club" book within the same year. ⁴⁵ The book was heralded as starting, "a new fashion in the 'popularization' of science," particularly meteorological science. ⁴⁶ As a result, in January of 1942, two months after the novel's publication, Paramount Studios announced that it had purchased the rights to develop *Storm* into a movie for \$30,000. ⁴⁷ All articles discussing the movie, agreed that *Storm's* main character, Maria, was the real star. "As you see," stated Walter Bara of the *Washington Post*, 'Storm' has not only personality but also sex and reproductive power." ⁴⁸ Other reviewers agreed; "[t]he storm is its hero or rather, its heroine." ⁴⁹ And this heroine had a lasting effect on American culture.

⁴³Robert van Gelder, "An Interview with George R. Stewart: Few Novels Have Been More Minutely Planned Than Was 'Storm," *New York Times*, December 14, 1941: BR2.

⁴⁴ Ralph Thompson, "Books of the Times," New York Times, November 20, 1941: 35.

^{45 &}quot;Books-Authors," 2.

⁴⁶ Robert van Gelder, "George Stewart's 'Storm' and Other Works of Fiction," *New York Times*, November 23, 1941: BR6.

⁴⁷ "News Of The Screen," New York Times, January 21, 1942: 21.

⁴⁸ Walter A. Bara, "Life And Times of Howling Maria," *Washington Post*, November 30, 1941: L12.

⁴⁹ "Excerpt from Book-of-the-Month-Club Brochure," as pasted to inside of Stewart, *Storm*, 1941.

ROSIE, WENDY, MARIA? CREATING THE GIRLS OF WWII

As explained in Chapter 1, during World War II the Pacific Theater made the need for more specific ways to communicate the threat of different storms affecting naval and air fighting a U.S. military priority. While interest in storm naming had been discussed after every major storm, the necessity for a complete overhaul of a naming system was not recognized as a meteorological priority. However, military officials' concerns accelerated when there was trouble specifying oncoming threats during a multiple typhoon season in 1944. On a deeper level, the concern over the naming system was part of a combined interest in military needs and the growth of American meteorological strength. With increased radar systems, personnel, and budget, the prediction of storms was both a possibility as well as a necessity.

At the same time, during World War II, U.S. mobilization forced a dramatic shift in Americans' ways of life. As many men went off to war, many women were called upon to fill their jobs. With well-publicized figures like Rosie the Riveter, Wendy the Welder, the WACs, WAVEs, the Nurses' Corps, and as illustrated in Chapter 1, the female meteorologist, a redefinition of femininity took place in both public and private spheres during the war.⁵⁰ Both males and

⁵⁰ For more on wartime women and changing gender roles see: Karen Anderson, Wartime Women: Sex Roles, Family Relations, and the Status of Women During World War II (Santa Barbara: Greenwood Press, 1981); Maureen Honey, Creating Rosie the Riveter: Class, Gender and Propaganda During World War II (Amherst: University of Massachusetts Press, 1984); Leila Rupp, Mobilizing Women for War: German and American Propaganda, 1939-1945 (Princeton: Princeton University Press, 1978); Leisa Meyer, Creating G.I. Jane (New York: Colombia University Press, 1998); Rose Rosenthal, Not All Soldiers Wore Pants: A Witty World War II WAC Tells All (Rochelle Park, NJ: Ryzell Books, 1993); Brenda Moore, To Serve My Country, to Serve My Race: The Story of the Only African American WACs Stationed Overseas During World War II (New York: NYU Press, 1996); Barbara Brooks Tomblin, G.I. Nightingales: The Army Nurse Corps in World War II (Lexington: University Press of Kentucky, 2003); and

females were forced to adapt to new gender definitions as work, family, and social structures changed. However, along with this "bending" of the gender rules during wartime came a specified definition of masculine and feminine traits that needed to be altered.

The perfect post-World War II American woman, or the type of woman to base comparisons on, actually was created during World War II. As Historian Robert Westbrook explains, while men were at war, the United States government created a symbolic image of the woman they were fighting for, or an "object of obligation." The political obligation felt by these men towards the perfect American woman was often drawn out, physically and metaphorically. Reinforced by propaganda such as pin-up images and planeside paintings of beauties, the "object of obligation," or the American woman, became iconocized. Hence, during the war it became an American political ideology to protect women, or anything feminized, from outside harm.

This cultural shift in gender roles and definitions also had an effect on the definition of what expectations were upheld at war and at home. With the naming of planes and ships after women throughout the war, men associated destructive vehicles and violence with femininity. Similarly, there was an understanding that the painting of planes with images of erotic women was a behavior accepted in the traditionally male-dominated battlefield. While women had taken positions in almost every government agency filling empty jobs during

Bitter Fruit: African American Women in World War II, Edited by Maureen Honey (Colombia: University of Missouri, 1999).

⁵¹ Robert B. Westbrook, "'I Want a Girl, Just Like the Girl That Married Harry James': American Women and the Problem of Political Obligation in World War II," *American Quarterly*, Vol. 42, No. 4 (December 1990) 587-611.

the war, the military, and its subsidiary, the Weather Bureau, was the last segregated space, with women participating as part of separate auxiliary organizations. This sphere of masculinity was reinforced by the control of femininity.

Following the multiple-storm season of 1944, the U.S. Military introduced a female-only naming system unofficially for use in the Pacific Theater. 52 Combining the changes in gender definitions, women's roles, and the military usurpation of the Weather Bureau, it is understandable how tropical storms were named after females. While there is no official documentation in national archives and Weather Bureau documents that confirms a specified reason for the adoption of the female-only naming system, by the time that the U.S. Military unofficially adopted a female-only naming system for tropical storms (cyclones and hurricanes) in 1944, Stewart's *Storm* had been circulating for three years. In fact, one of the republished versions of *Storm* had appeared as part of the "Armed Services Editions" kits. The ASE program, designed to entertain soldiers at war with cheap government-issued re-printed versions of popular and classic books doled out over 123 million books during the war. Stewart's *Storm* was part of the first round of books sent to soldiers in 1943.53 As a result, it is likely that any soldier or meteorologist during the time period had exposure to Stewart's "Maria."

Throughout the rest of the war, the female-only naming system was used in the Pacific Theater region. However, the system was notably meant to be

⁵² As described in interview of Reid Bryson, Transcript, University of Wisconsin Oral History Project, Interview #320, April 1986.

⁵³ Books in Action: The Armed Services Editions, Edited by John Y. Cole (Washington: Library of Congress, 1984), Library of Congress, online at, http://catdir.loc.gov/catdir/toc/becites/cfb/84600198.html.

contained to the region, only extending from the Pacific Theater to Hawaii, not past it. The names selected for the lists between 1944 and 1945 were based on suggestions of meteorologists and soldiers' girlfriends and wives' names. The lists did not strictly follow a particular alphabetical order and most of the names used in 1944 were not officially recorded. (See Table 7 for 1945 names)

Table 7. Pacific Theater Female-Only Naming List, 1945

Ann	Grace	Nora	Tess
Betty	Helen	Nancy	Ursula
Connie	Ida	Opal	Verna
Doris	Jean	Peggy	Wanda
Eva	Katie	Queenie	Yvonne
Edna	Louise	Ruth	
Francis	Marge	Susan	

Source: The Pacific Theater known naming list was discussed in Neal Dorst, talk, (cited previously).

Similarly, due to censorship rules in effect regarding meteorological reports stateside, weather reports about hurricanes were significantly filtered. Thus, the naming system, like *Storm's* system, was a well-kept secret.

THE END OF "STORMY WEATHER": INTRODUCING THE FEMALE-ONLY NAMING SYSTEM

While the system of naming storms after women was well liked, it was intended only for wartime purposes. As illustrated in Chapter 1, following the war the Weather Bureau underwent a major transition. By 1947, concerns over staffing, budgets, and an increased demand for services coupled with the overall restructuring of the organization had a direct impact on the hurricane naming

process as those in charge of the "unofficial" military naming system transitioned to bureaucratic postwar positions.⁵⁴

Similarly, the shift from using a storm naming system for wartime purposes to the emphasis on tracking and standardization after war for the mass public impacted the naming practice. As a result, the acceptance of feminine attributes and language descriptors used in a wartime sphere was initially abandoned in the postwar era as the U.S. Weather Bureau tried to separate wartime demands and peacetime actualities. One of the easiest ways to do this was to standardize the sexually charged naming system for tropical storms. No longer just an internal system for military purposes, the hurricane naming process was a public issue, they argued. And, the unofficial system that used female names during the war was acceptable in the sphere of war, but was not meant for mass consumption. As a result, the female-only naming system was phased out.

The clamor for a new hurricane naming system arose again after a slew of storms in 1947 and 1948 wreaked havoc in the Southern states. Areas like New Orleans felt the full effects of this problematic system of naming. For example, in 1947, Louisiana experienced a major September storm. Called "The 1947 Ripper," this storm caused considerable damage to property and loss of life.⁵⁵ A year later in 1948, another storm threatened Louisiana at the same time in September.

⁵⁴ "Annual Report," 1945, 1946, 1947, 1948, 1949, and 1950, Box 4, General Correspondence of the Weather Bureau, 1946-50, Record Group 130, National Archives at College Park, College Park, Maryland; and, "Annual Report," 1950-1951, Box 6, General Correspondence of the Weather Bureau, 1951-1955, Record Group 130, National Archives at College Park, College Park, Maryland.

^{55 &}quot;West End Takes Brunt of Storm; 65-Mile Winds," New Orleans Times-Picayune, September 4, 1948: 1.

Hitting at parallel times, meteorologists and reporters had trouble explaining to the public the difference between the storms. Unable to refer to the current 1948 storm as the "September Storm" or the "Labor Day Storm" for fear of a mix-up, reporters used, "the hurricane of September of last year," and "the current hurricane," in newspaper articles.⁵⁶ With the availability of new meteorological equipment developed during World War II such as radar and Navy "hunter planes" designed to help with tracking storms, New Orleans residents were baffled by the confusion caused by the current system of naming hurricanes. Citizens of New Orleans and other regions prone to hurricanes expressed their dislike of the period naming process, calling for modernization of this outdated system.⁵⁷ Issues with storms like the two September storms in Louisiana did not immediately cause change in the naming process, though. It took almost ten years before meteorologists and the U.S. Weather Bureau agreed on how to tackle this naming problem.

After the confusing 1947 storm season, the Weather Bureau implemented an unofficial naming system – the Joint Army/Navy Phonetic Alphabet – for its internal communications.⁵⁸ Beginning with, "Able, Baker, Charley," the system mimicked the consecutive alphabetical order introduced with the female-only system, but contained none of the gender references or connotations of the old

⁵⁶ See: "New Hurricane Nears Louisiana," New Orleans Times-Picayune, September 3, 1948: 1; "Gulf Coast Area Menaced By Wind," New Orleans Times-Picayune, September 4, 1948: 1; "Hits 12 Hours Sooner," The Times-Picayune, September 4, 1948: 1; and, "September Storm," New Orleans Times-Picayune, September 5, 1948: 7.

 $^{^{57}}$ See discussion on Navy "hunter planes" in "Radar Tracks Gulf Storm," New Orleans Times-Picayune, September 4, 1948: 1 & 2.

⁵⁸ Dorst, Talk, (cited previously).

system. However, this system was an internal system, still not meant for public consumption.

In 1951, the Weather Bureau publicly adopted the Joint Army/Navy Phonetic Naming Alphabet, beginning again with "Hurricane Able." ⁵⁹ The following year, though, the Weather Bureau continued its transition from a subsidiary of the military back to an independent organization, quickly distancing itself from anything to do with a military-related system. ⁶⁰ As a result, the naming system was changed again, and the International Phonetic Alphabet was adopted. ⁶¹ While a minor change in the process of naming storms, the switch to the new alphabet resulted in greater confusion as many of the same names appeared on each list but had alternative spellings. Due to the fluctuating naming lists, weather reports throughout the country often misprinted the names. This also caused confusion when the U.S. Weather Bureau dictated reports to other countries as proposed variations of the alphabets were circulating at NATO, the International Air Transport Association, and the International Civil Aviation Organization. (See Table 8).

_

 $^{^{59}\,\}mathrm{Grady}$ Norton, "Hurricanes of the 1950 Season," Monthly Weather Review (January 1951) 8-15.

⁶⁰ "Hurricane Season Is With Us Again: Scientists Have Two Theories Which Seek to Explain Why the Storms Act as They Do," *New York Times*, September 7, 1952: E12.

⁶¹ "What's In A Name? The Phonetic Alphabet Goes International," *Topics of the Weather Bureau*, II, no. 3 (March 1952): 38.

Table 8. Phonetic Alphabets, 1940-1956

U.S. Navy Phonetic Alphabet, 1940	Joint Army/Navy Phonetic Alphabet, 1941-56	International Air Transport Association Phonetic Alphabet, 1951	International Civil Aviation Organization Phonetic Alphabet (NATO supported), 1956
Affirmative Baker Cast Dog Easy Fox George Hypo Interrogatory Jig King Love Mike Negative Option Preparatory Queen Roger Sail Tare Unit Victor William X-ray Yoke Zed	Able Baker Charlie Dog Easy Fox George How Item Jig King Love Mike Nan Oboe Peter Queen Roger Sugar Tare Uncle Victor William X-ray Yoke Zebra	Alfa Bravo Coca Delta Echo Foxtrot Golf Hotel India Juliet(t) Kilo Lima Metro Nectar Oscar Papa Quebec Romeo Sierra Tango Union Victor Whiskey Extra Yankee Zulu	Alfa Bravo Charlie Delta Echo Foxtrot Golf Hotel India Juliet Kilo Lima Mike November Oscar Papa Quebec Romeo Sierra Tango Uniform Victor Whiskey X-ray Yankee Zulu

Sources: L. J. Rose, "Aviation's ABC: The Development of the ICAO spelling alphabet," ICAO Bulletin, November 2, 1956, Pgs. 12-14; "Aeronautical Telecommunications: Annex 10 to the Convention on International Civil Aviation," Vol. II, Ch. 5; International Telecommunication Union, "Appendix 16: Phonetic Alphabet and Figure Code" (Geneva: ITU, 1959) 430-431.

While confusion over the new naming systems intensified, the Weather Bureau continued to use the phonetic alphabet system as it focused on other matters since the system did work, despite its problems.

On a national scale, the U.S. Weather Service opened a Severe Weather Warning Center in 1951, combining the forces of several local forecasting stations into a large operating system.⁶² Most importantly, this center implemented governmental regulation and dissemination of meteorological updates, particularly of hurricanes, tornados, and earthquakes. The reorganization of the Weather Bureau, and its new Severe Weather Warning Center, increased interest in the state of current hurricane naming practices. Attention soon turned to the phonetic alphabet issues as another version of an alphabetic list by the International Air Transport Association was introduced in 1951. This coincided with the realization that the number of storms in four years had exceeded the phonetic alphabet's capability.

Recognizing the need for a new naming solution, the National Weather Service introduced a list of all-female names as a more permanent solution to the hurricane naming problem for the 1953 season.⁶³ As explained to the public, this new naming system, beginning with "Alice," mimicked the phonetic alphabet with easy-to-remember names but provided an unlimited number of names to suit the unknown number of hurricanes per year. ⁶⁴ Meant to simplify announcements about and public perception of the destructive natural force, the system was quickly hailed as a necessary and finite solution to a problem that had plagued the American public for years.

_

⁶² "Annual Report," 1950-51, Record Group 130, National Archives at College Park, College Park, Maryland (cited previously).

^{63 &}quot;Hurricane 'B' Sweeps Out Over Ocean," Baltimore Sun, August 16, 1953: 3.

^{64 &}quot;1st Hurricane Nears NC Coast," Atlanta Daily World, August 13, 1953: 1.

But this "new" naming system was not surprising to the public or new in any way. On a larger level, the explanation issued for its introduction was nothing more than a formality. In looking at this new naming system in historical context, it is obvious that the system adopted was nothing more than a retreat to a former well-liked system introduced in WWII. Similarly, while the Weather Bureau had reservations about implementing the system postwar, the American public's opinion on the issue weighed heavily and was directly influenced by the continued adoration of George Stewart's novel, *Storm*.

While Stewart's work had taken a new direction after *Storm*, its central methodology was similar. Publishing what is now seen as an onomastic masterpiece in 1944, Stewart's attention to the focus of naming customs resulted in the book, *Names on the Land*.⁶⁵ The book, like *Storm*, was extensively researched and reviewed the naming history of towns, cities, and structures throughout the U.S.⁶⁶ Applauded again for unmasking the "motivation of the namer" in the process of naming, Stewart became a leading scholar in the field of onomastics, eventually founding the American Name Society in 1951.⁶⁷ While Stewart's *Names on the Land* was an extremely different work than *Storm*, the connecting theme between each was the idea that a name directly impacts the public perception of something. As pointed out in *Names on the Land*, names

⁶⁵ Onomatology is the study of the origins of proper names; George R. Stewart was a founding member of the field. George R. Stewart, *Names on the Land: A Historical Account of Place Naming in the United States* (New York: Random House, 1945).

⁶⁶ Joseph Henry Jackson, "Bookman's Notebook: California Names," *Los Angeles Times*, April 3, 1949: A5.

⁶⁷ William Bright, "George Rippey Stewart (1895-1980): A Biography," American Name Society Website, Last updated December 29, 2001, http://www.wtsn.binghamton.edu/onoma/Default.htm#Stewart.

are a reflection of those who lived in a region, the origin of their heritage and the current events shaping the place. Quoting Sir Francis Bacon at the beginning of the work, Stewart highlighted this point:

This is written, then, as the story of that naming – how the great names, one by one, came to stand large on the maps, and how the little names in their thousands arose on the tongues of the people, after the varying customs of time and place, of blood and language.⁶⁸

Meanwhile, with *Storm*, a hurricane became a central character the minute a name was attached. Like a place, the name of the hurricane was a reflection of those who named it – and the culture that supported its naming.

While Stewart never officially drew connections in his books, he did recognize that the popularity of *Storm* was not receding. Between 1942 and 1953, Stewart's novel had become a sensation. While the Paramount Studios movie had never come to fruition due to wartime cutbacks, the Wonderful World of Disney bought the rights to the book to be made into a special for television. Similarly, due to its increased popularity, Stewart released reprinted versions of *Storm*, with new introductions analyzing the popularity of the book. In his 1947 edition, he even included a description of how to pronounce his beloved, "Maria," explaining that it should be said as if there was a silent "h" at the end (e.g., "Maria(h)").

As the popularity of Maria continued to climb, a new Broadway play "Paint Your Wagon" featured a song written by Alan Lerner with music by Frederick

⁶⁸ Sir Francis Bacon, as cited in Stewart, 4.

⁶⁹ The movie eventually debuted as a television special on November 27, 1959 (discussed in Chapter 3). Walt Disney's A Wonderful World of Color, *A Storm Called Maria*, aired on November 27, 1959: 60.

⁷⁰ Stewart, *Storm*, 1947.

Loewe, called, "They Call the Wind Maria."⁷¹ Debuting in 1951 along the same Broadway strip that was playing "A Tree Grows In Brooklyn," and "The King and I," "Paint Your Wagon" was sold out due to mail-in orders before it even premiered.⁷² And, with a subsequent publication of a book with sheet music and lyrics, one of its prominent songs, "They Call The Wind Maria," became an undeniable hit.⁷³

⁷¹ Claudia Cassidy, "On the Aisle: 'Paint Your Wagon' Has Other Charms, but the Dancers Steal the Show," *Chicago Daily Tribune*, December 17, 1951: B9.

⁷² Sam Zolotow, "'Paint Your Wagon Will Open Tonight," New York Times, November 12,1951: 20.

⁷³ Alan J. Lerner and Frederick Loewe, "They Call The Wind Maria," *Paint Your Wagon: The Musical*, Album Cover, 1951.



THEY CALL THE WIND MARIA74

A-way out here they got a name for wind and rain and fire The rain is Tess, the fire's Joe, and they call the wind Maria Maria blows the stars around, and sets the clouds a-flyin' Maria makes the mountains sound like folks was up there dyin' Maria (Maria) Maria (Maria), they call the wind Maria

Before I knew Maria's name and heard her wail and whinin' I had a girl and she had me and the sun was always shinin' But then one day I left my gal, I left her far behind me And now I'm lost, so gol-durned lost, not even God can find me Maria, Maria, they call the wind Maria

Out here they have a name for rain, for wind, and fire only When you're lost and all alone there ain't no name for lonely And I'm a lost and lonely man without a star to guide me Maria, blow my love to me, I need my girl beside me Maria (Maria), Maria (Maria), they call the wind Maria

Maria, Maria! Blow my love to me.

⁷⁴ Lerner and Loewe, "They Call The Wind Maria," Album Cover and Lyrics, 1951.

Originally recorded by Vaughan Moore and his orchestra, the song ended up as one of the most popular singles of the year.⁷⁵ While the Maria described in the song was not meant to be the same Maria from Stewart's book, it was certainly inspired by it. By the beginning of 1952, the popularity of "Paint Your Wagon," had spurred Warner Brothers Studios to offer to make a movie based on the play.⁷⁶ This suggestion only helped ticket sales for the play.⁷⁷

It was in this context that the Weather Bureau introduced the female-only naming system in 1953 as a test system and then implemented it as a continual system from 1954 on. Public acceptance of a female-named storm had reached an all-time high with Stewart's book and subsequent cultural references. As the Weather Bureau saw it, the previously tested system had infinite possibilities. While there were several names that repeated in subsequent years, the system was carefully constructed to be different than the previous WWII naming system that named storms after meteorologist's girlfriends and wives. As described by the Chief of the Weather Bureau, Ivan Ray Tannehill, "only two names were picked with real people in mind," when constructing the female-only naming lists. "Orpha," for a girl in one of the Weather Bureau's offices, and "Wallis" for the Duchess of Windsor.78 However, despite a plethora of articles explaining that

^{75 &}quot;1951 Concludes Amid Boom in Real Estate," Daytona Beach News-Journal.

 $^{^{76}}$ A. H. Weiler, "By Way of Report: 'Paint Your Wagon' Eyed By Coast - Addenda," $New\ York\ Times$, January 20, 1952: .

⁷⁷ Ibid.

⁷⁸ "Why Gales Are Gals: Hurricane Namers (Male) Prove It's To Avoid Confusion," *New York Times*, September 26, 1954: SM57.

hurricane "namers" were attempting to "avoid confusion," by their new sexspecific naming system, not all were in favor of the system from the start.⁷⁹

Only a year after officially starting to name hurricanes after women nationally, the Weather Service decided to continue its "trial naming process" indefinitely in 1955. 80 "Bristling protest" by a small minority was firmly quashed when the Weather Bureau "ignor[ed] the complaints from the female sex that hurricanes are unladylike and shouldn't bear feminine names," stated the Washington Post.⁸¹ They justified its actions in the public arena explaining that there was, "no other system that had the same advantages of brevity, ease of pronunciation and recognition." In fact, the all-male constituency Weather Bureau was applauded by male reporters for proving that even though it was not always right, it was "at least brave" for "standing its ground" against "the fair ones" and continuing "to 'use girls' names to identify hurricanes."82 This bravado of men and the initial concern of some women caused by the continuation of the naming process proved that female-named hurricanes quickly became a defendable sex-based object. It also shows how the defense of the female naming system became a tool in a perceived "battle of the sexes" – one in which women, unlike the politicians in Australia – ultimately had no power. Officially adopted in 1954 as a continuing system of naming to be used for the foreseeable future

⁷⁹ Ibid.

^{80 &}quot;Orpha and Wallis," New Orleans Times-Picayune, October 13, 1954: 6.

⁸¹ "26 Females in the Wind: Weatherman Picks New Set of Names For This Year's Lady Hurricanes," *Washington Post*, February 15, 1955: 1.

 $^{^{82}}$ "'55 Hurricanes Named: Alice Through Zelda," *The New York Times*, February 15, 1955: 8.

after a test pilot year, the female-named hurricane was around to stay. (See Table 9 for complete lists)

Table 9. Storm Naming Lists, 1945-1955

	Pacific Theater Female-Only Naming List, 1945	Joint Army/Navy Phonetic Alphabet, 1951-52	Pilot Female- Only Naming List, 1953	Nation-Wide Female-Only Naming List, 1954	Nation-Wide Female-Only Naming List, 1955	Nation-Wide Female-Only Naming List, 1956
Ann Betty Baker Barbara Barbara Barbara Barbara Barbara Brenda Betsy Connie Charlie Carol Carol Carol Connie Connie Connie Doris Dog Dolly Dolly Dolly Diane Dora Eva Easy Edna Edna Edith Ethel Edna Florence Florence Florence Florence Flora Grace How Hazel Hazel Hilda Hattie Helen Item Irene Irene Inene Ione Inez Ida Jig Jill Jill Janet Judith Janet Judith Janet Katie Kitty Katie Love Lucy Lucy Lucy Linda Laura Louise Mike Mabel Mabel Marbel Martha Molly Marge Nan Norma Norma Norma Norma Norma Norna Norlly Nona Nora Odette Nancy Peter Patsy Peggy Patsy Peggy Paula Queen Quenby Rosa Rhoda Sadie Ruth Tare Tina Tina Tina Trudy Trerese Susan Uncle Una Ursa Ursel Vicky Vicky Verna Vesta Virsel Yvonne Yola Zelda Zenda	Betty Connie Doris Eva Edna Frances Grace Helen Ida Jean Katie Louise Marge Nora Nancy Opal Peggy Queenie Ruth Susan Tess Ursula Verna Wanda	Baker Charlie Dog Easy Fox George How Item Jig King Love Mike Nan Oboe Peter Queen Roger Sugar Tare Uncle Victor William X-ray Yoke	Barbara Carol Dolly Edna Florence Gilda Hazel Irene Jill Katherine Lucy Mabel Norma Orpha Patsy Queen Rachel Susie Tina Una Vicky	Barbara Carol Dolly Edna Florence Gilda Hazel Irene Jill Katherine Lucy Mabel Norma Orpha Patsy Queen Rachel Susie Tina Una Vicky	Brenda Connie Diane Edith Flora Gladys Hilda Ione Janet Katie Linda Martha Nelly Orva Peggy Qeena Rosa Stella Trudy Ursa Verna Wilma Xenia Yyvonne	Betsy Carla Dora Ethel Flossy Greta Hattie Inez Judith Kitty Laura Molly Nona Odette Paula Quenby Rhoda Sadie Terese Ursel Vesta Winny Xina Yola

Sources: The Pacific Theater known naming list was discussed in Neal Dorst, talk, (cited previously); for Military Phonetic Alphabet see, L. J. Rose, "Aviation's ABC: The Development of the ICAO spelling alphabet," (cited previously); 1953 and 1954 lists, Peter T. White, "Why Gales Are Gals: Hurricane Namers (Male) Prove It's To Avoid Confusion," New York Times, September 26, 1954: SM57; 1955 list, "Weatherman Picks New Set of Names For This Year's Lady Hurricanes," Washington Post, February 15, 1955: 1; 1956 list, Alvin Shusters, "Hurricanes of '56 To Be Girls Again," New York Times, December 24, 1955: 28.

CONCLUSION: WE CALL THE WIND MARIA

When reviewing the history of the introduction of a female-only naming system it is important to start at the beginning. The foundation for a naming system evolved from centuries of multiple storm-naming systems. However, the concept of an official naming practice was first introduced in Australia in 1896 by Clement Wragge. But, it took nearly fifty years for a system to be tested again due to Wragge's malicious misuse of a public system.

In this context, it is no wonder that the U.S. Weather Bureau was nervous about officially introducing a similar naming system in what was seen as a victorious, but shifting cultural climate. However, in the same sense, it was the cultural climate of World War II and the postwar period that forced an extreme change in this position. When looking at George R. Stewart's background and *Storm's* reception, it is easy to see why the book was popular and how it must have been fascinating for a man focused on the evolution of names and their impact.

From the Weather Bureau's standpoint, it was the cultural temperature coupled with increasing emphasis on standardization and efficiency that directly impacted the openness to a system of naming and the failure of other systems to provide a mechanism for completing this. But it was the novel and its cultural impact that allowed the sidestepping of previous protocol separating gender and meteorology. The result was that weathermen along with the mass public not only jumped on, but painted the female-named storm system wagon.

As signaled by the defense of the system after its initial test pilot year in 1953, the female-named hurricane had an immediate effect on the perception of

not only hurricanes, but also women, in the postwar era. What these effects would be overall, though, were yet tallied. One thing was known, though, that the wind from 1953-onward would be known as "Maria."

CHAPTER 3

From Bad Girls to Bombshells:

SEXUAL CONTAINMENT, THE HURRICANE, & COLD WAR CULTURE



"Miss Hurricane Hunter 1956," USAF.1

Standing on a raised platform next to the newly-commissioned *Bermuda Sunshine*, a part of the new WB-50D airplane fleet, Mrs. Estella Hode was the

¹ "Miss Hurricane Hunter 1956," Air Force Weather History Office, Offutt Air Force Base, Nebraska, as posted by Lieutenant Colonel Bernard Barris, Retired, Air Weather Reconnaissance Association Website, Last accessed August 14, 2012, http://www.awra.us/gallery-febo5.html. Followed up with a phone interview and email correspondence with Lieutenant Colonel Bernard Barris, Retired, August 14, 20, 22, 2013.

perfect pin-up to represent the postwar U.S. Air Force "Hurricane Hunter" division. With a hip jutted outwards to push up her chest, high heels emphasizing mile-long legs, and a smile that shone as brightly as the polished plane she was showcasing, the 1956 Miss Hurricane Hunter was the essence of the subtle sultriness of a quintessential cotillion queen. Yet this debutante represented more than just the celebratory christening of a new plane, she symbolized the creation of an entirely new fleet of planes — planes that were devoted to the annihilation of another stereotyped feminine species of the postwar era — the feminized hurricane.

There is an underlying juxtaposition of two stereotyped images of women in the Cold War era. The woman standing next to the fierce fighter planes was the essence of the perfect postwar woman, domesticated, married, and docile. At the same time, the planes she was heralding were designed to annihilate the "other" type of Cold War woman, the "bad girl" who was a "free woman" that clearly was "no lady," with atomic-like power and irrational behavior. In order to understand how these two dichotomous images of women evolved, and how hurricane naming played a role in the support of these stereotypes, it is necessary to start at the beginning, with how the hurricane was "feminized" in the first place.

² While the "Miss Hurricane Hunter" title denotes a "single" woman, Mrs. Estella Hode was in fact, married. It is unknown at this time how frequently the "Miss Hurricane Hunter" title was held by a married woman, however, this author finds it particularly significant that Mrs. Hode was selected to represent the major mobilization of this brand new fleet of planes. Ibid.

GIRLS, GALS, & GALES: AN EVOLUTION OF PERCEPTION

In 1954, the *New York Times* published an article entitled, "Why Gales Are Gals." The article, explaining the new female-only naming system implemented by the U.S. Weather Bureau, carefully stated that the decision to use female names was rational. It was not a rash decision by weathermen, the reporter stated emphatically. However, the subtitle of the article, "Hurricane namers (male) prove it's to avoid confusion," suggested otherwise.³

Why Gales
Are Gals
Hurricane namers
(male) prove it's
to avoid confusion.

Why Gales Are Gals, New York Times, 1954.

The feminized hurricane, in theory, began with "Maria" in 1941. As discussed in chapter 2, when conceptualizing the fictitious hurricane "Maria," novelist George Stewart had been adamant that his storms be described as women. But soon after introduction of the new nationwide female-only naming system in 1954, it became clear that Stewart's storm was entirely different than the feminized hurricanes of the Cold War era.

³ "Why Gales Are Gals: Hurricane Namers (Male) Prove It's To Avoid Confusion," *New York Times*, September 26, 1954: SM57.

Unlike Stewart's "Maria," the feminized hurricane of the Cold War period was a creation akin to Dr. Frankenstein's laboratory, a hybrid product of a culture that encouraged gender association and sexual segregation with fervor. As a result, by the end of the 1960s there were few stereotyped feminine figures more despised than the female hurricane. Politically and socially charged at home and abroad, the language used to personify these "bad girls" was unparalleled. They were depicted as witches with the destructive power of atom bombs. As a result, the feminized hurricane was proclaimed the Red Menace of meteorology and the epitome of expressed sexual tension and fears of the period.

As discussed in Chapter 2, the decision to use female names for hurricanes was historically unique in terms of its introduction and overall acceptance. However, within the context of the Cold War era, this decision was explainable. The implementation of this system in the U.S. subsequently expanded to other places throughout the globe because of the spread of U.S. cultural domination. By dissecting the reasons why this system was introduced when it was and why it was so appealing, it is possible to identify the combination of larger shifts in American culture.

This chapter argues that the feminization of hurricanes was reflected by and contributed to three dramatic shifts in American culture in the postwar era.

⁴ Another classically feared female figure of the 1960s was the Cold War Mom who was said to be smothering and damaging to her children, particularly male children. This fear, coined "Momism," by Michael Rogin, explains that the glorification of the stereotypes of gender roles formed in wartime caused a "cult of domesticity" to ensue. This cult of domesticity that glorified the American mother for her ability to control the domestic sphere quickly turned into a "fear of maternal influence," during the Cold War era. Cold War movie portrayals of "momism," or the fear of corrupting mothers that emasculated American men and boys in their households created fearful stereotypes of powerful women within the home. Michael Rogin, *Ronald Reagan, The Movie and Other Episodes in Political Demonology* (Berkeley: University of California Press, 1987).

First, a redefinition of gender roles by the state dramatically influenced the perception of American women at home and abroad. Second, the rise of consumer culture caused these new gender stereotypes to be iconocized, further segregating the distinctions between ideal and difference. Finally, these changes in the rhetoric and spread of popular culture influenced the discussion of meteorology and the standardization of policy and the thought process about it. Understanding all three shifts unlocks the reason behind the acceptance and predominant usage of the feminized hurricane in popular culture.

GENDER IN THE POSTWAR PERIOD

As illustrated in the preceding chapter, the creation of an iconic American woman actively distributed in pin-ups and as painted beauties on airplanes had significant effects on the cultural expectations regarding women in the postwar era. As Robert Westwood has argued, ideas of women created as objects of obligation by the state became what men expected to find when they returned home from war. Much like the men fought to preserve and protect that iconocized image of American women overseas during war, men transferred their obligation to protect women from threatening forces to the homefront after the war.

Historians Joanne Meyerowitz and Alice Kessler-Harris have argued that after a record number of women went to work outside the home during the war, the government actively encouraged women's return to the home in the postwar period.⁵ The redefined gender roles of wartime no longer applied postwar, the government emphasized in pamphlets, speeches, and other propaganda.⁶ Women were encouraged to truly become the "object of obligation" in practice, not just in pin-ups.

The ideal postwar woman, in state-constructed representative image, was focused on her home, as there was no need for her to be focused on anything else. Portrayed in popular culture as stocking backyard bomb shelters to attending PTA meetings, the suburban housewife was glorified for her virtuous attention to the domestic sphere and ability to adapt to a postwar economic system that no longer required her assistance in the workforce. The association of "good" and "bad" females and feminine attributes was specifically highlighted through consumer-based marketing produced exclusively by males. The importance of family life was central to this idyllic hegemonic culture founded on the principle of sex-based gender roles that emphasized a male breadwinner and a female nurturer in a suburban environment.7 Consequently, sex-segregated marketing

⁵ Joanne Meyerowitz, *Not June Cleaver: Women and Gender in Postwar America*, 1945-1960 (Philadelphia: Temple University Press, 1994); and, Alice Kessler-Harris, *Out to Work: A History of Wage-Earning Women in the United States*, 20th Century Edition (New York: Oxford University Press, 2003).

⁶ As Nancy Woloch states, "by the end of 1946, 2 million women had left the labor force and another million were laid off," in an effort to return jobs back to men returning from war. Those women who kept jobs were generally found to be working in "traditional" gendered jobs such as schoolteachers, nurses, and maids. In studies performed and newspapers articles surveyed, these women were generally excluded or overlooked as researchers pressed for information about housewives. For more information see: Freida S. Miller, "What's Become of Rosie the Riveter?" *New York Times Magazine*, May 3, 1946: 21FF; and, Nancy Woloch, *Women and the American Experience*, 5th ed. (New York: McGraw-Hill, 2011): 329-358.

⁷ For ideology surrounding postwar women see: Elaine May, *Homeward Bound:* American Families in the Cold War Era (New York: Basic Books, 2008); Stephanie Coontz, The Way We Never Were: American Families and the Nostalgia Trap (New York: BasicBooks, 2000); Eugenia Kaledin, Mothers and More: American Women in the 1950s (Boston: Twayne Publishers, 1984); and, Wini Breines, Young, White, and Miserable: Growing up Female in the Fifties (Chicago: University of Chicago Press, 2001).

to consumers drastically increased the separation between genders.⁸ This, combined with the convergence of sex roles during war, led to an exaggeration of the feminine female and masculine male in postwar popular culture.

This exacerbation of traditional gender roles significantly affected views of women working outside the home who were not fulfilling "traditional" roles. By the mid- to late- 1960s, the increasing number of females working outside the home reached a tipping point, causing tension. With friction over the balance of gender roles, other aspects of Americans' lives were challenged as well.

On a broader level, larger political debates over differences between American ways of life and Communist sentiments also fueled an obsession with "perfect" American women. As a result, debates over transgressive behavior and women's roles became a focal point of discussion politically.⁹ At the same time, publications like Alfred Kinsey's 1948 and 1953 books about sexual activities of both men and women threatened the constructed conservative norm.¹⁰ Viewed as demoralizing to current society, the expression of these sexual freedoms added to pre-existing fears about women. In an effort to stabilize the fearful imbalance

⁸ For more on sex-segregated marketing during the postwar era see: Susan Douglas, Where the Girls Are: Growing up Female with the Mass Media (New York: Times Books, 1995); Marshall McLuhan, The Mechanical Bride: Folklore of Industrial Man (Corte Madera CA: Gingko Press, 2002); Rachel Devlin, Relative Intimacy: Fathers, Adolescent Daughters, and Postwar American Culture (Chapel Hill: University of North Carolina Press, 2005); Elizabeth Haiken, Venus Envy: A History of Cosmetic Surgery (Baltimore: Johns Hopkins University Press, 1997); and, Susan Strasser, Never Done: A History of American Housework (New York: Henry Holt, 2000).

⁹ Exemplifying these fears, in 1959, Vice President Richard Nixon and Soviet Premier Nikita Khrushchev went head to head over the layout and fixtures in modern kitchens. The "Kitchen Debate" had a significant strategic and diplomatic impact. Representing the astute differences between cultures as expressed through women's roles and duties within the home, this debate, among others, cemented the idea that the Cold War was unquestionably linked to the idealized American home. For more on the Kitchen Debates see: William Safire, "The Cold War's Hot Kitchen," *The New York Times*, July 24, 2009: A25.

¹⁰ Alfred C. Kinsey, *Sexual behavior in the Human Male* (Philadelphia: W. B. Saunders, 1948); and, Ibid, *Sexual behavior in the Human Female* (Philadelphia: W. B. Saunders, 1953).

of current society it was argued that sexual freedoms needed to be contained, forced, like women, back into the home. Margot Canaday illustrates this point by showing how the state defined and controlled sexual deviancy like homosexuality through legal measures. Meanwhile, Elaine Tyler May explains that the idea of sexual containment through Cold War symbolism was marketed in other ways to a society already at tension over sexual freedoms. Expressing this tension, working women were singled out and painted as threatening to postwar cultural balance because of their increasing role in the workforce. Claiming that the U.S. would be more vulnerable to attack by external forces if it were in shambles from internal tension, containing sexual freedoms of transgressive women allowed for the defense of America.

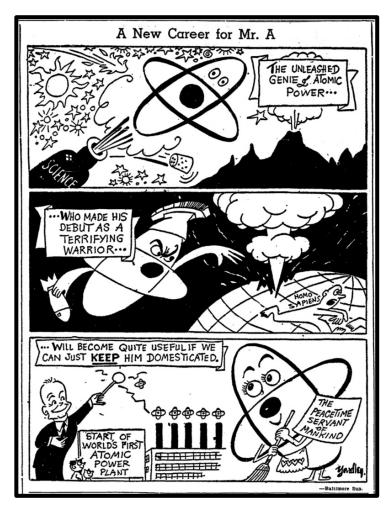
During the Cold War, Americans began to feminize nuclear debates. The atom bomb was feminized because it had the potential to damage the American homefront, or feminine area. Much in the same way a woman stepping outside set sex-based roles was painted as threatening, the bomb had the potential to wipe out the basic structure of American life. The atom bomb, like foreign Communist aggressors wielding nuclear threats, became a "symbol of sexual containment" that had to be "harnessed for peace."

While interest in the atom bomb as a destructive mechanism was shown in 1945, the idea that it could be used as an alternative energy source began to grow in the 1950s.¹² With the opening of major nuclear power plants throughout the U.S. and with new regulations on arms control being considered by the United

¹¹ May, 108.

 $^{^{\}rm 12}$ Richard Rhodes, *The Making of the Atomic Bomb* (New York: Simon and Schuster, 1988).

Nations, attention to the bomb's capabilities and usage predominated newspaper discussion. However, linguistically, reporters throughout the country discussed the atom bomb as an object to be "domesticated," "tamed," and "harnessed." The major way to do this, they concluded, was to repurpose its strength back into the home. For example, in the cartoon "A New Career for Mr. A," the transition between the violent Spartan warrior to domesticated effeminate man is easily seen.



Domesticating the Atom Bomb, 1954.13

¹³ "A New Career For Mr. A.," *The New Orleans Times-Picayune*, September 11, 1954: 6.

Similarly, the term "bombshells," started to be consistently applied to sexually expressive women.¹⁴ While the term arose in the 1930s, its usage and general acceptance grew in the postwar period as emphasis on sexually deviant behavior of women was a primary concern. Like the atom bomb, the bombshell needed to be "tamed," by force back into the suburban American home.

While major shifts were occurring in terms of cultural and political ideology about gender roles both at home and abroad, dramatic growth in advertising and media reinforced all of these images. As the number of Americans with televisions increased from 10,000 in 1945 to 60 million in the 1960s, many were introduced to new shows, nightly newscasts, and visual commercials.¹⁵ From June Cleaver, the perfect mother in Leave it to Beaver, to Samantha, the witch of *Bewitched*, ideas about normal women versus transgressive women were constantly debated on screen. 16 Not only did Americans see advertisements for different products, but they were influenced by basic advertisements for American life. For instance, in debating why the witch, Samantha, would be in a modern suburban home, audiences were treated to examples of how she strived to fit into society and how she would always be different, confirming that difference was a bad thing in this postwar culture. Similarly, the concept that the Cold War could be reaching into American homes at any time was confirmed nightly during newscasts.

¹⁴ May, 108.

¹⁵ "Television," The World Book Encyclopedia (Chicago: World Book, Inc., 2003) 119.

¹⁶ Douglas, "Chapter 6: Genies and Witches," 123-138.

While the television had a tremendous influence distributing a culturally hegemonic image of American society, advertising expanded the American way of life globally. In the process of increasing interests abroad through imperial means, Americans spread the images and products of their culture, too. ¹⁷ Victoria de Grazia has written that the spread of a hegemonic version of U.S. culture within the states is easily seen in other places around the world, as well. This formed a "Market Empire" where brand recognition was crucial to cultural domination. ¹⁸ From soldiers handing out Hershey's Bars from their K-Ration kits during the war to mass-marketing campaigns of well-known products like Coca-Cola after the war, American products became hot commodities overseas. Eventually, this soft-power cultural imperialism could easily be traced through countries in Europe, South America, the Caribbean, Asia, and any other place where U.S. troops came in contact. ¹⁹

_

¹⁷ For more on the development of a U.S. Empire in Latin America, the Caribbean, and the Pacific see: Emily Rosenberg, Spreading the American Dream: American Economic and Cultural Expansion, 1890-1945 (New York: Hill and Wang, 1982); Catherine Ceniza Choy, Empire of Care: Nursing And Migration In Filipino American History (Durham: Duke University Press, 2003); Michael Hunt, Ideology & U.S. Foreign Policy (Yale University Press, 1988); Mary Renda, Taking Haiti: Military Occupation & the Culture of U.S. Imperialism, 1915-1940 (Chapel Hill: University of North Carolina Press, 2001); Eric Roorda, The Dictator Next Door: The Good Neighbor Policy and the Trujillo Regime in the Dominican Republic, 1930-45 (Durham: Duke University Press, 1998); Haunted By Empire: Geographies of Intimacy in North American History, Edited by Ann Laura Stoler (Durham: Duke University Press, 2006); Ty P. Kawika Tengan, "Remembering Panalau: Masculinities, Nation, and Empire in Hawai'i and the Pacific," The Contemporary Pacific (University of Hawai'i Press) 20 (2008): 27-53; William Lederer and Eugene Burdick, The Ugly American (New York: W.W. Norton & Company, 1958); and Juan Pedro Soto, Usmaíl (St. John: Sombrero Publishing Company, 1959).

¹⁸ Victoria de Grazia, *Irresistible Empire: America's Advance Through Twentieth-Century Europe* (Cambridge: Belknap, 2006).

¹⁹ For more on the development of consumer culture within and outside the United States see: Lizabeth Cohen, *A Consumers' Republic: The Politics of Mass Consumption in Postwar America* (New York: Vintage Books, 2004); Thomas Frank, *The Conquest of Cool: Business Culture, Counterculture, and the Rise of Hip Consumerism* (Chicago: University of Chicago Press, 1998); T. J. Jackson Lears, *Fables of Abundance: A Cultural History of Advertising in America* (Basic Books: New York, 1994); and, Reinhold Wagnleitner, *Coca-colonization and the Cold War:*

INTRODUCING THE NAMING SYSTEM: A REACTION TO OVERALL CHANGE

All of these things, a shift in gender roles, the feminization of destructive objects, the change in mass media consumption, and the impact felt because of new mediums for prediction of meteorology influenced the introduction of a new naming system and acceptance of this naming system for hurricanes in the postwar period. For example, Elaine Tyler May's symbols of sexual containment and Michael Rogin's "maternal invasion," explain the increased belief of a feminized, vulnerable homefront, and the descriptive homogenization of demonic female aggressors. But atom bombs and movies were not the only "symbols of sexual containment" or maternal invaders used during the Cold War era to metaphorically "tame" women.

The feminized hurricane was also a product of this time period. However, unlike the feminized atom bomb or Rogin's "feared mom," the feminized hurricane had far greater long-term effects because of its sustained prevalence in the media and shifts in environmental concerns. While the atom bomb was originally deemed masculine because of its ability to entirely annihilate the population surrounding it, then feminine once domesticated, the hurricane was gendered female from the beginning. Similarly, this association of women with hurricanes has been more far-reaching and continues to be a prevalent association in popular culture today.

One explanation for the association of the female sex with hurricanes is that the hurricane was seen as an object that was as forceful as an atom bomb but

The Cultural Mission of the United States in Austria after the Second World War (Chapel Hill: University of North Carolina Press, 1994).

often would leave areas of impact relatively unscathed. Therefore, unlike the atom bomb – which consistently annihilated all in its path – the hurricane was unpredictable. The association of the female sex with the hurricane and its resulting descriptions reflected the basic assumptions about "erratic" and unpredictable transgressive women in U.S. society. As the following chapters will illustrate, by tracing the development of linguistic acceptance and opposition to the feminized hurricane through major storms from 1954 to 1969 it is possible to see the progression of the adoption of not only the state-controlled name itself, but a discussion of the very idea of what it meant to be feminine in the Cold War era. In describing and continually reevaluating what it meant to be "feminine" and "ladylike" in reports, weathermen and reporters not only mirrored larger discussions over the role of women in the Cold War society but also helped to shape it.

A CONE OF PROBABILITY: PINPOINTING GENDER IN MOVING TARGETS

In many ways this dissertation has evolved into a study of words — the words used by society to describe and assign gender to an environmental object — the hurricane. These words hold a variety of meanings and can often cause controversy or be applauded for their ability to sum up feelings and emotions, depending on the circumstances. Words also serve as reflective markers of cultural changes that were evolving slowly over time. But how does one study the words used in society? And, more particularly, how is it possible to accurately trace the use of words cross-culturally?

After experimentation with a variety of media sources, it was concluded that newspapers provide the key method to do this as newspapers are responsible for keeping track of not only local reactions to events in an area, but national and international opinions. ²⁰ This dissertation is based on a quantitative and qualitative study of 8,915 newspaper articles from 12 U.S. cities and a sampling of articles from 6 Caribbean and Central American cities. Every article in a five-day period for each storm was carefully read and analyzed for specific pre-selected variables. These included the number of articles for each storm, the number of articles about each storm in each newspaper, the number of references to gender made in each article, the type of gender reference that was made in an article, whether the storm was referred to as "Hurricane Maria" or just as "Maria", and the descriptors used within articles about a hurricane (See Table 10 for variable breakdown).

²⁰ Other methods of research were considered and ruled out in the initial stages of research. For instance, television reporting, while playing a key role in the development of hurricane tracking and perception in the late twentieth century serves as an infinite source of information that would have taken years to code, draw correlations from, and would be more subjective than newspapers. The question of whether a television commentator was acting on spur of the moment advise or ad-libbing when necessary would always be a variable that would throw off research conclusions. While this variable does exist for newspaper reporters, response to inappropriate comments can be easily tracked in opinion segments the following days. Archival research did take place during the construction of this dissertation, however, this author chose to use this information to fill in segments rather than let it serve as the primary statistical basis.

TABLE 10. Variables studied in dissertation newspaper articles and method of computation

Variable	Method
Number of articles relating to storm Number of references to a storm with "Hurricane" as the prefix	Quantitative Quantitative
Number of times the storm name was used without "Hurricane" as a prefix	Quantitative
Number of references to gender in article	Quantitative
Descriptive terms used in article	Qualitative

The analysis of these variables allowed for conclusions regarding several major factors. The first variable allowed for a tally to be kept for the number of newspaper articles on the hurricanes studied. As will be illustrated throughout the rest of this dissertation, the number of articles on particular hurricanes often reflected larger trends in the consumption of media related to and interest in hurricanes. The second variable, tied in with the statistics for the third variable, measured whether a hurricane was described by its assigned name, such as, "Maria" or referred to as "Hurricane Maria." This variable was important for several reasons, first to show the general acceptance and usage of the U.S. Weather Bureau's naming system, not only within the U.S., but also abroad. Secondly, it illuminated trends regarding the personification of hurricanes. As the naming system became entrenched in American culture, higher tendencies of storms referred to solely by its name occurred (i.e., "Hurricane" prefix was dropped). For example, "Hurricane Carol" was referred to solely "Carol" in most of the newspapers studied.

The final two variables studied were the most important variables to this dissertation's conclusions. The fourth variable, the quantitative analysis of gender, provided specific statistical data on the use of and fluctuations in the The quantitative study of gender is complicated, gendering of hurricanes. therefore the parameters set for this dissertation were extremely focused. When reading through a newspaper article, gender was defined as any reference to a hurricane as a: "she," "he," "sister," "brother," "mother," "father," "daughter," "son," "uncle," "aunt," "girl," "boy," "gal," "guy," "wife," "husband," "lady," "gentleman," or "bitch."²¹ If any gendered term appeared in the same sentence as the hurricane's name, the hurricane's name would also count as a gendered reference as it was concluded that the hurricane's name itself was gendered within that sentence. On the contrary, if the hurricane's name appeared separately within the text of an article, but not in the same sentence as a gendered reference, the name did not count as a gendered reference. This method provided statistical flexibility for articles that included quotations of sources who had gendered a hurricane, but reporters who had not.

The final variable collected for this dissertation research allowed for cross-comparative terms to be tracked in multiple cities and countries. It measured any descriptive terms used in articles referring to hurricanes. The qualifying terms directly described the hurricane, or a hurricane's movements, actions, and impact. Out of all of the statistics taken, this variable was the only qualitative variable based solely on this author's interest in the development of particular

 $^{\rm 21}$ References to a hurricane as a "bitch" appeared first in the 1980s, then regularly after 2005.

phrases and descriptions used with hurricanes over more than half a century. As such, the descriptive terms collected are only referred to in the text of the dissertation, not in the tabulation of its statistics.

The best way to illustrate how these statistics were collected is to include an example of a typical article in this 8,915 article study. The article selected, from the *New York Times*, is from the first year of the hurricane naming system (1954) and will be discussed in context with other articles from that time period in the following chapter, however, for the purpose of demonstrating the statistics collected it is an ideal example.²² Due to its size (stretching two pages in the newspaper), only a segment of it appears on the following pages. For simplicity, the article has been highlighted to illustrate the various variables studied in the dissertation. The blue highlighted version demonstrates the tabulation of the use of gender in an article. Meanwhile, the red highlighted version illustrates descriptive terms collected for qualitative tracking purposes. Finally, the green highlighted version shows the usage of the hurricane's name, "Edna," versus the usage of "Hurricane Edna" within the article.

_

²² "Eccentric Edna Grazed the City With a Wet, but Vicious, Left Jab," *New York Times*, September 12, 1954: 1.

Eccentric Edna Grazed the City With a Wet, but Vicious, Left Jab

By MEYER BERGER

Eccentric Edna of the mean terday morning - to a cautious Hurricane Sisters brood grazed crawl, lashing windshields with New York City with her short a semi-viscous film. left arm yesterday. She just The tantrum lasted, roughly, reached in from the sea in seventeen hours, from about 9 screaming northward off the o'clock Friday night through 2 coast. She bent and tore saplings o'clock yesterday afternoon. and low green growth, stripped the first autumn leaves from then increased to a violent downpark trees, beat against sky-pour all through the night. After scraper windows and setbacks midnight, the rain obscured the and plucked and tore at the great city's topmost towers from street bridges.

meteorological tantrum. She drove in impenetrable curtains down rain against the city's towers avenues and side streets, which it until she had turned them from cleared of pedestrians. The city bonewhite and soft gray to glis-seemed deserted. tening black. She created great rain pools in the sheep meadow in light. She whimpered for open-Central Park and around con-ings in the sheer north wall of struction jobs at Triborough the Empire State Building. At Bridge approaches. She reduced observation-roof level, she blew motor traffic-what little there her own tears even through was late Friday night and yes-

Edna's first tears fell lightly, vision. It lashed at apartment Edna wept in her violent and skyscraper panes and swept

> At dawn, Edna held back the tightly closed windows.

WHEN you think of writing-Think of Whiting. Continued on Page 72, Column 8 WHITING PAPER COMPANY-Advt.

Gender References Found in Sample Article.

Eccentric Edna Grazed the City With a Wet, but Vicious, Left Jab

By MEYER BERGER

Hurricane Sisters brood grazed crawl, lashing windshields with New York City with her short a semi-viscous film. left arm yesterday. She just reached in from the sea in seventeen hours, from about 9 screaming northward off the o'clock Friday night through 2 coast. She bent and tore saplings o'clock yesterday afternoon. and low green growth, stripped the first autumn leaves from then increased to a violent downpark trees, beat against sky-pour all through the night. After scraper windows and setbacks midnight, the rain obscured the and plucked and tore at the great city's topmost towers from street bridges.

bonewhite and soft gray to glis-seemed deserted. tening black. She created great rain pools in the sheep meadow in light. She whimpered for openings in the sheer north wall of struction jobs at Triborough the Empire State Building. At Bridge approaches. She reduced observation-roof level, she blew motor traffic-what little there her own tears even through was late Friday night and yes- tightly closed windows. Main-

WHEN you think of writing-Think of Whiting. | Continued on Page 72, Column 8

Eccentric Edna of the mean terday morning - to a cautious

The tantrum lasted, roughly,

Edna's first tears fell lightly, vision. It lashed at apartment Edna wept in her violent and skyscraper panes and swept meteorological tantrum. She drove in impenetrable curtains down rain against the city's towers avenues and side streets, which it until she had turned them from cleared of pedestrians. The city

At dawn, Edna held back the

Descriptive Terms Found in Sample Article.

Eccentric Edna Grazed the City With a Wet, but Vicious, Left Jab

By MEYER BERGER

New York City with her short a semi-viscous film. left arm yesterday. She just The tantrum lasted, roughly, reached in from the sea in seventeen hours, from about 9 screaming northward off the o'clock Friday night through 2 coast. She bent and tore saplings o'clock yesterday afternoon. and low green growth, stripped bridges.

bonewhite and soft gray to glis-seemed deserted. tening black. She created great At dawn, Edna held back the motor traffic—what little there was late Friday night and yes-

Eccentric Edna of the mean terday morning - to a cautious Hurricane Sisters brood grazed crawl, lashing windshields with

Edna's first tears fell lightly, the first autumn leaves from then increased to a violent downpark trees, beat against sky-pour all through the night. After scraper windows and setbacks midnight, the rain obscured the and plucked and tore at the great city's topmost towers from street vision. It lashed at apartment Edna wept in her violent and skyscraper panes and swept meteorological tantrum. She drove in impenetrable curtains down rain against the city's towers avenues and side streets, which it until she had turned them from cleared of pedestrians. The city

rain pools in the sheep meadow in light. She whimpered for open-Central Park and around con-ings in the sheer north wall of struction jobs at Triborough the Empire State Building. At Bridge approaches. She reduced observation-roof level, she blew

WHEN you think of writing-Think of Whiting. | Continued on Page 72, Column 8

Name Usage Found in Sample Article.

What the statistics for this sample article show quantitatively is that there were: 14 gender references, 5 references to "Edna," and no references to "Hurricane Edna." Meanwhile, the descriptive references illustrate that Hurricane Edna was described as one of the "mean Hurricane Sisters," and that "she" "wept" a "violent meteorological tantrum," both of which were terms used with other hurricanes and in other cities besides New York City.

This process of article analysis was repeated with every article analyzed for this dissertation.²³ As illustrated throughout the rest of this dissertation, what this extensive variable analysis provided was aggregate data on the progression of the use of gender for each storm, each city, each geographical region, and each time period. More importantly, it provided an unparalleled review of the use of gender and U.S. society, through the lens of hurricane descriptions, beginning with the acceptance of the hurricane naming system by U.S. mainstream culture in the 1954 and its eventual adoption globally.

_

²³ This author chose not to use computational software to analyze this data as the complications with "training" a computer to identify and delineate gender references made when referring to a hurricane and not a person mentioned in articles was impossible at this time. As a result, statistics for all 8,915 articles were taken by hand, very slowly, over three years. While human error is statistically inevitable, all efforts were taken to prevent it in collecting the statistics, including the usage of Excel spreadsheets and clustered tally marking for easy tabulation of the results.

CHAPTER 4

IT ALL BEGAN WITH ALICE: THE BAD GIRLS OF '54

In late June 1954, Hurricane Alice blew through Mexico, heading towards Texas. A popular name from the time period because of Walt Disney's recently released *Alice in Wonderland* film, the discussion surrounding what "Alice" would do as the first named storm in a newly implemented nation-wide system was surprisingly minimal.¹ While causing disastrous floods in the Rio Grande Valley, it was quickly dismissed as a regional problem. Similarly, "Barbara," which hit the Caribbean in July, "blew out harmlessly," to the sea.² As a result, by the time "Carol" came ashore in the first days of September, the mass public had been less than impressed by the new female-named gales. However, all this changed with Carol.

Carol, described as "fierce" and a "howler," seemed to "maul" the East Coast, reported the *Atlanta Journal-Constitution* on August 30, 1954.³ After "wallowing aimlessly" for days at sea, the storm quit "dawdling" and threw its

_

¹ From this point on for clarity, all hurricanes will be referred to first as "Hurricane (Name)," then as "(Name)," and for all subsequent references just as the (Name). Walt Disney's *Alice in Wonderland*, Directed by Claude Geronimi, Wilfred Jackson, and Hamilton Luske (1951: Walt Disney, Inc.) 75 minutes.

 $^{^{2}}$ "Alice Struck on July 25, Starting Season of Gales," $New\ York\ Times,$ October 16, 1954: 11.

³ "Fierce" and "howler" in: "Hurricane Carol Hits Coast, Fades," *Atlanta Journal-Constitution*, August 30, 1954: 1; "Mauls East Coast" in: "Hurricane Mauls East, Killing 37; Loss in Millions: Hundreds of Yachts Smashed," *Atlanta Journal-Constitution*, September 1, 1954: 1.

"whirling body" at the coast with a force that made the residents cringe.⁴ Carol was "everything but feminine as she blew out of North Carolina's area," reported the *Raleigh News & Observer.* Toppling the historic Old North Church steeple in Boston, Massachusetts, in one "furious" sweep, images and descriptions of Carol's "ride" along the coast relayed the message throughout the country that the powerful storm was a "different" type of hurricane that moved faster than Paul Revere.6



Carol vs. the Old North Church, 1954.7

4 "Wallowed aimlessly" in: "Atlantic Storm Losing Strength," Mobile Register, August 30, 1954: 1; "Dawdling" in: "North Carolina Coast Hit Hard," New Orleans Times-Picayune, August 31, 1954: 1; "Whirling body" in: "Hurricane Skirts Charleston, Aims At North Carolina Coast," Charleston News & Courier, August 30, 1954: 1A & 13B.

⁵ "North Carolina Areas Count Storm Damage," Raleigh News & Observer, September 1, 1954: 1 & 3.

^{6&}quot;28 Reported Dead in Hurricane: NE Bears Brunt of Full Wind," Mobile Register, September 1, 1954: 1 & 4.

⁷ "Wind Topples Steeple," *Baltimore Sun*, September 1, 1954: 1.

By September 1, with "much of its fury spent," the "Caribbean-born" hurricane finally turned into a "runaway hurricane" retreating back to the sea leaving a death toll of 54.8 Looking around after the storm, reporters in various cities throughout the U.S. commented on the storm that "devastated" the coast.9 With damage in the millions a "rush cleanup" was attempted as news about a "new blow threat," Hurricane Dolly, was reported.¹¹o Even though Dolly followed on the "heels of Carol" and did not affect the states the same way Carol had, discussion of the storm in reference to Carol appeared in every newspaper studied.¹¹

Overall, in 12 cities throughout the U.S., 110 articles appeared related to Hurricane Carol and only 5 cities referred to Carol as a feminized hurricane. On average, this meant that for the first major storm of the season, newspapers throughout the country specified a gender when referring to Carol 11 percent of the time. While this might have seemed a small percentage, it signaled the beginning of a trend in usage of feminine characteristics to describe storms. This trend continued to build over the next decade.

_

⁸ "Hurricane Rakes East, Kills 47; Batters Long Island; Power Cut," *New York Times*, September 1, 1954: 1 & 20; Death toll of 54 in: "Hurricane Leaves Death Toll of 54," *Los Angeles Times*, September 2, 1954: 1.

⁹ "In Wake of the Hurricane That Devastated New England," *Los Angeles Times*, September 2, 1954: 3.

¹⁰ Damage in millions in: "Storm Relief 'Red Tape' Cut: Presidential Order Speeds Rehabilitation Effort," *Baltimore Sun*, September 2, 1954: 8; "Rush cleanup" in: "Rush Cleanup of Damage Done By Hurricane," *Biloxi Sun-Herald*, September 2, 1954: 1; "New blow threat," in: "New Hurricane May Be On Way," *Richmond Times-Dispatch*, September 1, 1954: 12.

¹¹ "On the heels of Carol" in: "Hurricane Dolly Off North Carolina," *Miami Herald*, September 2, 1954: 1A.

¹² Of the 12 U.S. cities in the dissertation data set, Hurricane Carol included 110 Articles and had 12 Gender References total. Baltimore, Houston, Miami, New Orleans, and Raleigh all used a gender description when referring to Carol. Raleigh, however, had the highest number of gender descriptions.

While originally hoped for by the U.S. Weather Bureau, the female-naming system ignited interest in storms in a way that had never been achieved before. Feminized hurricanes became a topic of regular conversation and a part of cultural memory, not only in the U.S., but globally. The escalating interest in storms' movements created an environment where descriptive flair flourished. As will be illustrated in this chapter and the next, at a time when gender roles were particularly in the forefront of public discussion feminized storms became an animate object for the projection of fear, anger, and a sense of loss of control in a changing U.S. society.

THE "BAD GIRLS CLUB"

After Hurricane Carol, gender use quickly escalated over the course of the 1954 season as hurricanes Edna and Hazel quickly made their mark on the already devastated northeast. The "sister" of Carol, reported the *Atlanta Journal-Constitution* "slapped" the coastline. Seemingly "skittish" at first, "the arrival of Edna" only developed into a "carbon copy of Hurricane Carol" stated others in Biloxi and Mobile. 4

However, "Edna became twins," as she crossed Cape Cod, splitting into two hurricanes. ¹⁵ Meteorologists explained, "that she had been rent by her own

¹³ "Sister" in: Image caption, *Atlanta Journal-Constitution*, September 11, 1954: 1; "Slaps" in: "Upper East Coast Residents Flee Inland As Howling Edna Grazes Carolinas, Roars North," *Atlanta Journal-Constitution*, September 11, 1954: 1 & 3.

¹⁴ "Skittish" in: "New England Braces For Hurricane," *Biloxi Sun-Herald*, September 10, 1954: 1 & 5; "Carbon copy of Hurricane Carol" in: "Threat of Hurricane Cancels East Events," *Mobile Register*, September 12, 1954: 6 & A2.

 $^{^{\}rm 15}$ "Hurricane Grazes Northeast, Hits Tip of Nova Scotia," $\it Baltimore~Sun,$ September 12, 1954: 3.

violence," stated the *Baltimore Sun*.¹⁶ As a result, many watched on television as "Edna wept [during] her violent meteorological tantrum," that "lasted, roughly, seventeen hours," stated the *New York Times*.¹⁷ In fact, Edna became the "most widely televised and broadcast event of the season" as many radio and television stations followed the storm's movements with live coverage, a first for hurricane news reporting.¹⁸ Interest in Edna only escalated with reports of Hurricane Hunter planes flying along the outside of the storm and radar images from the flights appeared in newspapers. The *New York Times* even mocked the photos, stating that "Edna [had] her 'portrait' taken on radar as she [moved]" which allowed the storm "little privacy."¹⁹ Meanwhile, weathermen throughout the country were "harassed with storm phone calls," as many wanted to know more about Edna's progression.²⁰ But Edna, "maintained the prerogative of changing her mind," repeatedly, piquing interest throughout.²¹

As reported in the press, it soon became obvious that this "freak of nature" was one "angry woman!"²² The *Miami Herald*, even showcased Edna as a liquor-

_

¹⁶ "Hurricane Grazes Northeast, Hits Tip of Nova Scotia," *Baltimore Sun*, (cited previously).

¹⁷ "Edna wept in her violent meteorological tantrum" in: "Hurricane Skips City, Long Island; With A Wet, But Vicious Left Jab," *New York Times*, September 12, 1954: 1 & 72.

¹⁸ "Radio & Television Stations Planning Extensive 'Live' Coverage of Hurricane," *New York Times*, September 11, 1954: 8.

¹⁹ "Edna Has Her 'Portrait' Taken On Radar As She Moves Up Jersey Coast," *New York Times*, September 12, 1954: 73.

²⁰ "Weathermen Harassed With Storm Phone Calls," *New York Times*, September 11, 1954: 9.

²¹ "New York, New England Preparing For Hurricane," *Raleigh News & Observer*, September 11, 1954: 1 & 2.

²² "Freak of nature" in: "Hurricane Dampens Braves," *Charleston News & Courier*, September 11, 1954: 9A; "Angry woman!" in: "Hurricane Misses Charleston, Steers For New England Coast," *Charleston News & Courier*, September 10, 1954: 1A & 2A.

drinking flirtatious woman waving a handkerchief at the states as "she" kicked "her" heels up the coastline.



Hurricane Edna, Miami Herald, 1954.23

Captured in the cartoon is the exhaustion already felt by the eastern coast, particularly in the Northeast where the effects of Hurricane Carol were still being felt. Similarly, the tagline to the cartoon states that Edna was a "woman in trouble" who was not only "unwanted" but "feared," expressing sentiments about postwar anxiety and sexual tension. However, this "erratic lady" was eventually "rent asunder by her own violence," leaving an uneasy sense of relief as the latest in the pack of "sisters," Hurricane Hazel followed shortly after.²⁴

²³ "Hurricane Edna," *Miami Herald*, September 11, 1954: 6.

²⁴ "Erratic lady" in: "Storm Threat to Land Ends; Curves North," *Mobile Register*, September 9, 1954: 1 & 4; "Rent asunder by her own violence" in: "Hurricane Edna Splits Into

Heavily laden within the text, political cartoons, and general discussion of Edna in the media was a noticeable increase in the prevalence of references to Edna's femininity. In the case of Hurricane Carol, only 11 percent of articles used a gender designation. Less than a month later with Hurricane Edna, gender use equaled 101 percent — a 90 percent increase. Thus, of the 170 articles that discussed Edna, 171 gender references were made.

While this was a significant increase in overall assignment of gendered descriptions and terms in reference to Edna, what was most surprising was the overwhelming negativity of the gendered terms used. For example, of the references used, the most common phrases often referred to Edna, as, or performing the following acts: eccentric, rough, sweeping furiously, skipping, screaming, shrieking, tearing up, throwing a tantrum, angry, skittish, howling, slapping, having a sister, and swishing her skirts. By themselves, some of these acts were traditionally gendered "female," while some were not. However, when combined with references to Edna as a "female" by using words like "she" and "her" within the text surrounding these terms, it can easily be concluded that these acts were meant to emphasize Edna's gender as a female.

It should also be noted that Edna was the first major storm to be referred to as "no lady."²⁵ This was especially significant because at the time, being classified as unladylike, or more particularly, to state that a woman was "no lady" was considered a slur nonpareil. As described by historian Linda Kerber, the

Sections: 7 Persons Known Dead in Path of Big Storm," *Mobile Register*, September 12, 1954: 1 & 2. "Rent asunder by her own violence" was also found in the *New York Times* on the same day as the *Mobile Register* article.

 $^{^{25}}$ "Hurricane Edna Passes 100 Miles Off Virginia Capes: Heavy Rain, Winds Hit East Coast," $Richmond\ Times-Dispatch,$ September 11, 1954: 1 & 3.

phrase "no lady" meant a lack of voting rights, social status, sexual restraint, and could indicate a racial stigma.²⁶ "Ladies" were defined as upper- to middle- class white women, usually married after a certain "respectable" age. All other women who did not fit into this category were not "ladies" in the strictest sense. By stating "Edna" was "no lady" reporters and weathermen were expressing that she lacked qualities that defined the idealized American woman. To put it simply, the phrase was meant to be the ultimate insult.

After Hurricane Edna, newspapers throughout the country reevaluated their use of gender when referring to the new season's hurricane names. With Alice, Barbara, Carol, Dolly, and Edna on the public's mind, both support and strong opposition was voiced about the new system. In the *Biloxi Daily Herald* reports of an increase in requests to name storms after wives and girlfriends, made headlines. "I can't do it," stated Weather Bureau Chief Grady Norton emphatically, "I receive a list of names and orders to use them in sequence," and, "I follow orders."²⁷

While other newspapers applauded the new system as simple and effective, the *Houston Chronicle* was the most vocal in expressing opposition to the new naming system. Right after Hurricane Carol, an article appeared stating that it was "time the storm experts grew up and quit using 'cute' language" to describe tropical disturbances. For "a great many years it was possible to list hurricanes without such silly nomenclature," it argued. And, it did not "seem right" to "use

²⁶ Linda Kerber, No Constitutional Right To Be Ladies: Women and the Obligations of Citizenship (New York: Hill & Wang, 1998).

²⁷ "Hurricanes Can't Be Named After Your Girl," *Biloxi Daily Herald*, September 10, 1954: 6.

this juvenile playfulness in naming a cataclysm of nature [that had] the intensity of 100 hydrogen bombs." But that, the Houston newspaper concluded, was a "curse of the age" which seemed to be reflective of "a loss of virility in an effort to be cute." However, the *Houston Chronicle* proposed, "why not simply call them hurricane No. 1 or hurricane No. 2 of 1954," and so forth.²⁸

The following month, after Hurricane Edna, the *Houston Chronicle* took a much stronger stance on its proposal to remove the female name from the hurricane naming system. Reporting that the U.S. Weather Bureau had "begun to come under fire for giving deadly hurricanes such lovable names as Carol and Dolly," the paper stated that weathermen were not opposed to changing the naming system.²⁹ However, the naming system would stay in place for the entirety of the 1954 season.

The article then described an interview with Ivan Ray Tannehill, the assistant chief of operations for the Weather Bureau. "It isn't necessarily a permanent system," stated Tannehill. However, "it was the best thing we've come up with thus far," he explained to the reporter. When bluntly asked whether hurricanes were not designated by the number system proposed by the *Houston Chronicle* staff (e.g., Hurricane No. 1 of 1954), Tannehill was quoted as saying that he "didn't know." But, "that you probably would run into the same trouble

²⁸ "Storms Got 'Cute' Names During War in Pacific," *Houston Chronicle*, September 10, 1954: 9.

²⁹ "Time the Storm Experts Grew Up and Quit Using 'Cute' Language," *Houston Chronicle*, September 2, 1954: 2H.

with numbers as with letters of the alphabet—they could be misunderstood over networks," thus rejecting the *Houston Chronicle*'s suggestion.³⁰

The ongoing debate in the *Houston Chronicle* following both Carol and Edna was argued on two levels: first, whether naming storms was a good idea or not, second, whether naming them after females was the right decision. The *Houston Chronicle* proposed that the naming system should be dropped entirely. It also put forth an alternative naming solution. However, despite its objections, which were recognized by the Weather Bureau, the *Houston Chronicle's* idea was brushed aside.

The *Houston Chronicle* was not the only newspaper to object to the female-only naming system at its inception. The *New Bedford Standard Times*, in Carol-affected Massachusetts, went so far as to state that "the use of feminine names is inappropriate, facetious, and devoid of logical reason." Responding to this explosive suggestion by the *New Bedford Standard Times* and the reports coming from the *Houston Chronicle*, the *Miami Herald* disagreed. In the September 9 column, titled, "Town Crier," the *Miami Herald* editorialized that "Hurricane Carol would have been no more or less facetious if named Cornelius or Caliente." Overall, the article emphasized, "the weather bureau [did not show] much originality in selecting the names for this year's hurricane litter." But, "it's a matter of writing headlines," it argued, and no matter what the name was, "the

³⁰ "Time the Storm Experts Grew Up and Quit Using 'Cute' Language," *Houston Chronicle*, (cited previously).

 $^{^{31}}$ New Bedford Standard Times as cited in, "The Town Crier," Miami Herald, September 9, 1954: 1D.

wind still blows the same." Actually, the editorialist contended, "the real names we call a hurricane when it gets to town cannot be used in a family newspaper."32

Two days later, however, another opinion column appeared in the *Miami Herald* reversing the paper's support of the system of naming. "We think the naming of hurricanes after women should be dropped," stated the "As We See It," columnist. While "the practice of calling" storms "Alice, Carol, Dolly, and Edna and the like grew out of their capricious behavior," this was where "the similarity ends" they stated. In retrospect, "you can't convince anybody in New England that Carol had any ladylike qualities." In fact, "the way they're behaving calls for some strong old Biblical names like Goliath, Jonah, or Samson," the article concluded. Finally, it was agreed that "when nature works itself into a mighty wrath, we should not incur further woe with misleading descriptions," and female-named hurricanes would do just that.³³

The reversion to the previously defended naming system in the *Miami Herald* only exemplifies the larger discussion of the new naming system throughout the country. During the first part of a storm, as was the case with Hurricane Edna, reporters often agreed and delighted in the ability to curse the storm through gendered expletives. However, as the storm aftermath was tallied and response to strong storms rang out, newspapers reversed their positions. While the newspaper editorials that appeared in the *Miami Herald* were just one example of this, as storms continued to come and go throughout the years, the discussion of storm naming and gendering continued to follow this cyclical trend.

³² "The Town Crier," *Miami Herald*, (cited previously).

³³ As We See It, "No Time To Be Capricious," Miami Herald, September 11, 1954: 6A.

In October of 1954, after a series of major storms, another monstrous hurricane, Hazel, "altered" course to follow its predecessors, Carol and Edna, to hit the East Coast.³⁴ "The dawdling she did in her early days" was over.³⁵ "Wickedly menacing" the coast, the "nightmare" that followed left raging floods and over 150 dead in both the U.S. and Canada.³⁶ In discussing the storm, newspapers around the country printed accounts of how Hazel had "[left] her mark" after taking a pause to "rejuvenate" on the coast right before "galloping" to deliver a "terrific battering" during "her last fling."³⁷ As the *New York Times* concluded, Hazel was "one of the worst-tempered brats in an all-girl family" of hurricanes to hit the coast that year.³⁸ The *Raleigh News & Observer*, agreed with the *New York Times*, stating that Hazel had "behaved like Calamity Jane and left her calling cards scattered along the coast and inland" on the way out.³⁹

In addition to phrases popular with Edna and Carol, the most commonly used phrase with Hurricane Hazel was that the hurricane was a "menace," which

³⁴ "Hurricane Hazel Alters Course, Roars Toward Charleston, SC: 130 MPH Winds in Center; Inch of Rain is Expected in Richmond Area Today," *Richmond Times-Dispatch*, October 15, 1954: 1.

^{35 &}quot;Hazel Takes Trail Set By 2 'Sisters," Miami Herald, October 15, 1954: 2A.

³⁶ "Wickedly menacing" in: "Hurricane Kills 36 In Northward Path," *New Orleans Times-Picayune*, October 16, 1954: 1 & 8; "Nightmare" in: "Raging Floods Sweep Wind-Battered Areas," *Houston Chronicle*, October 17, 1954: 1 & 22; 150 dead in: "Hurricane Hazel Toll Hits 155 In Canada & United States," *Charleston News & Courier*, October 18, 1954: 1A.

^{37 &}quot;Leaves her mark" in: "Hurricane Smashes Into Myrtle Beach Area of S.C. Coast," *Charleston News & Courier*, October 15, 1954: 1A & 2A; "Rejuvenate" in: "Hurricane Hazel Is Expected To Pass Near Cape Hatteras," *Charleston News & Courier*, October 14, 1954: 1A; "Galloping" in: "Hurricane Kills 36 In Northward Path," *New Orleans Times-Picayune*, (cited previously); "Terrific battering" in: "Damage is Wide in Pennsylvania," *New York Times*, October 16, 1954: 11; "Last fling" in: "Hurricane's Toll Hits 36 in Canada," *New York Times*, October 17, 1954: 82. "Last fling" was also found in: "Hurricane Hazel Toll Hits 155 In Canada & United States," *Charleston News & Courier*, (cited previously).

 $^{^{38}}$ "Hurricane's Toll Increases Toll 8; Toronto Ravaged," New York Times, October 17, 1954: 1 & 80.

^{39 &}quot;Hurricane Brings Death, Destruction," Raleigh News & Observer, October 16, 1954: 1.

appeared in 4 newspapers, seconded only by the phrase, "wicked," used in 3 newspapers.⁴⁰ Similarly, the phrase "Hazel was no lady" appeared in 2 separate newspapers, the *Raleigh News & Observer* and the *Baltimore Sun*. The *Sun* went so far as to include a captioned cartoon that screamed the phrase, "You Were Certainly No Lady!" across the top of the image.



"You Were Certainly No Lady!" Baltimore Sun, 1954.41

The cartoon of Hazel, similar in structure to the portrayal of Edna as sweeping up the coastline with angry residents of various states clearly marked, took an entirely different approach to portraying the female-named hurricane. In the

⁴⁰ "Menace" or "Menacing" appeared in the: New York Times, Raleigh News & Observer, New Orleans Times-Picayune, and Atlanta Journal-Constitution. "Wicked" was used in the: Atlanta Journal-Constitution, New Orleans Times-Picayune, and Raleigh News & Observer. Often, they appeared together in a sentence.

⁴¹ "You Certainly Were No Lady!" Baltimore Sun, October 17, 1954: 14.

Hazel cartoon, Hazel is portrayed as a "witch." She is drawn as hideously ugly, with a wart-covered face and disproportionate facial features such as a crooked nose and chin.

As Susan Douglas has discussed, television shows highlighting women as witches and genies were popular on television during the 1950s and 1960s, so it is not surprising the phrase "was a witch," became a common association with hurricanes.⁴² However, the witch on television was very different than the witch hurricane. Cartoon depictions of these "witches" often illustrated them flying up the coastline on their brooms (such as in the *Baltimore Sun*) or calculating their next move (e.g., the *Miami Herald*). Similarly, in all cases, the witch hurricane was depicted as ugly and conniving.

In comparing the images of female hurricanes it is obvious that there were two very different portrayals of a hurricane — one an overly sexualized creature and the other the perfect combination of what many considered ugly features — but both the epitome of the "unwanted woman" in society. Similarly, both of these portrayals illustrate the ways in which the postwar world was truly obsessed with and in fear of women's power and sexuality. As tension grew over women's roles throughout the period, these two images of women were used more frequently to visually portray female-named hurricanes from this point on.

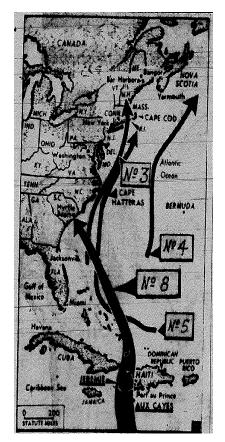
Overall, in the 204 articles describing Hazel's "Calamity Jane-like" trip up the coast, 114 gender references were made.⁴³ Fifty-six percent of newspaper

 $^{^{\}rm 42}$ Susan Douglas, Where the Girls Are : Growing up Female with the Mass Media, cited previously.

 $^{^{43}}$ "Calamity Jane-like" in: "Hurricane Brings Death and Destruction," <code>Raleigh News & Observer</code>, October 16, 1954: 1.

articles used gender to describe the storm, a noticeable drop from Hurricane Edna's 101 percent gender use rating. When looking at what affected the decrease in gender use percentage, several conclusions can be made. First, the number of articles discussing the storm grew considerably. With Edna, there were 170 articles; with Hazel, 204 articles. Second, discussion of the appropriateness of feminizing the hurricane within the text of newspapers had had an impact on the number of references used. Finally, the gender references with Hazel did not decrease in descriptive severity, despite a decrease in gender use percentage overall. In fact, Hazel's descriptions increased the division between sexually charged and stigmatized stereotyping of female hurricanes.

After voicing concern about the use of female names after Hurricane Edna, the *Houston Chronicle* actively chose not to use gendered references when discussing Hurricane Hazel. Instead, the newspaper used the "Hurricane No. 8 of 1954" system it had proposed in its editorial articles. This system was used in descriptions and depictions within the newspaper articles, as the *Houston Chronicle* did not refer to Hurricane Hazel by the name "Hazel" or by a specified gender. Even the hurricane tracking charts used within the newspaper itself had been removed of any evidence of the current female-only naming system. Other cities did not follow Houston's lead.





"Hurricane No. 8," Houston Chronicle, 1954; and "Hurricane Hazel," Baltimore Sun, 1954.44

By the next year, Houston's protest against the new naming system had failed. After some protest, the female-only naming system was renewed for the 1955 season. In August of 1955, as Hurricane Connie slammed into North Carolina, the *Houston Chronicle*, not only used "Connie" to refer to the hurricane, but included a whopping 18 gender references in the 4 articles that appeared discussing the storm. An explosive 450% increase in gender references from the previous year, Houston's opposition to the gendering of storms had been quashed. After a barrage of storms in 1954, the Weather Bureau had simply decided the storm naming system was pithy and therefore useful.

^{44 &}quot;Storm Smashes Coast of Carolinas," Houston Chronicle, October 15, 1954: 1; and, "Hurricane Hazel," Baltimore Sun, October 15, 1954: 2.

As Connie sped towards the coastline, reporters throughout the country had already become accustomed to the idea of the repeated system of naming in the first two hurricanes of the season, Alice and Brenda. By the time Connie stopped "lurk[ing] lazily" and began to spin "like a mad top," residents were enamored with the "capricious" girl who seemed to have a "dangerous flirtation" with the coastline.⁴⁵ But as Connie, "swished her windy tail" and "swirled her skirts," she seemed to deliver a "kiss" that packed a "punch."⁴⁶

While Connie "lacked Hazel's wallop," the "erratic lady" was the essence of "persistence" the *Raleigh News & Observer* expressed.⁴⁷ As she "hadn't made up her mind," Connie seemed to stand "still and growl" all while having the force "equal to thousands of H-Bombs."⁴⁸ Referred to as a "menace" Connie became quickly associated with larger Cold War tensions like the "Red Threat" or "Red Menace" and the fear of the atomic bomb. Reactions to the idea that Connie would possess power greater than 100 bombs put together was emphasized

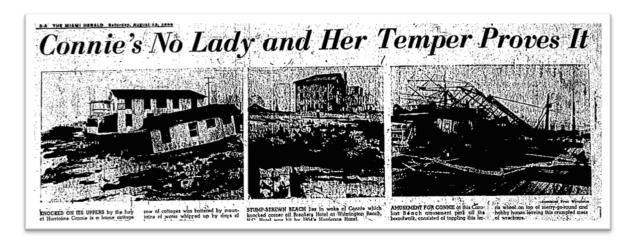
⁴⁵ "Lurked lazily" in: "Hurricane Is Churning Off Coast of Carolina," *New Orleans Times-Picayune*, August 10, 1955: 1; "Spins like a mad top" in: "Hurricane Loafs; City Has a Chance of Avoiding Blow," *New York Times*, August 11, 1955: 1 & 10; "Capricious" in: "Hurricane's Advance Winds do Most Damage Along North Carolina Coast," *New York Times*, August 13, 1955: 4; "Dangerous flirtation" in: "City Alert Ended as Connie Whirls Toward Carolina," *New York Times*, August 12, 1955: 1 & 8.

^{46 &}quot;Swished her windy tail" in: "Hurricane's Advance Winds Do Most Damage Along North Carolina Coast," *New York Times*, (cited previously); "Swirled her skirts" in: "More Water Than Wind: Hurricane Connie Comes To End Over Mountains of Pennsylvania," *Raleigh News & Observer*, August 14, 1955: 1 & 6; "Connie's kiss" in: "Connie's Kiss," *Baltimore Sun*, August 13, 1955: 1; "Punch" in: "Lacked Hazel's Wallop: Persistent Connie Has Gone," *Raleigh News & Observer*, August 13, 1955: 1 & 2.

⁴⁷ "Lacked Hazel's Wallop: Persistent Connie Has Gone," *Raleigh News & Observer*, (cited previously).

⁴⁸ "She hadn't made up her mind" in: "Big Storm Dawdling Off Carolina Coasts," *Mobile Register*, August 11, 1955: 1 & 12; "Stood still and growled" in: "Connie Dwindles, Leaving 41 Dead," *New Orleans Times-Picayune*, August 14, 1955: 4; "Force equal to thousands of H-Bombs" in: "Connie Blows North With Force Equal to Thousands of H-Bombs," *New York Times*, August 13, 1955: 4.

repeatedly in newspapers throughout the country. Similarly, phrases that referred to Connie as either a "menace," "threat," or larger "scare" permeated images and discussion of the storm. "The Connie Scare" has passed, announced the *Charleston News & Courier*, and thankfully, the once feared "menace" was now an "anemic image of her former self," concurred the *New York Times*.⁴⁹ Reports of Connie's unladylike behavior also proliferated during the time period. As stated succinctly in the *Miami Herald*, "Connie's No Lady And Her Temper Proves It."⁵⁰



"Connie's No Lady and Her Temper Proves It," Miami Herald, 1955. 51

But the most interesting aspect of Connie was the way it was paired with its successor, Diane. Following Connie's route exactly, Diane caused extreme fear and pressure on already disaster stricken areas. Known as a "Fujiwhara Effect,"

⁴⁹ "The Connie Scare" in: "Hurricane Threat Disrupting Business In Pee Dee Section," *Charleston News & Courier*, August 12, 1955: 1B; "No longer a menace" in: "Connie Safely Past; Area's Residents Eye Beaches Again," *Charleston News & Courier*, August 13, 1955: 8A; "Anemic image of her former self" in: "Hurricane Clips City, Then Fades in Pennsylvania," *New York Times*, August 14, 1955: 1 & 61.

⁵⁰ "Connie's No Lady And Her Temper Proves It," *Miami Herald*, August 14, 1955; A2.

⁵¹ "Connie's No Lady And Her Temper Proves It," Miami Herald, (cited previously).

Diane's duplication of Connie's path also increased the expression of anger against both Connie and Diane in newspaper reports. It was like they played a "cat and mouse" game with the coast, one receding, while the other "invaded" and plundered, stated the *New York Times*.⁵² As the "fickle female" performed some enormous "foot-dragging" in the process of dying, the *New Orleans Times-Picayune* even argued that the hurricane had become an "ex-hurricane" and did not deserve to be "dignified" with the classification of hurricane anymore.⁵³ Eventually, "weeping Diane" exercised "all the punch of a powderpuff," finally "dying" and ending the wrath of the "two windy sisters."⁵⁴

The personification of these storms allowed them to become villains against which reporters could vent their anger in colorful and emotionally laden language. As a result, weather reports discussing Diane often did not separate between when discussion of Connie cut off and Diane began. Images from the time period also often discussed the storms together. For example, the first image from the *Richmond Times-Dispatch*, appeared on the day Connie "died" and Diane started to impact the states.

_

⁵² "Cat and mouse" in: "Connie Bows Out," *New York Times*, August 14, 1955: 60; "Invaded" in: "Weather," *Houston Chronicle*, August 15, 1955: 2.

⁵³ "Fickle female" and "foot-dragging" in: "Hurricane Log," *New Orleans Times-Picayune*, August 18, 1955: 14; "Ex-hurricane" and "dignifying" in: "Diane Is Getting Weaker by Hour," *New Orleans Times-Picayune*, August 18, 1955: 1 & 3.

⁵⁴ "Weeping" in: "Water Damage Tops Sweep of Hurricane Over North Carolina," *Raleigh News & Observer*, August 18, 1955: 1 & 14; "All the punch of a powderpuff" in: "Terrific Damage Caused Crops By Wind, Rains of Two Storms," *Raleigh News & Observer*, August 18, 1955: 1 & 5; "Dying" in: "Other States Feel Effects of Hurricane," *Raleigh News & Observer*, August 19, 1955: 1; "Two windy sisters" in: "Business Gives With Wind In Hurricane at Beaches," *Raleigh News & Observer*, August 19, 1955: 1 & 7.



"Oh No! Not Another!" Richmond Times-Dispatch, 1955.55

The cartoon shows Hurricane Diane as a little girl who looks to be growing in size as she neared the coastline. Meanwhile, Connie is illustrated as having passed, but still clearly in present memory. On the other hand, in the *Mobile Register*, the storms were lumped together as the "Hurricane Girls." As shown, the Air Force Weather Planes, or newly formed Hurricane Hunter division, was tasked with the responsibility of tracking storms and assessing their strength and characteristics. In the image, the Air Force plane was examining one of the hurricane's eyes much like an optometrist. The reference to both "girls" and "lady" in the picture caption also highlights the femininity of the hurricanes the drawn figure was supposed to represent.

^{55 &}quot;Coming Our Way Now," Richmond Times-Dispatch, August 17, 1955: 14.



Meteorological Optometrist & The Hurricane Girls, Mobile Register, 1955.56

As a result of the back-to-back storms, discussion about hurricanes in newspapers throughout the country reached an all-time high. The number of articles about Hurricane Connie reached 306, with 440 gender references in all. This totaled to a 144 percent gender use rate within the articles. Meanwhile, of the 219 articles written about Diane, 349 references to gender were made, rendering the highest gender use percentage of all hurricanes in this dissertation's study: a 159 percent rate of gender use. Overall, in a 10-day period that included both storms, 525 articles appeared in 12 U.S. newspapers discussing the current hurricanes, with 789 gender references.

-

 $^{^{56}}$ "Meteorological Optometrist & the Hurricane Girls," $Mobile\ Register,$ August 14, 1955: A1.

In analyzing these statistical results in the context of the period several things can be concluded. First, the number of articles written about hurricanes increased dramatically with the discussion of them as gendered objects. Second, the two back-to-back hurricane seasons, 1954's Carol-Edna-Hazel and 1955's Connie-Diane, played a role in increasing interest in the new naming process and hurricane activity. Finally, and more importantly, the feminization of hurricanes had been entirely accepted as the norm by all newspapers in the 1955 year, despite initial protest from the first year. This is evidenced by the increasing use of gendered descriptions within the articles and in the images and cartoons produced related to each storm.

However, not all of the dissenters for the female-only naming system had disappeared. Following Hurricane Diane, articles appeared in the *Baltimore Sun* and *Raleigh News & Observer* discussing active protests taking place over the naming system. "Well once again this year a lady is protesting against the tagging of hurricanes with girls' names," sighed the *Raleigh News & Observer* in an article entitled, "She Blows." Georgia Singer Jane Pickens protested to the Weather Bureau that, "the association of women's names with 'tragedy and havoc created by hurricanes' is 'a personification of extremely poor judgment." Pickens then suggested that storms should clearly be designated "A, B, C or 1, 2, 3." Responding to Pickens' suggestions, the *Raleigh News & Observer* noted that while Pickens "had a right to protest [...] no insult to a whole sex has been intended" with the current naming system. In fact, the *News & Observer* argued, "most of us can speak with more real feeling about a wind named after a girl than a letter or number." Finally, they concluded that the Weather Bureau was right to

continue to "christen the powerful, capricious things with girls names," as it is best to remember, "to never underestimate the power of a woman."⁵⁷

The *Baltimore Sun* and *Washington Post*, however, had a different story of protest. "Everybody is still writing to poor Dr. Francis Reichelderfer, head of the U.S. Weather Bureau, about the naming of hurricanes," stated columnist George Dixon in the *Washington Post*. "Latest to hop into the act is Sen. Thomas H. Kuchel of California, whom I had always considered a serious man," Dixon continued. However, after reading the Senator's letter, Dixon felt that it "has driven Dr. Reichelderfer a step nearer manic melancholia." [58] (See Kuchel's letter on following page)

57 "She Blows," Raleigh News & Observer, August 16, 1955: 4.

⁵⁸ George Dixon, "Washington Scene...," Washington Post, August 29, 1955: 15.

To: Dr. Francis W. Reichelderfer, Head of U.S. Weather Bureau August 19, 1955

Women, I submit, historically have symbolized tenderness, devotion, sympathy and peacefulness. On occasions they may be stirred to fury, but their rages seldom last as long as Hazel's in 1954, or wreak such vengeance. They can be moody and unpredictable, though rarely as determined as Connie this year. While now and then excitable, few of them show the wrathfulness of Barbara in 1953 or Edna last summer. Before the 1956 hurricane season arrives I hope the Weather Bureau will have devised a new system of identification.

In a spirit of helpfulness, I wish to advance a few suggestions: How about adjectives which would be descriptive and meaningful? I suggest "acrimonious" or "aggressive" followed by "belligerent" or "bilious" and "capricious" or "corrosive," etc. Another possibility is the use of names from mythology. Or we might, in a succeeding year, recollect some of the Indian tribes which have endured similar rigors. I commend to the Weather Bureau a system which could start with "Achilles" or "Aeolus" and run through—(if the Atlantic seaboard should be so bedeviled by the weather gods)—"Zeus." In resorting to aboriginal sources, you might go from "Algonquin" to "Blackhawk," and "Canandaigua," right up to "Winnipesaukee" and "Winnebago."

The possibilities of an intriguing and impersonal scheme of meteorological nomenclature appear limited only by human resourcefulness and imagination. Perhaps the Weather Bureau could achieve a dual or triple purpose—alert the populace in endangered areas and simultaneously inspire a search of encyclopedias or even broaden the people's knowledge of geography and history.

From: Senator Thomas H. Kuchel, California

^{**}As reprinted in full in the Washington Post, August 29, 1955.**

Washington Post columnist Dixon's suggestion that Senator Thomas Kuchel had in one letter surrendered his "serious man" status in Dixon's eyes summed up the reaction felt to the statesmen's letter by others around the country. In the Baltimore Sun, excerpts of the Senator's letter and subsequent interview statements repeated similar sentiments. The Sun made sure to note that while, "similar protests were voiced by gallants last year" the Weather Bureau, "decided to stick to lady-like labels, explaining that in the complicated communications system used in tracing hurricanes and broadcasting warnings it needs 'short, easily pronounced and readily recognized' designations." As such, the Senator's suggestions work in their pithy quality, but lack in the "readily recognized" category. The Sun also noted that the Senator had warned that, "you would have to skip such sweet, dispositioned characters as Apollo and Eros," also complicating his ideas. "Unless the system is changed" the Sun concluded, "the next hurricane will be called simply 'Edith;" and, it was.59

When reflecting on the two noticeable protests made regarding the naming system in 1955, what is most fascinating is the fact that the two protests were not organized together, included perspectives from both a man and a woman, and represented individuals who had significant weight in the political and cultural world. Jane Pickens was a famous singer from Georgia; meanwhile, Senator Kuchel was a well-established legislative figure in Washington and California. Thus, when both spoke out about the hurricane naming system in 1955 they easily attracted media attention.

⁵⁹ "New Names For Storms? Senator Likes 'Acrimonious' Better Than 'Alice,' 'Connie," *Baltimore Sun*, August 19, 1955: 1.

While neither Pickens' nor Kuchel's motives were discussed in the articles that appeared in three newspapers about them, it is clear that reaction to their statements both defended the naming system in place and recognized that these opinions were simply ideas put forth in front of the Weather Bureau. At no point in any of the articles did a reporter suggest that the singer or Senator was out of order for their suggestions, they were simply part of a larger on-going discussion about the hurricane naming practice of the time. Similarly, the re-printed letter Senator Kuchel wrote to Dr. Reichelderfer denotes a level of respect for the Senator's suggestions, even if coupled with the implication that the Senator might not be as "serious" as he was portrayed until the letter.

Surprisingly missing from the articles responding to Senator Kuchel's letter, however, is discussion of race. In the letter, itself, Kuchel makes a unique suggestion of substituting women's names for aboriginal names. For example, he stated that, "in resorting to aboriginal sources, you might go from 'Algonquin' to 'Blackhawk,' and 'Canandaigua,' right up to 'Winnipesaukee' and 'Winnebago.'" While the articles analyze at length the other suggestions for names Kuchel had recommended, the absence of this suggestion is peculiar. It is perhaps overlooked because the suggestion Kuchel made of substituting race for gender during the 1950s was not viewed as outlandish. Instead, due to the racial and social politics of the time period, both race and gender were seen as interchangeable cultural problems, particularly in regards to citizenship and political power.

Similarly, the debate over hurricane names during this period echoes the debate held during Clement Wragge's tenure as Australia's Chief Meteorologist in several ways. First, the reaction to Jane Pickens' voice mimics that of the Australian women who expressed distaste for Wragge's female naming system in that it was mentioned, but largely ignored as a legitimate complaint. Meanwhile, Senator Kuchel's response, much like the senators from Australia, received considerable attention. As an elected official and a man, Kuchel's authority to question Weather Bureau activities was not seen as out of bounds. However, unlike during Clement Wragge's time period, the U.S. Weather Bureau held complete power postwar in choosing and implementing the hurricane naming system. As a result, despite being a male and a senator, Kuchel did not have the ability, nor have the support, to change the naming system, especially because the system had no effect on him or his fellow officials.

Finally, Kuchel's suggestions for replacement naming systems bring up an additional debate over what types of names could be acceptable substitute systems. Kuchel's suggestion that aboriginal names be used is fascinating as it immediately brings up a debate over the substitution for one historically powerless group (females) for another (aboriginal). Similarly, Kuchel's neglect of including male names as a possible alternative naming system points out that the acceptance of naming storms after powerless groups was just as predominant in this period as in Wragge's. It also illustrates the gender dynamics of the postwar era as Kuchel did not even think to include male names as a possible alternative.

Overall, the discussion of hurricane names through both Kuchel and Pickens again put the issue in the spotlight. However, the following year the Weather Bureau subsequently released a list of names that included only female names, as well as lists for 1956 and 1957, thus ending the temporary "test" period

for the storm naming system. From this point on, the system was meant to be permanent.

CHAPTER 5

LADIES NO MORE:

THE CHANGING IMAGE OF THE FEMINIZED HURRICANE



Camille ... She Was No Lady, Charity Booklet, 1969.1

After the terribly powerful 1954 and 1955 seasons, a popular term for the roster of female-named hurricanes was that they made up the "Bad Girls' Club," akin to rock-n-roll teens pledging to rebel for unknown causes.² While the "bad girl" hurricanes of the early 1950s disrupted the idyllic image of a postwar America free from all dangers, causing destruction and chaos with every move,

¹ Jim Davidson, *Camille...She Was No Lady*, Post-Storm Gulf-Coast Fundraising Benefit Booklet (Batesville, AK: Dav-Mac Publishing, 1969).

² Rebel Without A Cause, the movie starring James Dean, was released in 1955. *Rebel Without A Cause*, Directed by Nicholas Ray (1955: Warner Brothers) 111 minutes.

the perception of them was that they were still very much teenagers. However, by the end of the 1960s, after the hurricane naming process had aged in public memory and reports of hurricanes' strength as worse than atom bombs had circulated, gone were playful phrases like "bad girls" and in its place were vituperative declarations that a storm "was no lady." So how did this dramatic shift in the perception and description of hurricanes occur? And, did it transfer to other regions of the world under U.S. meteorological influence?

It began with Hurricane Audrey. In 1957, Hurricane Audrey struck Louisiana, Texas, and Alabama with a "fatal sting." As the first hurricane of the season, "Treacherous Audrey" was truly a "bad girl" leaving hundreds dead and almost 40,000 in the care of the Red Cross. Blindsided, reaction to Audrey was fairly limited. However, soon after the storm, the *Miami Herald* meagerly joked that Audrey was in fact, "No Sugarcane" and instead was incredibly lethal. The *Houston Chronicle*, concurred, eventually printing the following cartoon of Hurricane Audrey "socking" a Texan.

_

³ "Indianians Feel Audrey's Fatal Sting," *Miami Herald*, June 29, 1957: 1A.

^{4 &}quot;Treacherous Audrey" in: "Hurricane Leaves at Least 120 Dead," *Richmond Times-Dispatch*, June 29, 1957: 1 & 7; 40,000 in care of Red Cross in: "40,000 In Care of Red Cross," *Baltimore Sun*, June 29, 1957: 7.

⁵ "Audrey's No Sugar Cane," *Miami Herald*, June 27, 1957: A3.



First Blow of the Season, Houston Chronicle, 1957.6

Remarking that it was the "first blow of the season," the *Chronicle* played at the idea that Audrey, while shocking, would not be the last hurricane of the season. What is most noticeable about the image in the *Houston Chronicle*, is the fact that just three years prior, the *Chronicle* had actively protested the naming and feminizing of hurricanes. However, in the image, Audrey is very clearly identified as a female storm affecting the region. While just the arm of Audrey is sticking out, the nails on the fist are painted, signifying femininity. Similarly, the image of a female storm, albeit incredibly powerful, knocking a Texas cowboy off his feet could not be simplified more succinctly.

⁶ "First Blow of the Season," *Houston Chronicle*, June 28, 1957: 4B.

Despite the incredible damage caused by the storm and support in Texas for illustrating "Giant Hurricane Audrey" as an extremely powerful female figure, newspapers throughout the country did not use gender to describe the storm as much as before.⁷ In fact, while the number of articles discussing Audrey's impact was substantial, 224 to be precise, the number of gender references only tallied to 23. This meant that the overall use of gender between Diane in 1955 (at 159 percent) and Audrey in 1957 (at 10 percent) had decreased enormously. However, these statistics are misleading in the case of Audrey.

Two external variables affected Audrey's statistics. First, Audrey was the first storm of the season, thus, reporters and weathermen were taken aback by the development of Audrey in June and its horrifying and unexpected destruction. Thus, a vast majority of reports about Audrey focused primarily on disaster recovery and impact. Similarly, Audrey's regional impact directly affected the use of gender when describing the storm. Audrey only hit Texas, Louisiana, and Alabama. While it had peripheral impact in bordering states, this regional impact meant that interest in Audrey was highly limited. This was unlike Carol, Edna, Hazel, Connie, and Diane, all of which affected the entire eastern coast and scared all those in a hurricane-prone region. By the time Hurricane Donna stormed in during September 1960, gender use had once again become prevalent.

^{7 &}quot;Hurricane Heads Toward La. Coast," Biloxi Daily Herald, June 26, 1957: 1.

"Donna the Deadly," proclaimed the *Baltimore Sun*, following the "wild rampage" of Hurricane Donna in 1960.⁸ While "menacing the mainland," the "tempest" turned into a "Killer Hurricane" that "ravaged" everything from the Bahamas to Maryland.⁹ By the end of Donna's sojourn, she had become the "most talked about gal in town," stated the *Miami Herald*.¹⁰ The *New York Times* agreed, stating that Donna had been an "unwelcome visitor." Following up, it argued that, "there is only one kind word to be said about hurricanes: their stay is usually brief. And nobody misses them when they are gone" which was certainly the case with Donna.¹¹

Descriptions of Donna, overall, included some of the worst feminine stereotypes to date. While references to Donna as "capricious" or "savage" continued trends from previous storms, other phrases appeared more frequently. The first was that Donna was a "witch;" the second, that her "rage" was uncontrollable. As discussed previously, the term "witch" in everyday usage was popular. This was no different with Donna, who was depicted by the *Miami Herald*, as many other storms had been, an ugly woman swirling up the coastline with the intention of causing harm.

⁸ "Donna The Deadly," *Baltimore Sun*, September 11, 1960: 12; "Wild rampage" in: "25 Families on S. T. are Forced to Flee," *New York Times*, September 13, 1960: 30.

⁹ "Menacing the mainland" and "tempest" in: "Florida braces as Hurricane heads for its Southeast Coast," September 8, 1960: 29; "Killer Hurricane" in: "Florida Put On Alert For Killer Hurricane," *Los Angeles Times*, September 8, 1960: 1.

^{10 &}quot;Donna Sends Residents Hustling For Supplies," Miami Herald, September 9, 1960: 3C.

^{11 &}quot;25 Families on S.T. are Forced to Flee," New York Times, September 13, 1960: 30.



Peek-a-boo Donna, Miami Herald, 1960.

However, the use of "witch" with Donna went beyond depictions of a hurricane as a "witch" itself. Instead, accusations that Donna was "a real witch" like in the *Miami Herald*, or that the storm somehow was worse than a regular witch or "angry" woman, proliferated in articles.

Any Way You Look at It, Donna Was a Real Witch

Headline, Miami Herald, 1960.12

-

 $^{^{\}rm 12}$ "Any Way You Look at It, Donna Was a Real Witch," $\it Miami~Herald$, September 11, 1960: 20A.

Another word that permeated discussion of Donna was "rage." As described in many reports, Donna's "rage" was "menacing," "vicious," "dangerous," "not modest," a result of "backlash," and most definitely, "unladylike." In fact, the *Miami Herald* went so far as to state that, "Donna arrived with a lousy reputation," and did as any loose woman would. "This *slut* changed her mind several times," throughout its path up the coast the *Herald* exclaimed in fury. In defining Donna's actions, reporters were also determining the limits of the unrestrained hurricane and female in broader society. This discussion of "rage" and sexuality through "unladylike" or "sluttish" behavior as exemplified by Donna would continue to be brought up with other hurricanes throughout the 1960s and 70s.

But the most striking conclusion with Donna was the prevalence of gender references. In looking at the number of articles that appeared in newspapers throughout the country it is immediately evident that Donna was a massive storm in terms of both discussion and damage. Donna broke all previous records for number of articles, at 411 articles. However, of the 411 articles, 196 gender references appeared in text. Averaging a 48 percent total, Donna's gendering was significantly higher than Hurricane Audrey (at 10 percent), but lower than the

 $^{^{\}scriptscriptstyle 13}$ "We Waited In Darkness While Donna Raged," Raleigh News & Observer, September 13, 1960: 1.

^{14 &}quot;Rage" in: "We Waited In Darkness While Donna Raged," Raleigh News & Observer, (cited previously); "Menacing" in: "Hurricane Imperils Florida Coast Area," New Orleans Times-Picayune, September 8, 1960: 1 & 21; "Vicious" in: "Planes Flee Donna, Find GA Haven," Atlanta Journal-Constitution, September 10, 1960: 1; "Dangerous" in: "Blast At King & Calhoun: Sudden Fury Is Unleashed as Big Wind Whirls Over," Charleston News & Courier, September 12, 1960: 10A; "Not modest" in: "Donna Is A Big One—Watch Out," New Orleans Times-Picayune, September 9, 1960: 12; "Backlash" in: "Carteret Gets Terrific Blow," Raleigh News & Observer, September 13, 1960: 1 & 2; "Unladylike" in: "Some Like It Windy in Miami," Atlanta Journal-Constitution, September 10, 1960: 1 & 3.

¹⁵ "Hurricanes Create Real Neighborliness," Miami Herald, September 11, 1960: 5B.

1954 and 1955 storms' highest totals (a substantial 159 percent). However, the descriptive terms used when referencing Donna's actions in terms of strength (Donna the Deadly), emotions (rage), sexuality (slut), and ranking in reference to other female hurricanes (a *real* witch) illustrate that reporters attempted to distinguish Donna by using threatening feminine characteristics as defined in the broader society. By doing so, Donna became the most discussed and gendered hurricane of the era.¹⁶

Following Donna, the 1960s was plagued with hurricanes that continued to batter the already wounded coastline. According to the *New Orleans Times-Picayune*, 1964's Hurricane Hilda and 1965's "Billion Dollar Betsy," proved to all that "a crafty woman can always bend a male's actions to her will." As a result, in 1969, Hurricane Camille served as a historic close to the period. While previous hurricanes of the season, Blanche and Anna had been weak, Camille left "her footprints," throughout the shoreline, eventually leaving 256 dead and over \$1.5 billion in damage. 18

Reaction to Camille was similar to Donna. Discussion of Camille's power, sexuality, and qualities were clearly at the forefront of the public's mind. This "monster" "shrieked" through coast, "like a woman in labor," reported the *Mobile*

¹⁶ Of this dissertation's data set, which includes 12 major cities of the U.S.

¹⁷ Don Hill, "Betsy's Effect Here Called Devastating, Demoralizing," *New Orleans Times-Picayune*, September 13, 1965: 10.

^{18 &}quot;Camille Aims Fury At Florida Coast," Raleigh News & Observer, August 17, 1969: 1.

Register.¹⁹ With "erratic" behavior, Camille had a "Titanic punch," stated the Miami Herald.

Erratic Camille Has Titanic Punch

Headline, Miami Herald, 1969.20

"Camille the Terrible," proclaimed the *Houston Chronicle* when describing the devastation left behind. ²¹ "It was like Hiroshima," concurred the *Atlanta Journal-Constitution*. ²² It was reported by the *New Orleans Times-Picayune* that "during her lifetime, Camille's total energy equivalent excluded several thousand megatons of TNT, making her a storm of superlatives." ²³ Camille, in summation, made "Betsy and the 1915 storm seem like child's play," as she, "was a much stronger-willed 'lady." ²⁴ But most of all, newspapers throughout the country concluded, "Camille Was No Lady." ²⁵

As with other storms, the femininity of Camille was noticeably present in the following picture from the *New Orleans Times-Picayune*, "Four Men Who

¹⁹ "Monster" and "Shrieked" in: "12-Food Water Rise at Biloxi," *Mobile Register*, August 18, 1969: 1 & 6; "Like a woman in labor" in: "Great Hurricane Reaps Destruction in Vacation Area," *Mobile Register*, August 19, 1969: 1 & 6.

²⁰ "Erratic Camille Has Titanic Punch," *Miami Herald*, August 17, 1969: 1A & 22A.

²¹ "Camille the Terrible Zeroes in on Florida," Houston Chronicle, August 17, 1969: 1 & 19.

²² "200,000 Without Homes," Atlanta Journal-Constitution, August 19, 1969: 1A & 8A.

²³ "Mississippi Gulf Coast Suffers Nature's Mightiest Blast," *New Orleans Times-Picayune*, August 19, 1969: 17.

²⁴ "Plaquemines Towns Hit," New Orleans Times-Picayune, August 19, 1969: 3.

²⁵ "Hurricane Camille Leaves Trail of Destruction on Mississippi Coast," *Mobile Register*, August 19, 1969: 5B.

Knew Camille." In the photo, four men who were sailing when Camille hit found themselves individually tortured by her "wrath" until rescued by the Coast Guard. In the picture they are describing just how well they "knew" Camille, much as they would a woman they were intimately acquainted with. The recognition that they could have known "her" in this way and yet survive to tell the tale is particularly significant in the understanding of Camille's impact on individuals, especially men, and not just on physical surroundings such as trees and buildings. By pointing accusatorially at the map, the men show through their firm fingers and stern faces their dislike for this "woman" who had caused them trouble at sea. Only now out of Camille's way can the men appropriately attach their anger.



"Four Men Who Knew Camille," New Orleans Times-Picayune, 1969. 26

Despite the fact that Camille was a momentous hurricane, it was the subsequent, smaller storm, Debbie, which really made headlines. Much like the

²⁶ "Four Men Who Knew Camille," New Orleans Times-Picayune, August 20, 1969: 13.

Connie-Diane scenario in 1955, Debbie's development overlapped with the coverage of Camille. However, unlike previous hurricanes, Debbie was part of a government-supported experiment to control hurricanes. As discussed in Chapter 1, Project Stormfury resulted from increased interest in hurricane tracking in the post-World War II era. With the establishment of the Hurricane Warning Center, attention soon shifted to the idea of storm control. Project Stormfury worked on the theory that hurricanes could be disintegrated if silver iodide crystals were dropped in the eye of a storm. This process, known as "seeding" was extremely controversial. Unsuccessful tests took place in 1947, 1961, and 1963, none of which led to any firm conclusions.²⁷

Throughout the 1950s and 60s, newspapers around the country printed articles about the Hurricane Hunters themselves, the planes that tracked hurricanes, and the "Miss Hurricane Hunters" that were designated each year. In the articles and images that appeared each time, the Hurricane Hunter missions and Project Stormfury were displayed with pride and admiration, often showcasing fighter pilots as heroes and Miss Hurricane Hunters as the women whom they were fighting for. For example, in the *Atlanta Journal-Constitution Magazine*, a Hurricane Hunter (marked distinctively by the patch on his right shoulder) is shown standing proudly by a Weather Bureau plane on the front page of multi-page color article. Looking off in the distance, his stance and expression only accentuate the power and size of the plane in the backdrop of the image.

-

²⁷ "Hurricane Seeders May Tackle Fierce Debbie Today," *Miami Herald*, August 18, 1969: 22A.



The Hurricane Hunters, Atlanta Journal-Constitution Magazine, 1964.28

Thus, it is no surprise that while "Husky Hurricane Debbie," who "played second fiddle to Camille" developed, newspaper reporters geared up to follow the on-going science experiment with the avid thrill of sports fans.²⁹ Expressing a fiery reason why this process should not only take place but also be successful, one editorial article put it simply:

Doubtless there are those who wonder—Why in an era when man is able to walk on the moon, can he not spare himself the agony from the elements which abolish individual and collective achievement

²⁸ "The Hurricane Hunters," *Atlanta Journal-Constitution Magazine*, August 30, 1964: 1-9. Scanned color image courtesy of Lieutenant Colonel Bernard Barris, Retired, cited previously.

²⁹ "Husky Hurricane Debbie" in: "Hurricane Seeders May Tackle Fierce Debbie Today," *Miami Herald*, August 18, 1969: 22A; "Tame" in: "Will Debbie Freeze to Death?" *Raleigh News & Observer*, August 19, 1969: 1.

and reduce human kind to the position of a frightened, whimpering child?³⁰

Thus, championing this undertaking much like astronauts being cheered on as they took off to the moon several months earlier, "meteorologists and pilots declared themselves Tuesday night ready to go with people, planes, and pyrotechnics." This time would be a success they proclaimed, as they knew, "Debbie's location and makeup" and the "prospects for a repeat attack by U.S. Navy jet planes, look pretty good." As described in newspapers throughout the country, Project Stormfury, consisted of over 200 scientists who used some of the best new technology available, such as the Nimbus III satellite images and a well-staffed Hurricane Hunter division that had been practicing flights into the eyes of hurricanes for over a decade. However, it was Debbie, itself that was most applauded. Singled out after a "five year" search for a "suitable storm" to run the experiment on, Debbie was unique. But the final decision on whether to use Debbie as the case study, "depends on Debbie herself," the *Charleston News & Courier* stated animatedly.

_

 $^{^{30}}$ Don Lee Keith, "For Victims on Gulf Coast, There's Not Much to Say," New Orleans Times-Picayune, August 21, 1969: 2.

³¹ "Storm Fighters Ready Again: Prepared For Another Attack On Debbie," *New Orleans Times-Picayune*, August 20, 1969: 3.

³² "Storm Fighters Ready Again: Prepared For Another Attack On Debbie," *New Orleans Times-Picayune*, (cited previously).

^{33 200} Scientists in: "Camille Aims for North Gulf," *Mobile Register*, August 17, 1969: 1 & 14; Nimbus III in: "Camille Via Satellite," *Mobile Register*, August 17, 1969: 1;

³⁴ "Five year search" and "suitable storm" in: "Atlantic Hurricane Seeded by Planes," *New York Times*, August 19, 1969: 24.

³⁵ "Depends on Debbie herself" in: "Weathermen Will Try To 'Freeze' Debbie," *Charleston News & Courier*, August 18, 1969: 2A.

After much suspense, Debbie was "seeded" with iodide crystals. ³⁶ Newspapers around the country cheered at the "success" of "man's first major effort to rob a hurricane of some of its fury." "Seeding Starts Today," the *New York Times* openly proclaimed; "Seeded Debbie Slowing," the *Miami Herald* cried.³⁸ However, one question remained, would "Debbie freeze to death?"

Will Debbie Freeze to Death?

Headline, Raleigh News & Observer, 1969.39

Sadly, the answer was no. While hyped up in the media, the Project Stormfury test did not seem to have an effect on dissipating Debbie.

While Project Stormfury may not have impacted Debbie, gendered descriptions of hurricanes definitely were affected. Throughout the entire Debbie/Project Stormfury discussion, accusations about sexual behavior, critiques of femininity, and dark humor were used to describe scientific experimentation. In doing so, the language used to portray actions taken against Debbie was sexualized. For example, seen and portrayed as no longer just an unpredictable woman who was "no lady," reporters bemoaned throughout the country that hurricanes must be tamed. In an effort to "tame" Debbie, planes

³⁶ "Sister Storm Being Seeded," Baltimore Sun, August 19, 1969: A1.

^{37 &}quot;Seeding Starts Today," New York Times, August 18, 1969: 22.

³⁸ "Seeding Starts Today," *New York Times*, (cited previously); "Seeded Debbie Slowing," *Miami Herald*, August 19, 1969: 1A + 17A.

³⁹ "Will Debbie Freeze to Death?" Raleigh News & Observer, August 19, 1969: 1.

would attempt to "bombard" the hurricane, stated the *Raleigh News & Observer* in explaining the process. "Debbie seems ideally constructed and positioned for seeding," added the *Miami Herald*. In fact, "she comes as close in filling the bill as I could describe," explained Dr. Robert Simpson, a weather bureau official.⁴⁰

The gendered language used to describe Debbie's "taming," was even more explicit and reflected a continued vilification of women through derogatory sexual stereotypes. For instance, it was described that when, "penetration of the eye," occurred, or more specifically termed, "rainbow penetration by fighter pilots took place," "Debbie seemed to calm down." But despite giving Debbie the "cold treatment" and "penetrating" its eye, Camille's "sister" was not swayed. "Debbie goes on despite Iodide," the *New Orleans Times-Picayune* sighed. But the public would not be dissuaded, the *Times-Picayune* proclaimed, because after Debbie, "Hiroshima-like" hurricanes would eventually become a "tropical tiger [that] had [been] tamed into a pussycat" due to increasing abilities of man to dominate and "defang them."

Without reviewing the final statistical totals for Hurricane Camille, which also included the ongoing seeding process of "sister Debbie," it can be easily concluded that both storms were gendered. However, the statistics do point out some interesting larger trends in feminizing storms. Of the 292 articles that were written about Hurricane Camille (and Debbie), 202 gender references were made, which equals a 69 percent gender use rate.

⁴⁰ "Hurricane Seeders May Tackle Fierce Debbie Today," *Miami Herald*, (cited previously)

⁴¹ "Storm Fighters Ready Again: Prepared For Another Attack On Debbie," *New Orleans Times-Picayune*, (cited previously).

⁴² Bechtel, viii.

Comparing this to other storms from the period of feminized hurricanes, 1954-1969, (see table 11 and figures 3 and 4), two conclusions are immediately apparent. First, while protest to this gendering process might have been debated at the beginning and affected usage in various cities, it is clear that every city adopted the new naming system and deployed a gendered system for hurricane naming. Second, the use of gender to describe female-named storms increased dramatically over time as well as the number of newspaper articles written about each storm. From this fact, it can be argued that the use of gender created interest in storm tracking and a higher production of articles to meet these interests.

Table 11. Article and gender references by city, 1954-1969

Newspaper	Carol 1954	Edna 1954	Hazel 1954	Connie 1955	Diane 1955	Audrey 1957	Donna 1960	Camille 1969
Atlanta Journal-								
Constitution								
Articles	5	4	8	11	11	9	14	15
Gender References	0	3	6	14	23	ó	11	14
Baltimore Sun								
Articles	9	12	25	50	31	12	29	6
Gender References	1	15	11	39	36	2	10	9
Biloxi Daily Herald								
Articles	7	7	4	14	9	18	13	36
Gender References	Ó	20	5	21	22	0	6	39
Charleston News & Courier								
Articles	7	12	22	37	30	8	31	10
Gender References	o	12	12	40	43	0	3	9
Houston Chronicle								
Articles	10	9	8	4	6	38	14	17
Gender References	1	5	0	18	0	0	o	18

Los Angeles Times								
Articles	12	8	9	17	11	25	24	20
Gender References	0	6	1	14	5	0	5	5
				•	Ü		Ü	Ü
Miami Herald								
Articles	26	36	30	20	25	16	117	31
Gender References	2	25	22	21	21	0	64	22
Mobile Register								
Articles	4	7	6	20	7	11	53	32
Gender References	Ö	6	3	34	31	3	36	26
New Orleans Times-								
Picayune								
Articles	4	7	12	14	7	59	24	90
Gender References	1	9	17	43	50	13	16	28
			,	10	0 -	O		
New York Times								
Articles	9	44	31	45	11	11	46	17
Gender References	0	50	10	76	9	3	9	7
Raleigh News & Observer								
Articles	8	13	18	45	35	8	35	9
Gender References	7	13	15	65	73	2	32	8
Richmond Times-								
Dispatch								
Articles	9	11	31	39	36	9	11	9
Gender References	ó	7	12	55	36	Ó	4	17
matala Dan All								
Totals For All Newspapers								
Articles	110	170	204	306	219	224	411	292
Gender	110	170 171	204 114	300 440	349	23	196	202
References		-,-		77.	UTI	-0	-,-	
Percentage of	11%	101%	56%	144%	159%	10%	48%	69%
Gender Use								

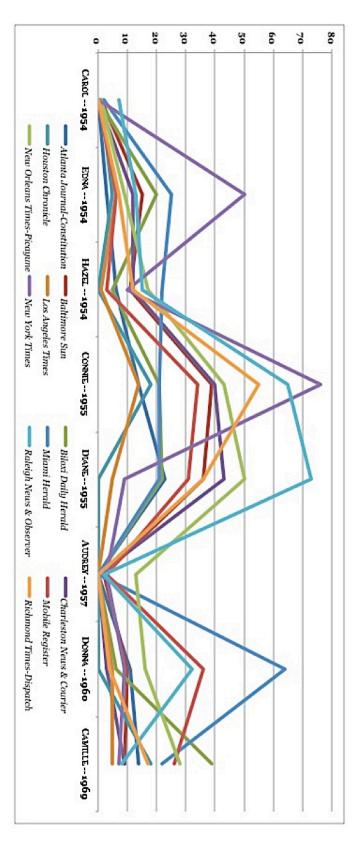


Figure 3. Gender reference use by city, 1954-1969

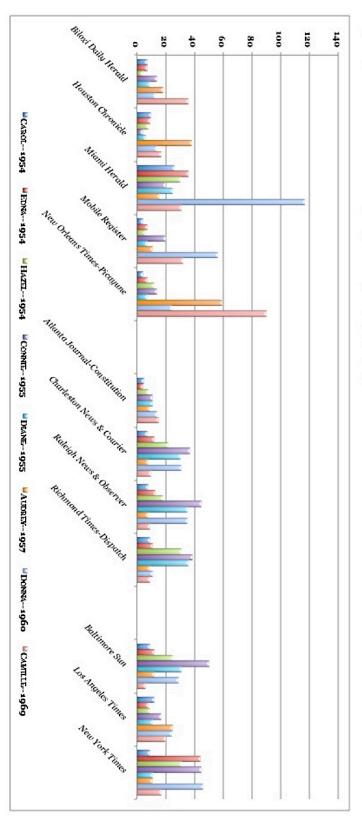


Figure 4. Number of articles by city and region, 1954-1969

Fleshing out some of the other statistics in the table and figures it is possible to reflect on regional and city-specific differences. Based on a look at the number of newspaper articles by region, it is obvious that the Gulf South had the highest number of articles written about hurricanes, followed by the North/West, and finally, the Upper South. This is not surprising considering where the 1954-1969 hurricanes hit the U.S. For instance, the *Miami Herald* and *New Orleans Times-Picayune*, both from the Gulf South region, had the largest and second largest number of articles for both Hurricanes Donna and Camille (both of which hit the Gulf South region).

Meanwhile, it is easily noted that cities affected by hurricanes have a higher number of gender references. What is most surprising, though, is the prevalence of gender references in the *New York Times* consistently throughout, and the fact that the *New York Times* had the highest number of gender references of all the cities during Hurricane Connie in 1955. As a major newspaper that is known for its reach and reputation, it was one of the newspapers that consistently used the most gender references when referring to hurricanes. From the beginning the *New York Times* officially adopted the naming system and gendered descriptors, primarily because of its proximity to the East Coast during the 1954 Hurricane Season that included three major hurricanes that struck the East Coast (Carol, Edna, and Hazel). The damage caused by these storms in successive order directly impacted the region around them. Similarly, the *New York Times* also printed many articles from around the country with each storm, thus gender references from regions that were directly affected by hurricanes also made it into the *New York Times* pages, as well.

FROM BOXING EARS TO GUATECONNIE: REPRESENTATIONS OF DESTRUCTIVE FEMALE HURRICANES IN THE CARIBBEAN & CENTRAL AMERICA

While fascinating on its own, the use of feminized descriptions of hurricanes did not solely affect the U.S. As mentioned previously, the U.S. Weather Bureau dominated meteorological discourse in the Atlantic Ocean region. This included the Caribbean and Central America. Thus, when the U.S. decided to introduce a female-only hurricane naming system it was adopted in other U.S.-influenced areas.

Based on research from 6 Caribbean and Central American newspapers, it is evident that the American naming process for hurricanes was adopted as soon as the system was introduced. For example, in *Le Nouvelliste*, the newspaper for Port-Au-Prince, Haiti, the headline easily reads "Hurricane Hazel," illustrating that the U.S. system of female-named hurricanes was in use in the first year of storm naming, 1954.

L'Ouragan " Hazel " devait frapper aujourd'hui le Sud-Ouest d-Haiti

Hazel Headline, Port-au-Prince Le Nouvelliste, 1954.43

The use of the naming system for hurricanes was not the only direct adoption of U.S. meteorological methods. On the front page of the *Havana Diario de la*

⁴³ "L'Ouragan 'Hazel' Devait Frapper Aujourd'hui le Sud-Ouest d-Haiti," *Le Nouvelliste*, October 11, 1954: 1.

-

Marina of Havana, Cuba, it is evident that foreign weather reports mimicked U.S. weather reports through the use of similar or identical maps. In the case of Hurricane Connie, the *Havana Diario de la Marina* printed a map that had not been altered as it is clearly obvious that "Hurricane Connie" is spelled in English on the map and in Spanish in the caption.



Ciclón Connie, Havana Diario de la Marina, 1955.44

-

⁴⁴ "Amenaza el Ciclón las Costas de Carolina; Estado de Alerta," *Diario de la Marina*, August 10, 1955: 1.

However, just because a naming system was introduced and used and maps were reproduced in both French-speaking and Spanish-speaking countries does not mean that the feminization of storms would transfer as well; but it did. Examples of this are most easily seen when looking at visual representations of storms from various Caribbean and Central American countries. For example, in 1954, the first year of the new female-only storm naming system, cartoons appeared in the *Havana Diario de la Marina, San Juan El Mundo*, and *Kingston Gleaner* illustrating the effects of Hurricane Hazel.

The first, from the *Diario de la Marina*, depicted Hazel as a tornado-like storm. There is no definitive gender designation given within the image, nor was there usage of the storm's name, Hazel, although the name was used in an earlier article that day in the newspaper. However, it is easily seen that the occupants of the country fear its wrath. The caption on the cartoon bolsters the depiction, describing the hope that the placards posted would keep the hurricane from entering.



It Was The Cyclone, Havana Diario de la Marina, 1954.45

Meanwhile, in the *Kingston Gleaner*, Hazel is directly referred to by name, but not shown in the image. However, the storm is discussed through a speech bubble above a resident reading the newspaper. As stated, the resident hopes that "Hurricane Hazel Don't Box Us," referring to the potential damage that Hazel could do. The term "box us" could also refer to the pain caused by "boxing of ears," which could result in permanent damage. Either way, it is obvious from the image that Jamaicans were concerned about Hazel and used the name Hazel to reference the impending storm.

^{45 &}quot;Se Fue El Ciclón," Havana Diario de la Marina, October 14, 1954: 4A.



Hazel, Kingston Gleaner, 1954.46

While the *Kingston Gleaner* and *Havana Diario de la Marina* did not depict Hazel as a female, the *San Juan El Mundo*, did. As described in Chapter 1, as a territory of the U.S., Puerto Rico had a unique relationship in meteorological history and a direct tie to U.S. meteorological practices. Thus, it is no surprise that both gendered depictions and name usage would be prevalent when a storm depiction was rendered.

The image of Hazel that appeared in *El Mundo*, is definitively gendered. Hazel is shown as having extremely long hair that whips behind the storm. Meanwhile the eyes of Hazel appear to be glaring and filled with fury the same way descriptions of the storm were used in U.S. newspapers. Finally, the big lips

^{46 &}quot;Hazel," Kingston Gleaner, October 9, 1954: 2.

of the storm are blowing furious winds and rain. The phrase "Audios! And Don't Come Back" sum up the expression of all Puerto Ricans.



Adios! And Don't Come Back! San Juan El Mundo, 1954.47

Throughout the rest of the 1950s and 60s, hurricanes were depicted as women through text and imagery. For example, due to size and impact, Hurricanes Connie and Diane received noticeable attention by Caribbean newspapers. In the *San Juan El Mundo* two cartoons appeared illustrating the storm. The first, shows a well-defined figure meant to be Hurricane Connie. The female storm is stalking away from a very battered-looking man and baby left on

^{47 &}quot;Adios! Y No Vuelvas!" San Juan El Mundo, October 13, 1954: 1.

a crippled shoreline. This is image is incredibly similar to depictions in U.S. hurricane cartoons of the cultural fears of the damaging power of unrestrained women on men and children (representing the home).



Connie, San Juan El Mundo, 1955.48

The second image of Connie that appeared in *El Mundo* also portrayed Connie and Diane in similar style to U.S. newspapers by highlighting the "one-two punch" of the "sister" storms. In the image, Connie is not depicted as female, but Diane is. However, Diane is also depicted as girlish, highlighting the fact that Diane was still growing. It is also clear that Diane is referred to as "Diana." While the name chosen by the U.S. Weather Bureau was "Diane" some newspapers in the U.S.

^{48 &}quot;Connie," San Juan El Mundo, August 9, 1954: 1.

and elsewhere, like San Juan, printed a variation of the name. Often times this was just simply a mistake on the artist's part.



"Connie & Diane," San Juan El Mundo, 1955.49

What is most interesting, however about the image of Connie and Diane depicted in *El Mundo* is the use of "Uncle Sam" to illustrate how the storm was affecting not only Puerto Rico, but the U.S. as well. The caption on the image states that "GuateConnie" would be followed by "GuateDiana," a play on the U.S.'s intervention in Guatemala the year before. As it stood, U.S. intervention was a direct result of fear that Communism would spread to Guatemala and then have a direct position to impact the U.S. The reference made in the image directly portrays the female storms as being like communist aggressors, causing

^{49 &}quot;Connie & Diane," San Juan El Mundo, August 18, 1955.

irreparable harm to the U.S. It also again directly links the fear of powerful women adding to it the fear of Cold War atomic tensions.

By the time Hurricane Camille hit in 1969, the female-only naming system was standard practice. As discussed earlier in this chapter, Camille was a particularly important storm because of its size and strength, but also due to the seeding efforts of "sister storm Debbie" taking place with Project Stormfury. In every Caribbean and Central American newspaper, the seeding of Debbie is given attention. For example, an article in the *Kingston Gleaner* proclaims that a "plane attacks Debbie." The article then continues to describe the seeding process and its potential impact on hurricane control much in the same way that U.S. newspapers discussed Project Stormfury's efforts.



"Plane Attacks Debbie," Kingston Gleaner, 1969.50

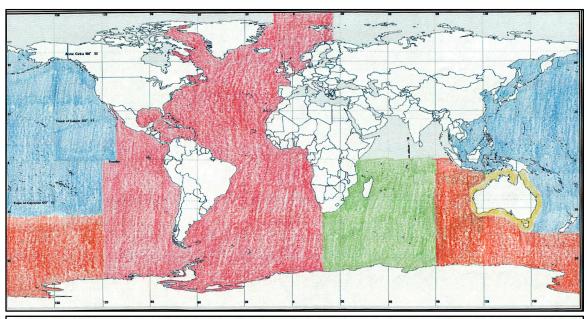
Past the introduction of the female-only hurricane naming in the U.S., Caribbean, and Central American region, the well-liked female-only storm

_

^{50 &}quot;Plan Attacks Debbie," Kingston Gleaner, August 19, 1969: 1.

naming system also spread to other parts of the globe. In 1960, female-only names were adopted for the Eastern and Central Northern Pacific Region as well as the South Indian Ocean Region. Thus, the female-only naming system now applied to typhoons and cyclones in addition to hurricanes. By 1963, Australia, which had had its own turbulent past with storm naming systems via Clement Wragge, also adopted the female-only naming system for all storms in the South Pacific Ocean Region. (See map for explanation of regional breakdown and year of naming system adoption).

Map 2. Implementation of Female-Only Naming System for Hurricanes, Typhoons & Tropical Cyclones, 1896-1964



KEY:

- ☐ Late 1800s: Clement Wragge introduces naming concept, uses female names for some storms
- 1945: US Armed Services adopt female-only naming system for Pacific Theater
- 1954: US Weather Bureau implements female-only list for Atlantic Ocean and bordering Pacific Ocean regions
- 1960: Female-only names adopted in South Indian Ocean region and all remaining NE Pacific Ocean region
- 1963-64: Australia & South Pacific Ocean regions officially adopt female-only naming system

CONCLUSION: WOULD A HURRICANE BY ANY OTHER NAME BE THE SAME?

Simply put, from 1954 to 1969, in a period of hegemonically constructed gender definitions, weathermen and reporters alike used the feminization of hurricanes as a mechanism for expressing anxiety over the shifting cultural climate. At a time when idealized feminine characteristics were defined by fragility, cleanliness, and perfection, not only in the home but also in the now ever-present male-dominated media, the vilification of female outliers allowed for the feminization of hurricanes to become a popularly consumed environmental object.

On a deeper level, by studying gendered storm descriptions from 1954 to 1969, it is possible to see how gender norms were shifting to become more rigidly defined in the Cold War era (e.g., the juxtaposition of the good woman versus the bad girl). While concepts of women's unsuitability for citizenship had existed since the Colonial period to disqualify women from voting and managing finances, these new gendered descriptors, as clearly found in accounts of hurricanes during this period, unlock embedded ideologies about gender during the Cold War.

The hurricanes studied in these chapters provide the basis for glimpses into broader U.S. culture at a fundamental level. They also provide one-of-a-kind insight into how gendered terminology, once applied, spreads in mass culture globally. The hurricane, which had no sex or gender before WWII, had a rigidly defined gender by the end of 1969. As a result, the sexualization of hurricanes and the heightened misogyny they reflected spread across the globe images of women as frightening and fickle, outside the polity, hypersexual and insatiable over a fifteen-year period. The resulting effect of this American-influenced shift

in public perception can only be understood after careful dissection of the culture that made this to happen. How and why the issue of the storm naming and gendering process would come up for debate again after being so firmly adopted by the masses is the story of the next chapter. Needless to say, though, "Camille Was No Lady," did not sit well with the resurgence of feminism that was geared towards sexual equality.

PART II THE PROBLEM WITH A NAME

CHAPTER 6

CEASE & DESIST: ROXCY BOLTON SAYS

NOW IS THE TIME FOR CHANGE



The NOW Hurricane, Miami Herald, 1970.1

In early 1970, the National Organization for Women (NOW) sent a "cease and desist" order to the Director of the U.S. Weather Bureau's Hurricane Center, in Coral Gables, Florida, effectively setting off a firestorm of accusations, discussion, and protests that stretched over a decade. Stating that the current

-

 $^{^{\}scriptscriptstyle 1}$ "NOW It's Time For A Change: Hurricanes' Names Stir Storm," The Miami Herald, March 28, 1970: 1A.

practice of identifying hurricanes with female names "reflects and creates an extremely derogatory attitude toward women," the document reflected rising tension in a shifting cultural climate over the issue of sexism in American society during the late 1960s and early 1970s.²

While issuing a "cease and desist" order to stop the use of female names for hurricanes was unprecedented, the NOW representatives' explanation received the most attention from weathermen and the public as they discussed the growing issue. "Hurricanes are disasters destroying life and communities, and leave a lasting and devastating effect on those affected," stated NOW representatives Roxcy Bolton and Martha Ingle. Similarly they implored that, "women are human beings and deeply resent being arbitrarily associated with disaster."³

Blindsided, reporters and weathermen alike asked themselves how the popular hurricane naming process had become the target of this call for immediate change. In an attempt to answer their own question, rebuttal to the letter publicly scoffed at the idea that the majority of the female population felt the same way about the hurricane naming process. Instead, they concluded that the NOW argument was just another attempt by feminists to reshape the fabric of American society.

² Roxcy Bolton, Letter to Director of Hurricane Center, n.d, Roxcy O'Neal Bolton Papers, M94-001: Hurricanes, State Library and Archives of Florida, Tallahassee, FL. [hereafter cited as Bolton MSS]

³ Ibid.

THE HURRICANE AS SEXIST: THE FEMINIST MOVEMENT PICKS UP STEAM

While weathermen and reporters were correct in their claims that hurricanes had become a "cause" of the resurgent feminist movement, the story behind "new" attention to hurricane naming practices is actually more complex. The evolution of feminist concern over gendered hurricanes arose from a confluence of three major movements: the civil rights movement, the second wave of feminism, and the environmental movement. All three of these movements affected American ideas about culture, gender, and the environment. However, it is crucial to first understand the history of these three movements before looking at the debate over hurricane names.

When contextualizing feminism in American history it is important to remember that feminism did not emerge from a cultural vacuum. Ideas regarding women's place in American politics and culture, and the association of women activists with the term "feminist," had been up for continuous debate since the 1890s. Popularly known as the "first wave" of feminism, this movement focused primarily on civil liberty through voting privileges. However, the movement fizzled out nationally following the implementation of the Nineteenth Amendment to the Constitution granting women the right to vote.

⁴ To understand the earliest feminist rumblings see: Ellen DuBois, Feminism and Suffrage: The Emergence of an Independent Women's Movement in America, 1848-1869 (Ithaca: Cornell University Press, 1999); Elisabeth Griffith, In Her Own Right: The Life of Elizabeth Cady Stanton (New York: Oxford University Press, 1984); Kathleen Barry, Susan B. Anthony: A Biography of a Singular Feminist (Bloomington IN: 1st Books Library, 2000).

⁵ For more on the first wave of feminism see: Nancy F. Cott, *The Grounding of Modern Feminism* (New Haven: Yale University Press, 1987; Sara Evans, *Born for Liberty: A History of Women in America*, 1st ed. (New York: Free Press Paperbacks, 1997); Nancy Woloch, *Women and the American Experience*, 5th ed. (New York: McGraw-Hill, 2011); and, Marjorie Spruill, *One Woman, One Vote: Rediscovering the Woman Suffrage Movement* (Troutdale, OR: NewSage Press, 1995).

While attention to women's rights was never officially negated, the push towards active change stagnated.⁶

As illustrated in the preceding section, the post-World War II period in American culture was one of intense cultural change. With a demobilized homefront, marketing that focused on American families resulted in a homogenized image of American gender roles. Meanwhile, the building tension over racial issues in the U.S. challenged the notion of a unified America. As the Civil Rights Movement brought attention and eventual policy changes to racial discrimination and segregation in American society, the issue of gender discrimination came to the forefront yet again.

As part of the Civil Rights Act of 1964, Title VII prohibited discrimination in employment on the basis of race and sex.⁷ The newly established Equal Employment Opportunities Commission (EEOC) oversaw this policy implementation.⁸ Unhappy with the results of the EEOC and seeking to change other aspects of gender relations, a new feminist group organized under the

⁶ To see how feminism past the 1920s fared see: Lois Scarf and Joan M. Jensen, eds., *Decades of Discontent: The Women's Movement, 1920—1940* (Westport, CN: Greenwood Press, 1983); Susan Ware, *Beyond Suffrage: Women in the New Deal* (Cambridge: Harvard University Press, 1981); Pam Tyler, *Silk Stockings and Ballot Boxes: Women and Politics in New Orleans, 1920–1963* (Athens: University of Georgia Press, 2009); and, Anne Firror Scott, "After Suffrage: Southern Women in the 1920s," *Journal of Southern History*, 30 (August 1964): 298 - 315.

⁷ Carol M. Brauer, "Women Activists, Southern Conservatives, and the Prohibition of Sex Discrimination in Title VII of the 1964 Civil Rights Act," *Journal of Southern History*, 49 (1983): 37-56.

⁸ For more on legal cases relating to sexual discrimination see: Susan Gluck Mezey, *In Pursuit of Equality: Women, Policy, and the Federal Courts* (New York: Palgrave Macmillan, 1991); David L. Kirp, Mark G. Yadof, and Marlene Strong Franks, *Gender Justice* (Chicago: University of Chicago Press, 1986); Nancy Levit, *The Gender Line: Men, Women, and the Law* (New York: NYU Press, 2000); and, Catharine A. MacKinnon, *Sexual Harassment of Working Women: A Case of Sex Discrimination* (New York: Yale University Press, 1979).

leadership of author and feminist Betty Friedan.⁹ The National Organization for Women (NOW), consisting of 28 women in its 1966 inaugural year, sought to "take action to bring American women into full participation in the mainstream of American society now."¹⁰

As part of its organizational aims, NOW focused on several key issues it considered vitally important to American women during what scholars now call the "second wave" of feminism. ¹¹ These issues included: professional discrimination; political involvement; redefining concepts of marriage, family and women's lives; and the desire to change the increasingly "false image of women" that spread in the media through television shows, advertisements, and general discussion of women.¹²

Coining the term "sexism" to refer to the various issues feminists were fighting against, NOW and other feminist groups argued that sexism could be found in everyday life through harassment, discrimination, and linguistic representation. Due to the increased publicity about feminists, between 1970 and 1972 nearly every major news outlet in the country gave sexism discussion time

⁹ In addition to her other feminist activities, Betty Friedan is best known for her book, *The Feminine Mystique*, 1963 (New York: W. W. Norton, 1997).

¹⁰ NOW Charter and Aims, Bolton MSS, M94-001: Hurricanes.

¹¹ The second wave of feminism as discussed in: Ruth Rosen, *The World Split Open: How the Modern Women's Movement Changed America* (New York: Penguin, 2006); Judith Hole and Ellen Levine, *Rebirth of Feminism* (New York: Quadrangle Books, 1971); John D'Emilio and Estelle Freedman, *Intimate Matters: A History of Sexuality in America* (Chicago: The University of Chicago Press, 1997); and, Daniel Horowitz, *Betty Friedan and the Making of "The Feminine Mystique": The American left, the Cold War, and Modern Feminism* (Amherst: University of Massachusetts Press, 2000).

¹² Woloch, 364-366.

on the air or in print.¹³ By doing so, the overall comprehension of the word "sexist" expanded in public consciousness.¹⁴

As a result NOW's numbers grew from 1,000 in 1967 to 15,000 in 1971. ¹⁵ However, the group splintered over how best to tackle the numerous women's issues. Some feminists called for radical change such as abolishing gender references altogether while others argued for a more moderate progression of feminist-influenced change. ¹⁶ At the heart of the discussion over feminist agenda were two key issues, the Equal Rights Amendment and current abortion policies. ¹⁷ The tension between the radical and moderate feminists over these

¹³ Some of the feminist texts gaining notable attention during this period include: Helen Gurley Brown, *Sex and the Single Girl* (New York: Barnes & Noble, 1962); Betty Friedan, *The Feminine Mystique*, (cited previously); Alice Rossi, "Equality Between the Sexes: An Immodest Proposal," in Robert J. Lifton, *Woman in America* (cited previously); Caroline Bird, *Born Female: The High Cost of Keeping Women Down* (New York: Pocket Books, 1969); Kate Millett, *Sexual Politics*, 1969 (New York: University of Illinois Press, 2000); Shulamith Firestone, *The Dialectic of Sex: The Case for Feminist Revolution* (New York: Bantam Books, 1970); *Sisterhood Is Powerful: An Anthology*, edited by Robin Morgan (New York: Random House Paperbacks, 1970); *Women in Sexist Society: Studies in Power and Powerlessness*, edited by Vivian Gornick and Barbara K. Moran (New York: New American Library, 1971); Germaine Greer, *The Female Eunuch*, 1972 (New York: Harper Perennial Modern Classics, 2008); and, Simone de Beauvoir, *The Second Sex*, Translated by Constance Borde and Sheila Malovany-Chevallier (New York: Vintage Books, 1989).

¹⁴ For more on the expansion of the word "sexism" and the effect on the use of and development of the term "gender" see: Ethel Klein, *Gender Politics: From Consciousness to Mass Politics* (Cambridge: Harvard University Press, 1985); Susan M. Hartmann, *From Margin to Mainstream: American Women and Politics Since 1960* (New York: Temple University Press, 1989); Shira Tarrant, *When Sex Became Gender* (New York: Routledge, 2006); Judith Butler, *Gender Trouble: Feminism and the Subversion of Identity* (New York: Routledge, 2006), and, *Undoing Gender* (New York: Routledge, 2004). To see how historians should adapt their concept of women's history, gender history, "sex" and "gender" in their work see Joan Scott, "Women's History," and, "Gender: A Useful Category of Historical Analysis," in *Gender and the Politics of History* (cited previously).

¹⁵ Woloch, 366.

¹⁶ Radical feminism as discussed in Alice Echols, *Daring to be Bad: Radical Feminism in America*, 1967-1975 (Minneapolis: University of Minnesota Press, 1989).

¹⁷ More on these two controversial issues can be found in: Mary Berry, Why ERA Failed: Politics, Women's Rights, and the Amending Process of the Constitution (Bloomington: Indiana University Press, 1988); Donald Mathews, Sex, Gender, and the Politics of ERA: A State and the Nation (New York: Oxford University Press, 1992); Jane Mansbridge, Why We Lost the ERA (Chicago: University of Chicago Press, 1986); James Mohr, Abortion in America (Oxford: Oxford University Press, 1979); David Garrow, Liberty and Sexuality: The Right to Privacy and the

issues and others created confusion in media reports. As a result, a mixed stereotype of feminists emerged in a male-dominated popular culture. Feminists were portrayed as demonic, self-centered, man-haters who were threatening to social order.¹⁸ Despite the negative backlash, feminists created a "moral climate for reform" that stretched into nearly every aspect of American society.¹⁹

While the second wave of feminism picked up steam, the modern environmental movement also gained attention. Arising from the same 1960s ideas about social impact and society that caused a resurgence of the feminist movement, the environmental movement focused on changes in the environment and particularly brought attention to the relationship of humans to their environments.20 With increased emphasis in the post-World War II media, popular environmental discussions arose over the subjects of land use, the extinction of animals and wildlife, and population pressures. Similarly, while

Making of Roe v. Wade (Berkeley: University of California Press, 1998); Rickie Solinger, Wake up Little Susie: Single Pregnancy before Roe v. Wade, 2nd ed. (New York: Routledge, 2000); Andrea Tone, Devices and Desires: A History of Contraceptives in America, 1st ed. (New York: Hill and Wang, 2002).

¹⁸ For the best books on the affect and backlash to feminist ideals see: Phyllis Schlafly, A Choice Not An Echo (Perre Marquette Press, 1964); Donald Critchlow, Phyllis Schlafly and Grassroots Conservatism: A Woman's Crusade (Princeton NJ: Princeton University Press, 2005); Susan Faludi, Backlash: The Undeclared War Against American Women (New York: Three Rivers Press, 1991).

¹⁹ Woloch, 374.

²⁰ For more on each of these subjects see: Samuel P. Hays, Beauty, Health, and Permanence: Environmental Politics in the United States, 1955-1985 (Cambridge: Cambridge University Press, 1989); Uncommon Ground: Rethinking the Human Place in Nature, Edited by William Cronon (New York: W.W. Norton & Co., 1996): Thomas Dunlap, Saving America's Wildlife (Princeton: Princeton University Press, 1988); James Whorton, Before Silent Spring: Pesticides and Public Health in Pre-DDT America (Princeton: Princeton University Press, 1975); Paul Ehrlich, The Population Bomb (Cutchogue, NY: Buccaneer Books, 1995); Susan Strasser, Waste and Want: A Social History of Trash, 1st ed. (New York: Holt, 2000); Robert Bullard, Dumping in Dixie: Race, Class, and Environmental Quality (Boulder: Westview Press, 2000); Gregg Mitman, Reel Nature: America's Romance with Wildlife on Films (Cambridge: Harvard University Press, 1999); and, Alexander Wilson, The Culture of Nature: North American Landscape from Disney to the Exxon Valdez (Cambridge MA: Blackwell, 1992).

challenging the images of Americans' relationship to the environment, the movement discourse also highlighted the visible connection between gender and the environment.

First published as a series of articles for *The New Yorker*, then as a book in 1962, Rachel Carson's *Silent Spring* officially kicked off the movement, bringing attention to the necessity for environmental regulation, particularly in the pesticide industry. ²¹ Reaction to Carson's work was heated. Newspapers throughout the country questioned Carson's credibility in terms of her education and sex. Articles stating, "Rachel Carson stirs conflict" appeared, declaring that her work was "accused of alarmism, or lack of objectivity" and that she was not "professionally competent to evaluate possible hazards." Initially described as a "quiet woman author," Carson quickly became a "fanatic defender of the cult of the balance of nature." ²²

The use of Carson's sex to paint her as a "fanatic" and "alarmist" is not unique in the context of the postwar period where outspoken women were described as irrational and fear inducing. But the connection made between Carson, the environment, and gender was not the only blend of ideas from the feminist movement and the new environmental movement. As the environmental and feminist movements picked up steam in the late 1960s and early 1970s, an amplified recognition of sexism through gendered language quickly drew attention to the feminization of hurricanes. While the rest of the country had started to debate equal gender balance, rampage-like descriptors

²¹ Rachel Carson, *Silent Spring*, 1st Edition, 1962 (Boston: Houghton Mifflin, 2002).

²² "Rachel Carson's Warning," *The New York Times*, July 2, 1962: 28; and, "Silent Spring' Is Now Noisy Summer," *The New York Times*, July 22, 1962: 87.

used by meteorologists and reporters continued to focus on negative depictions of femininity. By the 1970s, the language of gender definitions across American society had piqued interest in hurricane names to a point of nation-wide discussion. By referencing gender, feminists proclaimed that weathermen were being misogynistic with their continued use of the female naming system.

Backlash to feminist ideas continued to smear these women and their movement as disruptive, focusing attention on "irrelevant" problems like language used in society, particularly when describing female-named hurricanes.²³ With no alternative solution and little cause to shift the naming process, weathermen swatted away the feminist idea of changing the hurricane naming process for years — stating that only women conjured up appropriate amounts of annoyance and fear to have hurricanes named after them. ²⁴ Eventually becoming so embedded into the fabric of American society by the end of the 1970s, it would take broad sweeping governmental changes to force the adaptation of hurricane naming. Meanwhile, weathermen were made to look funny, outdated, and most of all sexist. Bowing to feminists shortly afterwards, weathermen added male names to the hurricane list in 1978, but not without putting up a fight first.

_

²³ Rosalyn Baxandall and Linda Gordon, *Dear Sisters: Dispatches from the Women's Liberation Movement* (New York: Basic Books, 2000) 2.

²⁴ Art Buchwald, "Stormy Women," The Washington Post, April 27, 1972: C1.

CEASE AND DESIST! ROXCY BOLTON VS. THE WEATHER BUREAU

As a National Vice President of NOW, feminist Roxcy Bolton represented feminists everywhere when she signed and issued the "cease and desist" order to the National Weather Bureau. Known primarily for her protests against "Men's Only" lunch spaces in Florida workplaces, Bolton was an advocate for equality in a time when negative portrayals of transgressive women made the media spotlight daily. A Southern-bred feminist hailing from hurricane prone Mississippi and Florida, Bolton zealously took up the case against sexist hurricane names and the vilification of women through storm descriptions. ²⁵

After issuing the "cease and desist" letter, Bolton, the then sole representative for NOW after others decided the pursuit was too difficult, was invited to appeal to the National Weather Bureau at the Interdepartmental Hurricane Warning Conference in 1971.²⁶ At the conference, Bolton approached a panel of men with the request for a change in the hurricane naming system.²⁷ It is "humiliating and degrading," she told the panel, not only to women in general, but especially to "women whose names are identical with the names of those hurricanes." In fact, she argued, "the majority of American women would be

²⁵ For more information on Roxcy Bolton see the online exhibit: "Roxcy Bolton, Pioneer Feminist," Roxcy Bolton Collection, Florida Memory Project Online, Created October 6, 2009, http://www.florida.memory.com/OnlineClassroom/Roxcy Bolton/index.cfm.

²⁶ According to Bolton, Martha Ingle, a Miami reporter and the other signature listed on the original "Cease & Desist" letter to the National Weather Bureau, had decided that it would be too harmful to her career to continue to pursue the change in hurricane names. While Bolton had the support of NOW and the title of Vice President, all actions with the Weather Bureau were taken on individually. Bolton, Telephone interview with the author, March 22, 2013; and, Bolton, Letter to Director of Hurricane Center, n.d.

²⁷ Interdepartmental Hurricane Warning Conference, Report of the 1971 Interdepartmental Hurricane Warning Conference, Coral Gables, Fla., January 13-14, 1971 (National Hurricane Center: 1971), National Oceanic and Atmospheric Association Regional Library, Miami, FL.

happier to have a woman named to a top job in the Commerce Department rather than to some hurricanes."28

In discussion at the meeting, Bolton was asked to provide a different naming system to the committee. Suggesting offhandedly that hurricanes be named after birds instead of women, she was immediately shot down with the statement that "the Audubon Society would object." Horrified, she responded to the weathermen, "you're concerned about the Audubon Society and regard for birds — but not for women?" However, despite Bolton's suggestions and vigorous debate, the discussion was tabled until the following year.

Responding officially to the comments, Steering Committee Chair Karl Johannessen later issued Bolton a statement explaining that they commended her for her "calm manner of presentation." As explained in the statement, while the committee members were "sympathetic" to her concerns they believed that "the majority of women do not hold Mrs. Bolton's views on the naming of hurricanes." Since no "suitable alternative methods" were proposed, the Weather Bureau voted to retain the current system.³⁰

Not surprisingly, Bolton was not ready to give up the fight for the change in hurricane names. Appealing immediately to the Weather Bureau, her next letter proposed that hurricanes be named after U.S. Senators, starting in alphabetical order, "or in some method whereby all Senators would have a

²⁸ Bolton, Speech before Interdepartmental Hurricane Warning Conference, January 13, 1971, Bolton MSS, M94-002: Hurricanes.

 $^{^{29}}$ Bolton, Letter to Dr. R. H. Simpson, January 1, 1972, Bolton MSS, M94-002: Hurricanes.

³⁰ Karl Johannessen, Letter to Roxcy Bolton, February 9, 1971, Bolton MSS, M94-002: Hurricanes; Bolton, Letter to Dr. R. H. Simpson, Jan 17, 1971, Bolton MSS, M94-002: Hurricanes.

Hurricane named for them during their 6-year term." Her explanation stated that senators, "delight in having streets, bridges, buildings — especially Federal buildings — named for them," why not hurricanes? She argued that "no one would overlook the Irwin Hurricane warning, or the Goldwater, or the Ellender," all popular political figures of the time.³¹

By the time Weather Bureau Director Robert Simpson replied to Bolton's suggestion of using U.S. Senators' names he had already invited her to attend the Interdepartmental Hurricane Warning Conference again in 1972. However, he let her know that while he found her suggestion a "most interesting innovation," he did think it might be "fraught with more political consequences than is implied by [the] conclusion that all Senators enjoy having things named for them."32

Appearing at the conference, Bolton was again denied her request, for reasons related to her failure to provide a sufficient alternative to the naming system. Explaining that the use of Senators' names "clearly involves political considerations and individual personalities" weathermen argued that "Senators are not uniformly distributed alphabetically," and therefore were an unsuitable option. However, unlike the 1971 conference conclusion, this time she was informed that the issue of hurricane naming had been referred to larger, more "appropriate levels in Washington for future consideration." 33

In 1973, after continual correspondence with the National Weather Bureau over the issue of hurricane naming, Bolton was yet again invited to appear before

³¹ Bolton, Letter to Dr. R. H. Simpson, January 1, 1972.

 $^{^{32}}$ Robert H. Simpson, Letter to Roxcy Bolton, January 17, 1971, Bolton MSS, M94-002: Hurricanes.

³³ Simpson, Letter to Roxcy Bolton, January 26, 1972, Bolton MSS, M94-002: Hurricanes.

the Interdepartmental Hurricane Warning Conference. The meeting minutes from the conference reflected that she appeared for the third year in a row without "substantiating evidence nor acceptable alternative proposals," according to the committee.³⁴ The result of the third consecutive year of discussion was that the delegation decided the issue of hurricane naming would be tabled once and for all. Consequently, the issue of changing the hurricane naming procedure was not approached again by the Weather Bureau until 1978.

FROM "AMERICAN TRADITION" TO "INTENTIONAL SLUR": THE BOLTON STORY IN THE MEDIA

While dialogue between Roxcy Bolton and the representatives at the Weather Bureau took place, reaction in newspaper articles throughout the country showcased larger debate over female-named hurricanes and other sexspecific labeling processes. It is in these decade-spanning newspaper articles that true backlash to this proposed "feminist" idea is representative of the larger discussion of the effects of feminism in everyday life and the shift toward acceptance of these ideas by the end of the decade.

Following the first appearance of Roxcy Bolton at the Interdepartmental Hurricane Warning Conference in 1971, newspaper articles throughout the country applauded the Weather Bureau's decision to keep the current system of hurricane naming. "By maintaining the tradition," U.S. Meteorological Director George Cressman explained in an interview, weathermen were simply continuing

_

³⁴ Interdepartmental Hurricane Warning Conference, Report of the 1973 Interdepartmental Hurricane Warning Conference, Coral Gables, Fla., January 24-25, 1973 (National Hurricane Center: 1973), National Oceanic and Atmospheric Association Regional Library, Miami, FL.

"a part of American heritage," he concluded, and getting rid of the system of names that "had a personality" would be detrimental to the public.³⁵ "Betty sounds more powerful than Bob," agreed the *New Orleans Times-Picayune*, in an article reviewing the decision. In fact, it argued, female names, "carry a fundamental message to mankind: 'Ignore us at your peril," which is exactly the effect the Weather Bureau was trying to achieve.³⁶

"We intend no slur on women," a weatherman quipped in a 1971 *Irish Times* interview, countering Bolton's and other feminists' accusations that weathermen fought to keep naming hurricanes after females as a way of continually deriding the feminine species. In fact, women should see it as an honor to have a hurricane named after them, weathermen had concluded. Why else would the Weather Bureau receive 10 letters to every 1 letter requesting their name to be added to the annual list, articles and editorial cartoons like the one below from the *Los Angeles Times* concluded.³⁷

_

^{35 &}quot;Hurricanes—no slur on women," The Irish Times, May 27, 1971: 7.

³⁶ Bill Neikirk, "Hurricane Naming After Women to Be Continued," *The Times Picayune*, May 27, 1971: 4.

³⁷ This statistic was given by Director R. H. Simpson to various newspapers and also sent to Roxcy Bolton herself. R. H. Simpson, Letter to Ms. Roxcy Bolton, March 25, 1970, Bolton MSS, M94-002: Hurricanes.



Hurricane Emmy Lou, Los Angeles Times, 1968.38

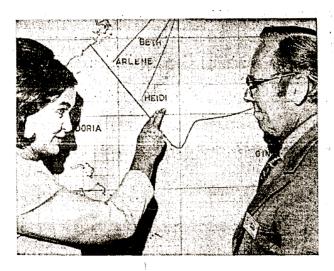
While media around the country quickly re-printed key statistics and quotes from Cressman and others, few mentioned Roxcy Bolton by name in 1971. Meanwhile, Weather Bureau officials were always identified by their proper titles and names. Proclaiming that issues with the naming process stemmed from "women's liberation groups," the unacknowledged Bolton is missing from the headlines, signaling both a lack of respect for the naming discussion and a typical example of multiple feminist activities throughout the country being conflated into a conglomerate deemed of "little relevance." Feminist accusations were also mocked in political cartoons like the one from the *Miami Herald* that was

³⁸ "Emmy Lou," Los Angeles Times, August 23, 1968: B7.

 $^{^{39}}$ Dick West, "Sexually Balanced Language," $New\ York\ Journal\ and\ Guide,$ February 12, 1972: A8.

seen in the beginning of this chapter where a 1960s feminist is carrying a NOW sign and protesting the use of female names for hurricanes.

A year later, feminist Roxcy Bolton did make national headlines when she appeared at the 1972 Interdepartmental Hurricane Warning Conference. An immediate contrast to the 1971 response to Bolton's appearance at the Weather Bureau conference, the 1972 newspaper articles not only listed Bolton's name specifically, but also included a photo. Taken at the 1972 conference, the image captured of Roxy Bolton shows her standing with an unknown "weather service official," later identified as Director Robert Simpson. The layout of the image showcasing Bolton and Simpson posed next to a map with female hurricane names on it is a prime example of the popular labeling of feminist activists as radical. The caption on the image, "Storm warning," immediately set the tone of the article before it began — Bolton was deemed radical feminist, giving a warning.



Storm warning ... Ms. Roxcy Bolton with a weather service official.

Roxcy Bolton at the 1972 National Weather Bureau Conference, Los Angeles Times, 1972. 40

⁴⁰ "Female of Species Not More Deadly?" *The Los Angeles Times*, January 21, 1972: OC2.

As described in corresponding newspaper articles, the weatherman's expression summed up the shock and frustration of weathermen and reporters to her ideas. The fact that Director Simpson is not mentioned in either the caption or the article is peculiar. Instead, Bolton is made to look like a raging feminist who happens to be directing her anger at "any" weather official present, not describing her concern to an esteemed director of the Weather Bureau. ⁴¹ Attaching the picture and an article from an Alaskan newspaper that had printed it, Director Simpson later wrote Bolton with an apology for the text that accompanied the picture explaining that no Weather Bureau official released the image to his knowledge. However, the damage had been done and media outlets throughout the country ran the photo with their accompanying articles skewering Bolton's statements.

Gone were the descriptions of Bolton's "calm manner" and in its place were images of a woman giving a "warning." ⁴² "I am sick and tired of hearing that 'Cheryl was no lady,' or 'Betsy annihilated this or that," a "bellicose" Bolton reportedly argued. ⁴³ If weathermen were not sexist in their decision to name hurricanes after women, then they would have no problem adding male names to the list, she concluded to much horror. Then Bolton again "demanded" that hurricanes be named after U.S. Senators, not women. Not surprisingly, weathermen did not agree. Instead, weathermen "batten[ed] their hatches" in fear of more contentious claims. Finally, "she hit her audience with yet another

⁴¹ Dr. R. H. Simpson, Letter to Roxcy Bolton, February 1, 1972.

 $^{^{42}}$ Johannessen, Letter to Roxcy Bolton, February 9, 1971; Bolton, Letter to Dr. R. H. Simpson, January 17, 1971.

^{43 &}quot;Female of Species Not More Deadly?" The Los Angeles Times, OC2.

icy blast," by suggesting that "hurricanes" be named "himmicanes" to be truly egalitarian. ⁴⁴

Reporters and weathermen throughout the country exclaimed that Bolton's idea went one step too far. Just because the word "hurricane" phonetically sounds like "her-icane" they protested, does not mean that the word should be changed. Furthermore, Bolton's request was received as another example of the so-called, "Women's Lib Storm" that was brewing throughout the country.⁴⁵ While wreaking a different type of havoc, this feminist political storm seemed to confirm why "everyone knows a hurricane is a feminine phenomenon."⁴⁶ In fact, some articles cruelly joked, maybe Bolton was simply upset because her name, "Roxcy," had made the 1969 season hurricane name list.⁴⁷

While some in the media snickered about the dualistic meaning of "Hurricane Roxcy," others provided vicious rebuttal to Bolton's suggestion of naming hurricanes after U.S. Senators and changing "hurricanes to himmicanes" in two primary waves. First, a reply from the National Weather Service's Karl Johannessen that, "we wouldn't want to cast a slur on U.S. Senators" by naming hurricanes after the senators started a heated debate between feminists and weathermen in the media. "We intend no slur on women," reporters titled articles the next day, a quoted response to other feminist claims made a year

⁴⁴ Ibid.

⁴⁵ "Hurricanes—no slur on women," *The Irish Times*, 7.

⁴⁶ Buchwald, "Stormy Women," C1.

⁴⁷ "Hurricane Roxcy," *The New Times, Miami's News & Arts Weekly*, February 22-28, 1989: 1.

earlier by the Weather Bureau's director George Cressman. ⁴⁸ This, "unsuspecting weatherman," did not truly mean that U.S. Senators would be dishonored by associating hurricane names with them, the director stated, instead, he had just misspoken. ⁴⁹

"She has a good point," said Dick West of the *New York Journal and Guide* in the second wave of discussion. "Senators are virtually synonymous with high winds," he expressed. However, when "the women's lib leader proposed changing the meteorological term from 'hurricane' to 'himicane' she lost my support forthwith." It would be too difficult to achieve verbal equality "with a few lexicographical alterations" and instead would require "tampering with words in an effort to achieve sexually balanced language" resulting in "major surgery on the mother tongue," he concluded.⁵⁰

What is most interesting about the newspaper reports is that nowhere in correspondence or official minutes of the Bolton/Weather Bureau interaction is a serious discussion of the idea of the hurricane becoming the "himmicane." Mentioned off-handedly at the 1972 conference, Bolton's suggestion was not meant to be up for consideration. However, the newspaper reports after the conference used this suggestion to fully discredit Bolton's appearance and the possibility of a change in the hurricane naming system.

However irrational Bolton's suggestions were made to look, the question of appropriateness of hurricane names was now at the forefront of discussion by

 $^{^{48}}$ For the response made a year earlier see: Neikirk, "Hurricane Naming After Women to Be Continued." 4.

⁴⁹ For the debate over Karl Johannessen statement see: "Hurricanes—no slur on women," *The Irish Times*, 7.

⁵⁰ West, "Sexually Balanced Language," New York Journal and Guide, (cited previously)

both feminists and the American public alike. The idea that hurricanes and women were not synonymous was starting to sink in, even if it was through association with radical feminist activities. On the defense, reporters and weathermen scrambled to come up with a new way to prove to the American public why this particular system of naming could not be easily changed by the next Interdepartmental Hurricane Warning Conference in 1973.

THE "THERE IS NOTHING MORE SCARY THAN A WOMAN" DEFENSE

In a fake interview done by humorist Art Buchwald of *The Washington Post* in the wake of the 1972 Bolton/Interdepartmental Hurricane Warning Conference confrontation, "leading hurricane researcher" Professor Fritz Fogelhammer's rationale of why hurricanes should continue to be named after women summed up the slippery slope meteorologists and journalists tread defending this system of naming in the media. As astutely joked about by Fogelhammer, weathermen, researchers, and reporters seemed to all agree that the extreme, irrational fear of women was something that most Americans held to be true and therefore could be utilized in the case of female-named hurricanes. As evidenced in this simulated interview using other statements being made in the media at the time, the fear of women was the defense of choice in the debate over female-named hurricanes versus male-named hurricanes. (See mock interview)

Interview of Professor Fritz Fogelhammer by Art Buchwald in the Washington Post

Buchwald: You're saying people are more afraid of women than they are of men?

Fogelhammer: Yes, especially during storm conditions. An angry woman is like a hurricane. When the barometer drops she starts blowing in all directions.

Buchwald: I've seen it happen.

Fogelhammer: It's impossible to get the same storm effect in a man. A man's anger may begin as a hurricane, but it usually blows out to sea before it reaches typhoon conditions.

Buchwald: How do you explain that?

Fogelhammer: Women tend to store up tremendous atmospheric pressure during the daytime when they are dealing with the house and the children. As soon as the husband comes home from work, all this pressure is suddenly released, causing large vortical circulations on all frontal zones. During these storms most men try to head for the basement for safety, but they very rarely make it.⁵¹

The interview, while entirely made up by favorite humorist, Buchwald, illustrated on a fundamental level the popular belief that hurricanes were still best described as feminine. By explaining in detail why hurricanes were just like women, Fogelhammer the pretend researcher, and Buchwald the *Washington Post* reporter, exemplified the continued justification to the American public of this type of naming process in several ways. First, these statements, like others

_

⁵¹ Buchwald, "Stormy Women," C1.

made in the media, paid very specific attention to traditional female roles, justifying yet again why hurricanes are like women. Women's roles outside the home had increased, yet the association of women with the domestic sphere, or as the embittered housewife, continued to be presented in the media. By discussing the woman at home whose frustration and anger whips up a theoretical hurricane that wreaks havoc on her husband, Fogelhammer's defense of the system of naming a storm after a woman was incredibly similar to other meteorologists and reporters at the time.

While the fake description given by made up meteorologist Fogelhammer is derisive in its discussion of angry housewives, it is not surprising when reviewing depictions of storms as demonic women. What is surprising is the tenacity at which Fogelhammer links a crazed housewife, not just the woman outside the home, to a hurricane. While female-named hurricanes cause a different type of destruction than housewives, he proposed, both inflict mayhem on unsuspecting men, or the chosen representative victims. In this statement, Buchwald – through Fogelhammer – is directly highlighting the common argument that all women in this period were threatening and in this context hurricane names were appropriate labels.

Second, these statements also serve as an exemplary response to the suggestion that storms could potentially be named after men (or senators). By denying that male-named hurricanes could be as effective in ensuring attention by the American public during periods of impending disaster, weathermen, like the made up Folgehammer, used the fear of women defense to justify the current system of naming. More importantly, while this defense was partially

constructed in reference to the current debate with feminists like Roxcy Bolton over the use of U.S. Senators' names, it was also formed to justify the naming process to the rest of the country as a whole. Buchwald's inclusion of the housewife who wreaks havoc demonstrates the common theme that women, like hurricanes, inspired greater fear then men. Thus, male-named hurricanes would inspire less fear than female-named hurricanes. More importantly, when applying misogynistic ideas to hurricanes, real meteorologists and reporters normalized misogyny.

While something like the fear of women defense had been used in the 1950s when introducing female names for hurricanes, specific use of this defense in 1972 was clear — it was meant to firmly shut down potentially sympathetic feminist opposition in the American public's mind. Liking this defense so much, reporters and weathermen even began to associate the Feminist Movement (led primarily by women) with a hurricane itself. Described as causing a "different type of storm," these "Stormy Women," or the resulting "Women's Lib Storm" that was "brewing," supposedly confirmed the relationship between hurricanes, feminist women, and the importance of using a fear of women to marginalize criticism of the female-naming practice for hurricanes.⁵²

In historical context, the debate over Bolton's suggested alternate naming systems and concern over the use of female-names mimics debates raised over Clement Wragge's original tropical storm naming system. Eighty years after Wragge's system was revoked, Bolton's suggestion of using senators' names or

_

 $^{^{52}}$ Joseph Adelson, "Is Women's Lib a Passing Fad?" New York Times Magazine, March 19, 1972: 26.

male names for storms was met with considerable contention. The Bolton debate again brings forward the issue of who has the power to name storms and decide which names could be used. During Bolton's protest, the U.S. Weather Bureau still maintained the power to name storms and was predominantly staffed by males. While the shifting cultural climate and Bolton's position as a Vice President of a major feminist organization, NOW, allowed Bolton's arguments to be heard at the major Weather Bureau conference several years in a row, as opposed to previous female protestors of the past, she had limited ability to force the enactment of change.

As a result, in 1973, after the Weather Bureau decided to indefinitely end its discussion of changing the hurricane naming process, newspaper reports throughout the country quickly proclaimed that weathermen had won this round against the feminists. For the next five years, weathermen downplayed feminist opposition to the female-named hurricane with two factors. First, their suggestion that women were feared above men had worked to supposedly prove that there was truly no other effective way at that moment to name hurricanes. Roxcy Bolton had tried and failed, they reminded the public frequently. Adding to this, weathermen and reporters repeatedly argued that this system of naming had become "a part of American history" worth maintaining.

The second factor directly influencing the continuation of this naming process was the lack of a stimulus for change. Unlike the feminization of hurricanes, a dramatic shift in policies surrounding gender and the naming and descriptions of hurricanes had no "war effort" that acted as a mechanism for radically shifting cultural attitudes quickly. The end of World War II had

signified a shift towards protecting the demobilized homefront, including attention to meteorological needs, such as devising and implementing a hurricane naming system. With no major military mobilization of the mainstream U.S. homefront taking place in the 1970s and a system already in place that did work to label hurricanes, the idea of implementing a new naming system seemed frivolous. It would take major pressure from changing American culture and world meteorological organizations to bring the issue of hurricane naming to the forefront again. How this new naming system would be implemented and what it would be was still unfathomable.

CHAPTER 7
"It's Raining Men": Juanita Kreps Steps In



The Weather Girls, "It's Raining Men," Album Cover, 1982.

In September 1982, a female group known as "The Weather Girls" released the song, "It's Raining Men." The song began with two women mockingly reporting that they were "The Weather Girls" and they had important "news" for the broader public. "You better listen," cautioned one of the singers, while the other agreed emphatically, "get ready!" As sassily proclaimed immediately

_

¹ The Weather Girls, *It's Raining Men*, 1982, by Columbia Records.

following, the shocking news was that, "tonight for the first time [...] in history, it's gonna start raining men."

With phrases like, "Hallelujah!" and, "God bless Mother Nature, she's a single woman too, she took on the heavens, and she did what she had to do [...] she rearranged the sky so that each and every woman could find the perfect guy," the "news" described in the song was portrayed as exciting and broadly welcomed by all women.² And, in fact, it was. The catchy tune quickly reached the Billboard Hot 100 charts for the U.S., Europe, and Australia. The group's music video, a production involving dancing scantily-clothed men, pretend weather girls, and umbrellas, was played on new music video station, MTV, only escalating the song's popularity and cementing its notoriety in popular culture for decades to come.³

Written in 1979 by Paul Jabba and Paul Shafer, "It's Raining Men," is a direct reflection of feminist-influenced change found in many different realms of popular culture during the late 1970s and early 1980s. Like other female power ballads released in the early '80s, the song's wording and exclamatory remarks mimic excitement over broader wins against sex-segregation and restriction in political and private realms. Within the song's lyrics are suggestive themes of female sexual desire, applause for female power, exasperation over restrictions, and exclamation that a new era of the 80s empowered woman had arrived.

² The Weather Girls, *It's Raining Men*, (cited previously).

³ MTV debuted August 1, 1981, with the purpose of playing music videos 24 hours a day, 7 days a week. Craig Marks and Rob Tannenbaum, *I Want My MTV: The Uncensored Story of the Music Video Revolution* (New York: Plume, 2011).

But unlike Donna Summers' "She Works Hard For the Money" or Cyndi Lauper's "Girls Just Wanna Have Fun," "It's Raining Men" also reflects another major cultural transition. The song's copyright date also marks the global introduction of male names into the previously female-only hurricane naming list in 1979. From 1979 on, it did indeed "rain" men throughout the world, starting with "Bud."

But however popular the song and its concept of "raining men" was when released by The Weather Girls in 1982, it was unfathomable in 1973 when Roxcy Bolton last appeared in front of the Interdepartmental Hurricane Warning Conference. So how did this switch in broader public perception change over the course of the 1970s to allow the introduction of a new naming system? And, more importantly, what happened after the male-female naming system was implemented? Were hurricanes truly equal-gendered in name and description? To begin, it is necessary to review changes taking place internationally before returning to what was happening in the U.S.

GLOBAL PRESSURES: AUSTRALIA LEADS THE WAY

The relationship between Australia and gendered storm naming has been a recurring theme throughout this dissertation. Having been first introduced as a concept in the late 1800s with Clement Wragge, the female-only storm naming system was enacted, ended, and re-assigned during an 80 year period. As described in Part I, after World War II, Australia followed the U.S. and the World Meteorological Organization's lead in re-adopting a female-only naming system

for hurricanes, cyclones, typhoons and other tropical storms by 1963. However, for the 1975 season, the Australian Meteorological Organization dramatically decided to break from this system by introducing a male-female naming list for cyclones the following year.

In late February 1975, the Australian Science Minister William L. Morrison, issued a statement that "asked the bureau of meteorology to change the present system" of cyclone naming. "In the future male and female names should be used equally," he stressed. Morrison emphasized in interviews that, "there is no reason women should have the odium of providing names for all storms." In fact, he urged that, "this will help to remove an unnecessary stigma from the female species."⁴

While the announcement itself was intriguing, the reasoning behind it and response to it was illuminating. The announcement, according to Morrison, was made as a "gesture to the United Nations International Women's Year." Sociologist Leila Rupp has written that the feminist movement had an extremely broad reach internationally. 6 As such, discussions of equality, and more particularly, portrayals of women in text and in the media were brought up within many presses of the world. The United Nations' decision to name 1975 as the "Year of the Woman" was a direct result of this spread of global feminism. It is not surprising that Australia would not only be privy to, but actively participate in, a declaration of this special occasion.

^{4 &}quot;Aussie Storms Will Be Named After Males Too," Los Angeles Times, February 26, 1975.

⁵ "Australia Gives Cyclones Sex-Equality Treatment," New York Times, March 2, 1975: 40.

⁶ Leila J. Rupp, Worlds of Women: The Making of an International Feminist Movement (Princeton, NJ: Princeton University Press, 1997).

Similarly, the selection of cyclone naming as the tributary "change" in sexist behavior as offered by the science minister was also not unforeseen. Based on its previous history with storm naming systems via Clement Wragge, the Australian Weather Bureau and connecting South Pacific Ocean Region had been hesitant to adopt the World Meteorological Organization's hurricane and cyclone female-only naming system. But in 1963 it yielded to the World Meteorological Organization, adopting the naming system for the purposes of international naming system coordination. How Australian residents, particularly feminists, perceived the system on a day-to-day basis past 1963 is unknown. However, it can be assumed that the discussion of hurricane and tropical cyclone naming would have been a topic of ongoing interest.

On September 30, 1975, Dr. William Gibbs, then director of the Australian Bureau of Meteorology stated that the Bureau of Meteorology would be adopting the Science Minister's proposed male-female cyclone naming system for the upcoming 1975 season.⁸ As a result, the first cyclone of the next season would be named "Alan." Also stated was that this new storm naming system would be permanent, newspapers declared, despite what the World Meteorological Organization's system was, thus beginning discussion of the appropriateness of

⁷ More research needs to be done to make a conclusive argument one way or another. At this time, though, responses to the Australian name change were published in articles in the U.S. (as discussed in chapter 8), these responses are where I have drawn my conclusions.

⁸ The predominant cyclone season traditionally runs from November 1 through April 1. This is opposite the hurricane seasons of the U.S. that runs from June 1 through November 1. "Climatology of Tropical Cyclones in Western Australia," Australian Government: Bureau of Meteorology, Accessed February 4, 2013, http://www.bom.gov.au/cyclone/climatology/wa.shtml.

^{9 &}quot;Sex-Shift in Australia: A Cyclone Named 'Alan," New York Times, October 1, 1975: 23.

storm naming throughout the world again.¹⁰ Following Australia, Fiji adopted their own naming system that also included both male and female names.¹¹

With Australia's unique tie to the hurricane naming system's origins through Clement Wragge, it is not surprising that Australia would have a vested interest in the naming system debate, nor lead the way in changing the naming system, since they were the last to adopt it. What is more peculiar about the situation is the reaction by the U.S. press to this naming system, especially three years after the U.S. Weather Bureau post-Bolton had emphatically decided not to review the naming system again for the foreseeable future.

In U.S. newspapers, the quotations from the "science minister" used highlight the science minister's political power to change the naming system without WMO approval and the connection between the origins of the naming system. In most, Clement Wragge is credited as the creator of the naming process, which was eventually discarded. Yet no U.S. newspaper mentions the fact that the U.S. Weather Bureau re-adopted one of Wragge's proposed storm naming systems in the post-WWII era. The connection with Wragge both justifies Australia's interest in breaking from world naming practices and removes U.S. influence. Most interestingly, though, almost all U.S. newspapers describe the naming system change for cyclones as a reaction to the International Women's Year. Yet, most use the same quotation from an "Australian feminist" who was part of "Women's Liberation, one of Australia's feminist groups," who

^{10 &}quot;Nonsexist Storms," Washington Post, February 26, 1975: 30.

¹¹ Bureau of Meteorology Research Centre, "Global Guide to Tropical Cyclone Forecasting," Commonwealth of Australia, Bureau of Meteorology, 2009, http://www.webcitation.org/mainframe.php.

stated that the new naming system was "not really very interesting" and "didn't really advance the cause of women." The unnamed feminist whose statements spread around the world is typical of other misquoted or under contextualized quotes of the period. The unnamed feminist's quote inadvertently defended the system of naming to the U.S. public, thereby segregating Australia's decision to alter naming storms from the reality of U.S. naming practices. As a result, the Australian decision did nothing to officially change U.S. perspectives on the hurricane naming system. But it did bring the issue to light again during a year where the discussion of women and the perception of women in everything from text to television was up for debate.

WORDS AND WOMEN: MS. MAGAZINE, HERSTORY & THE ELEMENTS OF STYLE

In the U.S., the discussion of women and the words used to describe them had been slowly building in public consciousness during the 1970s. One of the first instances of this came with the publication of *Ms*. magazine in 1971 and the use of "Ms." as a prefix.¹³ As described in the *Washington Post*, "the name of the magazine was chosen to indicate [a] new freedom from traditional roles." As "Ms. Steinem" had described, instead of using Mrs. or Miss to identify two very distinctive homogeneous stereotypes of women, *Ms*. proposed the use of a more

¹² This direct quote appeared in the *Los Angeles Times* and *Washington Post*, but was also be found in various newspapers during repeated discussions of naming systems over the next few years. "Aussie Storms Will Be Named After Males Too," *Los Angeles Times*, (cited previously); "Nonsexist Storms," *Washington Post*, (cited previously).

¹³ "Liberated Ladies to Have Their Own Magazine," Chicago Tribune, October 28, 1971.

^{14 &}quot;Ms. Steinem's 'Ms." Washington Post, October 28, 1971: C12.

neutral term "Ms." that would not distinguish marital or age-based status. ¹⁵ While the term "Ms." had been used before, it had fallen out of style in the postwar era. *Ms.* magazine was extremely popular, offering an alternative to the *Ladies Home Journal, McCall's, Redbook*, and *Cosmopolitan*, which according to Steinem, most women found "patronizing." ¹⁶ By the end of the first year, sales of subscriptions at \$9 each, were up to 36,500. ¹⁷ Officially approved by the U.S. Government Printing Office in 1972 and used in newspapers throughout the U.S., "Ms." became a standard prefix used in U.S. society. ¹⁸

In addition to "Ms.," other terms were being discussed. For example, Robin Morgan introduced the concept of "Herstory" in her 1970 book, *Sisterhood is Powerful.*¹⁹ "Herstory," and its resulting movement, simply put, was the study of history through women's eyes. Morgan and others argued that history tended to focus on men with women as a periphery whereas "herstory" would focus entirely on women's actions. While Morgan's term "herstory" was meant to be both serious and comedic, women-centered presses were created and various academics and newspapers used the term "herstory."²⁰ As a result, many college campuses began offering courses in women's studies and major "Herstory Weeks"

¹⁵ "A 'Populist' Magazine for Women: Ms." Washington Post, December 12, 1971.

¹⁶ "Success' for Ms." Washington Post, March 21, 1972: B2.

¹⁷ "Success' for Ms." Washington Post, (cited previously).

¹⁸ "Don't Use Ms. With Miss Stafford, Unless You Mean ms." *New York Times*, September 21, 1973: 36; "Mr., Ms., Mystery, and Misery," *Chicago Tribune*, September 25, 1972: 24.

¹⁹ Robin Morgan, Sisterhood Is Powerful: An Anthology of Writings From the Women's Liberation Movement (New York: Random House, 1970).

²⁰ For examples of resulting "Herstory" texts see: June Sochen, *Herstory: A Woman's View of American History* (New York: Alfred Publishing Co., 1974); Ruth Ashby and Deborah Gore Ohrn, *Herstory: Women Who Changed the World* (New York: Viking, 1995).

were celebrated throughout the country that included marches and organized strikes.²¹

Reactions to "Ms." and "Herstory" only provoked larger discussions of word choices regarding women and men in society. While articles appeared about interest in "herstory" classes on college campuses and protests taking place at Miss America pageants, other articles were extremely negative towards these new terms. ²² In the *Chicago Tribune*, a columnist highlighted the suggestion that "man" should be dropped from all words in favor of women by replacing every word in his article with "man" in it with, "woman." For example, the result of, "years of sewomantic womanipulation, [... was that] it became nearly impossible, as one herstorian put it, 'to tell a woman from a wowoman." While some proclaimed the new language terms a "feminist fad" that would fade, others decidedly stated that the "Language Lib" was around to stay.²⁴

However, because of the various discussions on word choices and women circulating in popular culture, in addition to larger protests on representation of women and images of women within the media, between 1974 and 1976, a plethora of books and articles were published in the U.S. that discussed the use of gendered language in everyday society. Most noticeably were June Sochen's Herstory: A Woman's View of American History, published in 1974, E. B.

²¹ "College Campuses to Offer Range of 'Herstory' Courses," *Los Angeles Times*, September 14, 1970: E5; "Women's Suffrage: Celebrating 'Herstory' Week," *Chicago Tribune*, August 19, 1972: N_A20; "Coming Wednesday: A Herstory-Making Event," *New York Times*, August 23, 1970: SM4.

²² "Can Feminists Upstage Miss America?" New York Times, September 8, 1974: 58.

²³ Clarence Petersen, "'Outwomaneuvered' by 'Sewomantics'?" *Chicago Tribune*, October 25, 1974: A5.

²⁴ "Feminist Fad," *Times of India*, November 23, 1975: 8; "Language Lib," *Chicago Tribune*, September 15, 1970: B1.

White's revised edition of William Strunk's *The Elements of Style*, at the end of 1975, and Casey Miller and Kate Swift's *Words and Women* of 1976.

June Sochen's *Herstory*, was one of the major works resulting from a larger discussion by academics over the term "herstory" and its potential application to history. Receiving harsh criticism by the *Chicago Tribune* for being a "half-told past," the Chicago professor's book covered women's history from 1600 to 1920 and sold for \$10 beginning in November 1974.²⁵

Meanwhile, William Strunk's *The Elements of Style*, first published in 1935, as a technical handbook for writing was meant to simply detail rules regarding English grammar and writing style. After Strunk passed away in 1946, well-known writer E. B. White revised another version published in 1959, extending the page count significantly in the second (1972) and third (1979) editions. However, despite revisions to original author Strunk's text, E. B. White actively chose to continue to recommend the use of language that favored masculine pronouns unless it was clear that the "antecedent is or must be feminine." In addition, White wrote in the *San Francisco Chronicle* that unisex language, or language devoid of sexual context, "would be a dull tongue — and a false one," as "true inequality does not lie in our tongue, it lies in our hearts and in our habits, and language is remarkably sensitive to both." Thus, the

²⁵ June Sochen, *Herstory: A Woman's View of American History*, (cited previously); "Herstory: A Woman's View of American History," *Chicago Tribune*, November 10, 1974.

²⁶ William Strunk, Jr., and E. B. White, *The Elements of Style* (New York: MacMillan Publishing Company, 1972).

assignment of the original terms, albeit masculine, would be correct usage, as it is up to the person to read and take meaning from them as they wish.²⁷

Feminists met response to White's continuation of the masculine pronoun rule with disdain. Casey Miller and Kate Swift's book, *Words and Women*, published in 1976, actively called out White's decision. While, "every reader of *Charlotte's Web* knows that E. B. White, in his heart of hearts, had the makings of a feminist," he, like others, confused, "sex equality with sameness, sexual indifference, or absence of sex" through his actions.²⁸ In fact, the discussion of removal of sexually stigmatized terms to replace with less gendered terms was not destruction of the English language. For example, nothing would happen if "chairman" became "chairperson" or even the "chair," they argued.²⁹

While debates over language circulated, revision of textbooks, library contents, dictionary entries, official documents and rules of style for newspapers reflected changing trends. With the common buzzwords for the period printed on an almost daily basis in newspapers, it was not surprising that any topic of the use of gendered language would be discussed. Thus, when the Australian Weather Bureau announced it had decided to change its cyclone naming process because they felt it was misrepresenting the female sex, it sparked a resurgent interest in the hurricane naming process stateside again. As a result, by the end of the 1970s, the problem with a name – Alice, Hazel, Connie, or Camille – needed to be fixed.

²⁷ As discussed in Casey Miller and Kate Swift, *Words and Women*, 1976 (New York: iUniverse, Inc., 2000) 135.

²⁸ Miller and Swift, 136.

²⁹ Miller and Swift, 136 & 138.

JUANITA KREPS STEPS IN: WEATHERMEN BOW DOWN TO A DIFFERENT STORM

By 1978, the U.S. Feminist Movement had reached an ultimate triumph as broad sweeping changes at governmental levels took place. Along with victories in the Supreme Court for women's equality, major events during 1978 in particular directly affected the naming of hurricanes. The official military inclusion of women in major areas of its forces signaled an attempted standardized equalization of the sexes by a governmental institution. For instance, in 1978 alone: the Coast Guard opened all assignments to women; the Marine Corps promoted its first female to Brigadier General; the Air Force Strategic Command assigned its first female aircraft member to alert duty; the Women's Army Corps (WACs) was disassembled and incorporated into the regular U.S. Army; and Judge John Sirica ruled that it was unconstitutional for the Navy to ban women from its ships. 30 These events, combined with other advancements showed recognition that separation of the sexes was sexism, and proved that gender equality was important at a governmental level. The National Weather Bureau, also a governmental organization, once again felt pressure from feminists and soon followed suit in reviewing its policies in relationship to sexism. But it was not until a major governmental figure stepped in and implemented a naming system change that the U.S. altered its naming system.

In January of 1977, Dr. Juanita Kreps became the first woman appointed as U.S. Secretary of Commerce under President Jimmy Carter. As the fourth

_

³⁰ Women In Military Service For America Memorial Foundation, "Highlights in the History of Women in the Military," Last accessed on September 15, 2012, http://www.womens memorial.org/Education/timeline.html.

woman in U.S. history to hold a cabinet position, Kreps was well aware of the significance of her position and the timing of her tenure in the scheme of other cultural changes. As the first female director of the New York Stock Exchange, Kreps knew how to assert her authority in a male-dominated business world. By the time she was appointed to the cabinet position, Kreps was extremely conscious of both her role as a "feminist" and as an educated woman. In interviews later in life, Kreps openly stated that she had "always considered [her]self a feminist and [thought her] actions would bear that." Similarly, she claimed that at the time of her appointment, there "was an important exchange [...] on the question of qualified women," both in terms of seeking them out and in terms of understanding their potential roles in shifting workplace settings.³¹

Aptly described by the *New York Times*, "commerce was perhaps the most unglamorous, thankless job in the cabinet," due to its strenuous micromanagement requirements and wide-variety of service and public work projects listed under it.³² One of these services, however, included the National Oceanic and Atmospheric Administration and National Weather Service.

As an advocate for women, Kreps' attention immediately turned to the hurricane-naming debate. The debate, which had stagnated in 1973, gained attention in 1975 when Australia decided to introduce a male-female naming system for its tropical cyclones and other storms. Occurring the same year as the

³¹ "Interview with Juanita Kreps," done by Lynn Haessly, January 17, 1986, Interview C-0011, Southern Oral History Program Collection, #4007, University of North Carolina at Chapel Hill, Last accessed online October 4, 2012, at http://docsouth.unc.edu/sohp/browse/themes.html?theme_id=6&category_id=30.

 $^{^{\}rm 32}$ "Juanita M. Kreps, Commerce Secretary, Dies at 89," New York Times, July 8, 2010: A22.

proclaimed International Women's Year, the decision, seen as the result of internal fighting in the ministry was not heralded as a global feminist achievement. In fact, as the *Oakland Tribune* reported, Australian feminists were unconcerned with the name change. As stated, the change was "not really very interesting" as it "was only a gesture and didn't really advance the cause of women."³³ However, Juanita Kreps read the situation differently.³⁴

In 1977, the newly-appointed Kreps took a page out of the Australian Science Minister's book and immediately instructed Dr. Bob White, Administrator for the NOAA that the hurricane naming system would change the following year to alternate, male-female. Stunned, Dr. White informed National Hurricane Center Director Neil Frank of the dramatic policy change, leaving Frank with a significant dilemma to sort through.³⁵ According to Frank, the U.S. had just ceded control of the naming system to the broader World Meteorological Organization. Thus, any changes to storm naming lists now had to be approved by designated regional committees. Furthermore, the lists for the upcoming years had already been approved and would require significant work to alter.

Following Kreps' order, Dr. Frank appeared in front of the Region IV Hurricane Committee at the inaugural meeting in San Juan, Puerto Rico, to sway votes for an altered naming system. Resistance from a number of Latin American countries and former British colonies was noted at the meeting, but "the other delegates were sympathetic about the pressure on the United States government."

³³ "Hurricane Names Turn Bisexual," *Oakland Tribune*, February 25, 1975: 10.

³⁴ Eleanor Clift and Tom Brazaitis, *Madam President: Shattering The Last Glass Ceiling* (New York: Scribner, 2000) 107.

³⁵ Neil Frank, Email correspondence with Neal Dorst regarding hurricane naming tradition, as passed on to the author, August 21, 2012.

While it was quickly decided that it would be too difficult to change the naming system for the current 1978 season, it was proposed that the system could change in 1979. Sealing the deal for this decision was the agreement that the U.S. Weather Bureau "would host annual classes for weather forecasters of various Region IV member countries at their Miami offices during the off-season."³⁶

To appease Kreps' insistence that progress be made immediately, the U.S. worked out a deal with Mexico, the only other country affected, to change the naming system for the Eastern Pacific Ocean region. In exchange, Mexican-influenced names, such as "Fico," were added to the naming list for the new 1978 Pacific Coast list. As described by Frank in interviews, apparently [Fico is] very popular South of the border."³⁷ On May 12, 1978, the National Oceanic and Atmospheric Administration, overseeing the National Weather Bureau, announced to the mass public that Eastern Pacific hurricanes of the 1978 season would not be named solely after women. Instead, they would alternate female and male names, starting with "Bud."³⁸ If all went well, the Atlantic Coast would do the same in 1979.

"There's been some pressure in the United States, no question about it," said Neil Frank, head of the National Hurricane Center in Miami, referring to

³⁶ Telephone interview with Dr. Neil Frank performed by Neal Dorst of the NOAA/AOML/Hurricane Research Division, August 20, 2012, as cited in email correspondence with Neal Dorst and author, August 21, 2012.

 $^{^{\}rm 37}$ "Hurricane Bob? Stormy feminists sink tradition of feminine storms," Wilmington Morning News, May 13, 1978: 1-2.

 $^{^{38}}$ "Weathermen Blown Over; Hurricanes To Be Unisex," The Los Angeles Times, May 13, 1978: A12.

feminist sentiments. ³⁹ However, since the United States had started collaborating with other nations on the naming process as part of the World Meteorological Organization, it was no longer solely up to the United States to change the hurricane naming process at whim throughout the world. Working out a deal with Mexico, the only other country affected by storms in the Eastern Pacific, the U.S. Weather Bureau met the goal of including male names for the 1978 season for that regional area with the promise of approaching the WMO about it for the rest of the Western Hemisphere in the near future.

Reaction to this decision to include male names was mixed in the United States. Some media playfully introduced the male-named hurricane as if introducing a birth announcement. The most noticeable example of this was in the *New Orleans Times-Picayune* and also the same day in the *Mobile Register*, where the front page included a cartoon showing a gynecologist exclaiming surprisingly to a female hurricane that she "had a son," or male hurricane — a once outlandish suggestion.

_

³⁹ "Hurricane Watchers Now Prepare for...Bud, Hector, Sergio," *The Washington Post*, May 13, 1978: A8.



"Feminists Prevail," Times-Picayune, May 13, 1978: 1.40

The caption on the cartoon captures the surprise of reporters and weathermen throughout the country. "Feminists prevail: Storms Now Him and Her," it read.

Meanwhile, other articles quoted Director Frank as stating that, "we at the NOAA decided that in this day and age it was the sensible thing to do to name some hurricanes after men."⁴¹ "We guess that it was good news," finding out that hurricanes would no longer be solely named after women, agreed the *Los Angeles Times*. "But we are not too sure," stated the reporters in the Pacific Ocean area

⁴⁰ "Feminists Prevail," *The Times-Picayune*, May 13, 1978: 1. The same cartoon also appeared in the *Mobile Register* that same day. "Hurricanes to become Himmicanes in 1979," *The Mobile Register*, May 13, 1978: 6-A.

⁴¹ "Another Sexist Bastion Falls: Hurricanes Renamed," *New York Times*, May 13, 1978: 10.

that would first be affected by the switch in the naming process. Furthering this point, they complained:

There has to be a better solution. We didn't like it when only women's names were applied to hurricanes because, among other things, the system served to damage the reputations of some we loved. We don't like the new system either, primarily because we now want a complete overhaul.

Why not name hurricanes numerically—after *things*? The first storm of the year could be called Square One, the second Two-Step, and so on, carrying us through Plus Fours, Prop 13 and F-15. These would have relevance in some cases if not all; no one would be insulted and the mail from irate taxpayers with hurricane names would fade. ⁴²

In fact, the *Los Angeles Times* concluded, "Prop 13 and F-15 may be controversial, but they can't write letters.⁴³

Others commenting on the change were not so light-hearted. In the "Headliners" section of the *New York Times*, which quickly announced major headlines, a picture of Director Frank appeared with the tag line, "Goodbye to Chauvinism."



Goodbye to Chauvinism

Hell hath no fury like a woman stormed: Severe atmospheric pressure from women's organizations was cited by Richard A. Frank, director of the National Oceanographic and Atmospheric Administration, in explaining why, beginning with the 1978 tropical storm season in the eastern Pacific, half the hurricanes will henceforth be named for men. The second hurricane, or himmicane, will be Bud, the fourth Daniel, and so on. In 1979, Florida may expect Hurricanes Bob, David and Frederic. Mr. Frank said the change had nothing to do with the fact his boss, Secretary of Commerce Juanita M. Kreps, is a woman.

"Goodbye to Chauvinism," in "Headliners," New York Times, May 14, 1978: E7.

⁴² "What's In A Number?" Los Angeles Times, May 21, 1978: H4.

^{43 &}quot;What's In A Number?" Los Angeles Times, cited previously.

As described sarcastically in the opening sentence, "hell hath no fury like a woman stormed," the article mocks the situation, poking fun at Frank and other weather officials. Finally, the article notes in its final biting line that Frank had carefully stated that, "the change had nothing to do with the fact his boss, Secretary of Commerce Juanita M. Kreps, is a woman."

The reaction by the *New York Times* was similar to other newspapers throughout the U.S. in blaming Secretary of Commerce Juanita Kreps for changing the naming process. In looking at responses to Kreps' decision in comparison to the reaction to the Australian Science Minister's announcement, it is obvious that Kreps' decision was met with contention. At no point in the examination of the Australian Science Minister's decision was his gender discussed. Similarly, the Minister's decision was not portrayed as "feminist," "angry," or "stormy." It was portrayed as an honorary tribute to the United Nations' International Women's Year, an esteemed and global event. Meanwhile, Kreps' decision was likened to a "storm" of "fury" that had no contextual basis for its inception. In this manner, reporters and weathermen likened Kreps' decision to other feminist decisions. In fact, the New Orleans Times-Picayune even went so far as to comment in their article, "Meet the Himmicane: Liberated Wind That Still Blows No Good," that weathermen had bowed to pressure from "women's groups," that included Juanita Kreps. The response throughout the country showed that New Orleans reporters were not alone in this sentiment. 45

^{44 &}quot;Goodbye to Chauvinism," in "Headliners," New York Times, May 14, 1978: E7.

⁴⁵ Don McLeod, "Meet the Himmicane: Liberated Wind That Still Blows No Good," *New Orleans Times-Picayune* May 13, 1978: 4.

Overall, the statements made by editorialists in Los Angeles, New Orleans, and other areas signify a general acceptance of the idea of changing the hurricane naming system from all-female names. There was no discussion of a return to the all-female naming system; it was agreed that the system, like other changes to 1970s society, was there to stay. However, while accepting this change, reporters also show a continued dislike of the idea of using male names, suggesting that instead there should be a complete overhaul. Maybe labeling hurricanes after "things" would be the best option, they concluded.

However, articles discussing the issue of hurricane naming started to take on a very different tone by the end of 1978. Weathermen were made to look outdated and sexist in their continued fight to hold onto the female-named hurricane. Often made the brunt of political cartoon jokes like in the figure below, which appeared in the *Los Angeles Times*, the tides had visibly shifted.



"Grin & Bear It," Washington Post, August 17, 1977: VA13.

At the end of 1978, representatives of the Weather Bureau "went to the international community" consisting of twenty-one Atlantic-affected countries requesting to change the global hurricane naming system. According to Director Neil Frank the international community said, "they understood the problem and they were willing to consider use of male-female names in 1979," without much debate.⁴⁶ In 1979, a standardized system of alternating male-female hurricane names was introduced globally.

THE EQUAL-GENDERED HURRICANE?

As illustrated in this chapter and the last, events pieced together in archival documents, correspondence, and books portray a drastically different story than that which was told in newspaper articles. Combined, though, they paint a vivid picture of change over a ten-year period in American cultural history. As discussed in Chapter 6, the shift between being the weatherman's migraine to being recognized as politically prescient never officially came for Roxcy Bolton. However, the justification in finally achieving the goal of changing hurricane names was realized in 1978. That it took 10 years to effect this change is a testament to the ongoing struggle feminists faced throughout the decade.

The fact that the hurricane naming discussion starts and ends in the 1970s is key. When Roxcy Bolton first approached the Weather Bureau as a representative of NOW in 1970, momentum from the Feminist and Environmental Movements was just starting to build. As Bolton continued to

_

⁴⁶ "Hurricane Watchers Now Prepare for...Bud, Hector, Sergio," A8.

appear at conferences in 1971, 1972, and 1973, responsiveness to the issue of sexism and the relationship between gender and the environment was shifting dramatically in broader U.S. culture. It is immediately apparent in newspaper articles that the discussion of hurricane names reflects expressive terminology attached to feminists and outspoken women like Rachel Carson, as well as the causes they were representing. In Roxcy Bolton's story there is a progression from seeing a feminist as a pesky gnat in 1970 that does not deserve to be identified by name in newspapers, to a well-identified but stereotypical radical feminist in 1972 standing in a picture pointing a finger and waiting for confrontation during the peak years of radical feminism and discussions of "Language Lib," to acceptance of broad-scale ideas about sexist behavior that was by the end of the 1970s deemed passé.

By the time Dr. Juanita Kreps was appointed Secretary of Commerce in 1977, the U.S. Feminist Movement had reached an ultimate triumph as broad sweeping changes at governmental levels took place.⁴⁷ Combined with other advancements, these changes showed recognition that separation of the sexes was sexism and that gender equality was important at a governmental level.

More importantly, much like the senators in Clement Wragge's day, Juanita Kreps' governmental position as the Secretary of Commerce overseeing

⁴⁷ Along with victories in the Supreme Court for women's equality, major events during 1978 in particular directly affected the naming of hurricanes. The official military inclusion of women in major areas of its forces signaled an attempted standardized equalization of the sexes by a governmental institution. For instance, in 1978 alone: the Coast Guard opened all assignments to women; the Marine Corps promoted its first female to Brigadier General; the Air Force Strategic Command assigned its first female aircraft member to alert duty; the Women's Army Corps (WACs) are disassembled and incorporated into the regular U.S. Army; and Judge John Sirica ruled that it is unconstitutional for the Navy to ban women from its ships. Women In Military Service For America Memorial Foundation, "Highlights in the History of Women in the Military," (cited previously).

the National Weather Service provided her with the power to enact change in the naming system. While her effort to compel change throughout the world was stalled for a year by the new oversight of the World Meteorological Organization, Kreps' determination that the conversion of the naming system be implemented in the U.S. made change globally an inevitable conclusion.

However, how Americans and others reacted to Kreps' change in hurricane names was up for debate. How would they deal with a deeply imbedded dormant ideology of feminizing hurricanes? Would male hurricanes become feminized or retain traditionally masculine characteristics? Similarly, how did this change affect other countries outside of the U.S., besides Australia? Despite these lofty questions one thing was certain, Roxcy Bolton and Juanita Kreps' effect on hurricane names would continue to affect American culture for the foreseeable future as it did indeed, rain men.

CHAPTER 8

MISTERS, MONSTERS, & MENACES: INTRODUCING BUD

From 1972 to 1989, hurricane names and the descriptions of them underwent considerable change. At the end of 1969, 69 percent of articles used gender when referring to a particular female-named storm. This meant for every article that appeared, a little less than 1 in 4 articles referred to a hurricane as female/feminine. By the end of 1989, however, gender use had dropped to 7 percent. This equated to 1 in 14 articles referencing a storm as gendered, either male or female.

When first reviewing these statistics it would be easy to assume that gendered references shrank significantly once the female-named storm system was replaced with a male-female system. This conclusion would lead to the notion that when adding male names to the mix, storms became less gendered. It could also lead to the assumption that male storms negated or minimized the extreme use of gendered descriptions when referring to storms, either male or female.

These conclusions, however, are entirely misleading. By looking at how storms and descriptions of storms changed between 1972 and 1989 it is possible to see larger fluctuations in the progression of removing sexist language from everyday usage. However, it is also possible to see what sexist language continued to be prevalent, despite increased awareness of describing an object as

gendered male or female. In fact, these storms showcase terms not dropped by feminist-influenced change.

When "Angry Agnes," stormed towards the shore in 1972, the discussion over the hurricane naming system through Roxcy Bolton was reaching its peak.¹ As described in Chapter 6, reporters and weathermen throughout the period continued to insist that only feminists perceived the hurricane naming system as a problem. Throughout Agnes, reporters reconfirmed this theory. For example, the *Raleigh News & Observer* featured several "well-researched" articles that made a point to emphasize they had talked to both men and women about the issue at hand. "I don't know why there's anything objectionable about naming hurricanes after women," a New Bern City manager was quoted as saying in the first article. "I've heard comments made a number of times that it is sort of fitting," he continued, "women are a little on the unpredictable side and there is a certain relationship between that and hurricanes."

Meanwhile, the day before, the *News & Observer*, printed an article entitled, "No Storm Over 'Hericane' Tag." The article, written by a reporter who had interviewed 11 women in the Morehead City area, was supposed to represent a "wide" perspective of "typical" women. "I had a difficult time in downtown Morehead City finding any women who would agree with [Bolton]," wrote the reporter in the first segment of the article. Throughout the rest of the article, statements given by the interviewed women, like, "I could care less," "I think women are just as unpredictable as storms," "storm names 'never bothered me a

¹ "State Federal Officials Adding Up Damage Done in Florida by Agnes," *Miami Herald*, June 21, 1972: 21A.

² "Winds, Women Termed Alike," Raleigh News & Observer, June 22, 1972: 5.

bit," "I reckon it's better (for women) than being ignored," appeared. The reporter did ask three women about Bolton's suggestions that storms be named after men as well as women. Of the three women quoted on this issue, two were extremely adamant that the naming system should be changed. As described by the reporter, sisters, Ms. Anne Reintjen, 20, and Ms. Chris Reintjen, 19, were not "militant about women's lib, but both have recently begun using 'Ms.' in front of their names, in lieu of Miss or Mrs." The description given followed the quotations given by the Reintjen sisters. By doing this, the reporter immediately signaled that while the Reintjen sisters were not "militant feminists" they were in fact feminists, thus, the placement of this description in text suggested that the Reintjen sisters' statements were unlike other statements given by the vast majority of women.³

As a result of the ongoing discussion of the female-only naming system during Agnes, Agnes' descriptions were extremely gendered. For example, headlines throughout the country used Agnes' gender to illustrate the resulting destruction. "Furious Female Soaks Coast States," confirmed the *Miami Herald*.4 "12 Dead in Her Wake," proclaimed the *Houston Chronicle*.5

³ "No Storm Over 'Hericane' Tag," Raleigh News & Observer, June 21, 1972: 5.

^{4 &}quot;Furious Female Soaks Coast States," Miami Herald, June 20, 1972: 2A.

 $^{^5}$ "12 Dead in Her Wake: Agnes Bears Down on Florida Coast," Houston Chronicle, June 19, 1972: 1 & 2.

Furious Female Soaks Coast States

Furious Female Agnes, Miami Herald, 1972.6

Agnes Bears Down On Florida Coast

"12 Dead in Her Wake," Houston Chronicle, 1972.7

"State Mopping Up After Agnes' Watery Dirty Work," sighed the *Raleigh News & Observer*.8 "Fury Subsides As She Moves Inland," exhaled the *Mobile Register*.9

Similarly, following attempts at seeding practices with Project Stormfury during 1969's Debbie, articles appeared during Agnes that referenced the strength of the storm in similar themes of atomic power, harnessing, and attempts at control. For example the *New York Times* reported that, "the reality is that, though man may think himself omniscient and omnipotent he really is neither in the face of fundamental elements." As a result, "he may posses the fire of the atom and have mastered the power of gravity but he still cannot temper the

⁶ "Furious Female Soaks Coast States," Miami Herald, cited previously.

⁷ "12 Dead in Her Wake: Agnes Bears Down on Florida Coast," *Houston Chronicle*, cited previously.

⁸ "State Mopping Up After Agnes' Watery Dirty Work," *Raleigh News & Observer*, June 23, 1972: 5.

^{9 &}quot;Agnes' Fury Subsides As She Moves Inland," Mobile Register, June 20, 1972: 1.

wind or curb the rain." Because of this, "he is mortal, and now and then such storms as [Agnes] force him to admit it." 10

The continuing discussion of Agnes not only as a gendered object, but as more powerful than an atom bomb, is not surprising when put in context with Hurricanes Camille and Debbie three years earlier. But how did the continuation of linking females with destructive objects during the height of Roxcy Bolton's protests to the Weather Bureau play out? There were 84 gender references in 150 articles discussing hurricane Agnes. Compared to hurricane Camille, the overall total percentage of gender use in newspaper articles dropped by 13 percent. Looking at this particular statistic, it could be assumed that the heated debate that was taking place in the media over the appropriateness of hurricane naming practices at the time had affected the use of gender to describe Agnes. However, when reviewing the 84 gendered terms used, such as "fury," "bomb-like," "mopping," and "angry," in addition to the articles discussing whether women found storm naming appropriate or not, it is clear that Agnes was described in the same way as storms from the 1960s, prior to the start of the Bolton/Weather Bureau debate.

As described in Chapter 7, in 1978, the Weather Bureau tested the male-female naming system in the Pacific Ocean region. Meanwhile, the Atlantic Ocean region retained the traditional female-only naming list. (See Table 12) This naming system was altered in 1979 with the adoption of the male-female naming system for both regions from that point on under the control of the World Meteorological Organization.

¹⁰ "In the Face of the Storm," New York Times, June 23, 1972: 36.

Table 12. Storm Naming Lists, 1978 – 1979

Atlantic Coast Hurricane Naming List, 1978	Western Pacific Coast Hurricane Naming List, 1978	WMO Controlled Atlantic Coast Hurricane Naming List, 1979	WMO Controlled Pacific Coast Hurricane Naming List, 1979
Amelia Bess Cora Debra Ella Flossie Greta Hope Irma Juliet Kendra Louise Martha Noreen Ora Paula	Aletta Bud Carlotta Daniel Emilia Fico Gilma Hector Ira John Kristy Lane Miriam Norman Olivia Paul	Ana Bob Claudette David Elena Frederic Gloria Henri Isabel Juan Kate Larry Mindy Nicholas Odette Peter	Andres Blanca Carlos Dolores Enrique Fifa Guillermo Hilda Ignacio Jimena Kevin Linda Marty Nora Olaf Pauline
Rosalie Susan	Rosa	Rose Sam	Rick Sandra
Tanya	Sergio Tara	Teresa	Terry
Vanessa	Vicente	Victor	Vivian
Wanda	Willa	Wanda	Waldo

Sources: From National Hurricane Center Annual Yearly Reports, cited previously.

Looking at the names that made the Atlantic and Pacific coast lists for both 1978 and 1979 and comparing them with previous storm naming lists from the 1950s and 60s, it is easy to spot the Mexican-influenced name additions. Similarly, it is also obvious that by 1979, there is a direct correlation to the malefemale alternating of names. If the first storm has a female name, the second has a male name and vice versa. In addition, it is also obvious that the two regional lists are set to alternate each other. For example, if the Atlantic Coast is using a female name, the Pacific Coast will use a male name for clarity purposes. Also, in fitting with previous naming traditions, no two names are repeated.

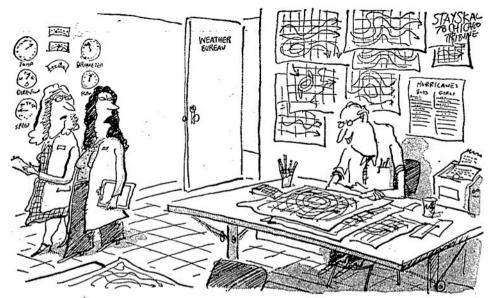
During 1978, 18 storms affected the West Coast of the U.S. and Mexico during the test year, including 6 major hurricanes. Reaction to the new naming system was tentative. On the Pacific Coast, it appears that the *Los Angeles Times* did not discuss the hurricanes in the early part of the season with great fervor. The first hurricane to make a multi-article appearance with a male name attached was Hurricane Fico. Hurricane Fico struck Hawaii in July 1978. In the articles related to Fico, a Mexican Meteorological Organization-selected name, the *Los Angeles Times* does not gender the storm at all. And, while the name was used, it was used infrequently. Descriptions given regarding Fico relate to the amount of surf caused by the storm and sustained winds. This trend was repeated elsewhere in the country. For example, the *Chicago Tribune* explained that "Hurricane Fico kicked up mountainous surf," but does not delve any further into describing the storm.¹²

The reaction to July storm Fico and other storms in 1978 suggest that the equal-gendered naming practice was still incredibly new to the vast majority of the public. However, by September, a cartoon appearing in the *Chicago Tribune* mocked the new naming system's effect in implementing an equal policy regarding storms.

_

¹¹ For examples of how Fico was described by the *Los Angeles Times* see: "Heavy Surf Will Create Riptide Peril on Weekend," *Los Angeles Times*, July 14, 1978: E1; and, "75 Flee, Homes Damaged As Hurricane Hits Hawaii," *Los Angeles Times*, July 21, 1978: A18.

¹² "Kicked up mountainous surf" in: "Hurricane Fico Stirs Up Hawaii Surf," *Chicago Tribune*, July 20, 1978: B10. For more on Hurricane Fico in the *Chicago Tribune* see: "Hurricane Fico Brushes Hawaii," *Chicago Tribune*, July 21, 1978: A12.



"Have you noticed how he names the worst hurricanes after girls?"

A Not So Equal Naming System, Chicago Tribune, 1978.13

The image, depicting two female meteorologists discussing what appears to be a chief male meteorologist plotting storm names, is captioned with the phrase, "Have you noticed how he names the worst hurricanes after girls?" ¹⁴ The caption and depiction clearly illustrate that although hurricanes might be named after boys and girls (as illustrated on the posted name list on the board behind the male meteorologist), it was still rumored to be unequal. How the male-named storms would be perceived past the official introduction of the naming list everywhere in 1979 was still clearly up for debate.

In 1979, with the male-female naming system successfully implemented globally by the World Meteorological Organization, Hurricane David became the first major storm to affect the mainland U.S. and cause major damage in the

¹³ "Have You Noticed How He Names the Worst Hurricanes After Girls?" *Chicago Tribune*, September 6, 1978: D2.

¹⁴ "Have You Noticed How He Names the Worst Hurricanes After Girls?" *Chicago Tribune*, cited previously.

Caribbean. Forming off the Windward Islands, David headed toward the Leeward Islands with increasing speed. By the time it reached Puerto Rico, it had become a Category 5 hurricane, the strongest and largest storm of the season. While it decreased significantly after moving through Hispaniola, David eventually hit the Florida coast as a Category 2.

Throughout the storm, newspapers around the U.S. agreed with the *New York Times*, when they proclaimed David, "the most powerful of all" storms. ¹⁵ Furthermore, both the *Raleigh News & Observer* and *New York Times* highlighted that "compared to this, Donna was a pussycat." ¹⁶ Unlike unspecified Fico, "Dangerous David," was more like "Goliath," proclaimed newspapers throughout the country as "he" "punched," "hugged," "littered," "ripped," "slashed" and "menaced" all in its path. ¹⁷ But mostly, all agreed, this "diabolical storm" was a "monster" that left nothing but death as "he" left. ¹⁸ The *Miami Herald*, went so far as to depict David, and the following storm, Frederick, as male storks bringing death. However, the image in the *Miami Herald* also makes

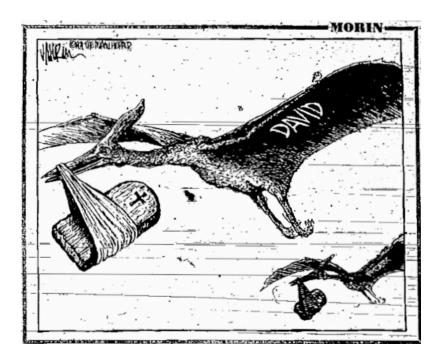
¹⁵ "Hurricane Kills 10 in Caribbean Islands, New York Times, August 31, 1979: A10.

¹⁶ "Compared to this, Donna was a pussycat" was found in multiple newspapers, such as: "60,000 in Dominica Homeless as David Thunders Northward," *Raleigh News & Observer*, August 31, 1979: 1 & 7; "Hurricane Kills 10 in Caribbean Islands," *New York Times*, cited previously; "David Razes Island, Turns on Hispaniola," *Atlanta Journal-Constitution*, August 31, 1979: 1A & 22A.

^{17 &}quot;Dangerous David" in: "David Rips Dominican Republic," *New Orleans Times-Picayune*, September 1, 1979: 1 & 8; "David and Goliath" in: "Hurricane Batters Miami: Thousands Flee Homes in South Florida," *Los Angeles Times*, September 3, 1979: 1 & 6; "He" in: "Storm Watch Posted in Florida," *Charleston News & Courier*, September 2, 1979: 1A & 2A; "Punched" and "Hugged" in: "Hurricane Ranks Among Century's 6 Deadliest Atlantic-area Storms," *New York Times*, September 3, 1979: A9; "Littered," "Ripped," and "Slashed" in: "David Hits Cuba; Florida Is Alerted," *New Orleans Times-Picayune*, September 2, 1979: 1 & 7; "Menaced" in: "50,000 Weather Storms in Shelters; More Leave Their Homes Willingly," *Miami Herald*, September 3, 1979: 16A.

¹⁸ "Diabolical storm" in: "David Builds, Aims 'Right at Miami," *Houston Chronicle*, September 3, 1979: 1; "Monster" in: "Forecasters Predict David Will Head Into Gulf," *Mobile Register*, August 31, 1979: 8A.

a distinction between male storks and female storks – the male stork in the image is clearly represented as a pterodactyl – a fierce dinosaur of a hurricane, again delineating sexes through representation.



David & Frederick as Storks, Miami Herald, 1979.19

Plain and simple, the New Orleans Times-Picayune declared, David was a "killer."



Killer David, New Orleans Times-Picayune, 1979.20

^{19 &}quot;David & Frederick," Miami Herald, September 4, 1979: 6A.

²⁰ Headline, New Orleans Times-Picayune, September 1, 1979: 8.

Meanwhile, "sister" storm, Elena, was described as indecisive and weak compared to David and Frederick.



Indecisive Elena, Houston Chronicle, 1979.21

As a monumentally large hurricane that caused over \$1.54 billion (1979 USD) in damage, 218 articles appeared discussing David throughout the U.S. However, only 6 of the 12 U.S. cities used gendered references in articles. As a result, the use of gender in articles dropped to 15 percent as opposed to 56 percent with 1972's Agnes. The significant decrease can be attributed to several factors. David was an enormous hurricane, causing significant damage in the Caribbean and Florida. However, it did not extend to other parts in the U.S. This did affect the reaction to David, as only Floridians were impacted by the storm. However, the number of newspaper articles (218) was larger than with Agnes (150), thus proving that while gender was used less frequently, it was still discussed with fervor. Newspapers throughout the country actively chose to decrease the number of gender references used when referring to David.

_

²¹ "Indecisive Elena Sits Offshore," Houston Chronicle, September 1, 1979: 1.

However, just as with female-named storms in the 1950s and 60s, specific gender references used with David were repetitively used with other male-named storms later on. For example, in addition to referring to David directly as a man, a "he," or a "him," reporters also confirmed that David was stronger than a female storm. Through this process reporters emphasized David's masculinity by highlighting the femininity and negating the power of female storms. For example, "sister" storm Elena was described as "indecisive" and "weak" compared to "killer" David. From the 1980s on, all male storms were consistently compared to female storms in terms of strength and size. The male-named storms' "masculinity" was reaffirmed based on this comparison.

Another gendered descriptor with David that would appear in reports about male hurricanes again was the reference to David as a "monster" or a "menace." While "monster" and "menace" might not seem like traditional male stereotypes, their use throughout the next decades in reference to male named storms was gender-specific. With David, the phrase "monster" was meant to designate David as a male-named storm that was equal to a powerful male that easily surpassed the "unladylike" "witches" of the 1960s.

Gender-specific descriptors were continually used throughout the rest of the 1980s with both male and female named storms. Alicia, for example, eventually struck Galveston, Texas, in 1983. While not significantly affecting the rest of the U.S., Alicia's impact was seen as a pivotal moment in Texas history, causing 21 deaths and \$2 billion in damage.²² However, it was the images of

 $^{^{22}}$ "Texas Cleaning Up Billion-Dollar Mess," New Orleans Times-Picayune, August 20, 1983: 1 & 4.

Houston's booming business downtown littered with glass from its easily identifiable skyscraper skyline that drew significant media coverage.²³ Seen as the oil and business exchange metropolis of the Gulf South, the image of Houston as a "crippled" city that had been "battered" by Alicia was printed in nearly every U.S. newspaper.²⁴ This "angry woman's 100-plus mph winds," left an "indelible mark here," lamented the *Houston Chronicle*.²⁵ Continuing, they proclaimed that Alicia had "wielded her power with [a] heavy hand" much to the dismay of Texas residents.²⁶

Others, such as the *Raleigh News & Observer* cautioned that Alicia, the first storm of the season left a "hellish portent" for how the rest of the season might progress.²⁷ "Monstrous" and "malevolent" "tempests" like Alicia, were "God's trickle-down theory in action." Alicia was certainly "fickle" if nothing else, agreed the *Biloxi Sun-Herald* and *Miami Herald*.²⁸ Alicia's "fickle" behavior was even portrayed through depictions of the storm's movements up the coastline. In a radar map that appeared in the *Miami Herald*, Alicia is described as "zigzagging" up to the coast and behaving "erratically."

²³ "Glass, Debris Fly Between Skyscrapers," *Atlanta Journal & Constitution*, August 19, 1983: B4; and, "Window Worries," *Houston Chronicle*, August 18, 1983: 23.

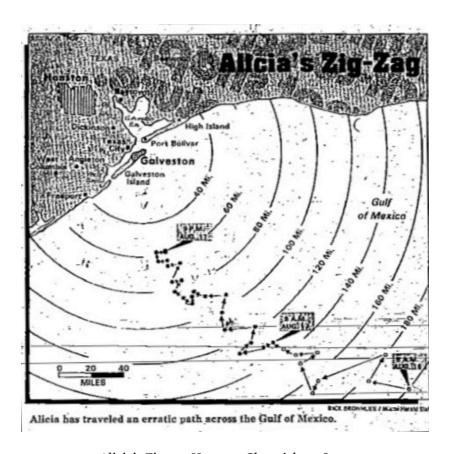
²⁴ "Crippled" in: "Alicia Leaves Death, Destruction Behind; Cripples City Businesses," *Houston Chronicle*, August 19, 1983: 1 & 4; "Battered" in: "Lonely Streets: Hurricane Alicia Leaves Battered Downtown Emptied of People," *Houston Chronicle*, August 18, 1983: 22.

²⁵ "Angry woman's winds" in: "Ironic Twists of Fate Reported in Fury of Hurricane Alicia," *Houston Chronicle*, August 18, 1983: 22; "Indelible mark here" in: "Hurricane Alicia's Power Left Indelible Mark Here," *Houston Chronicle*, August 19, 1983: Section 2, Pg. 8.

²⁶ "Lonely Streets: Hurricane Alicia Leaves Battered Downtown Emptied of People," Houston Chronicle, cited previously.

²⁷ "Alicia's Hellish Portent," Raleigh News & Observer, August 20, 1983: 4A.

²⁸ "Fickle" in: "Fickle Alicia Puzzled Forecasters," *Biloxi Sun-Herald*, August 18, 1983: 1 & 10; and, "Stronger Alicia Threatens Texas: Winds Hit 115, and Still Rising," *Miami Herald*, August 18, 1983: 1A & 22A.



Alicia's Zigzag, Houston Chronicle, 1983.29

The description and illustration of Alicia as erratic is similar to the stereotyping of previous female-named storms as erratic and indecisive.

While Alicia, like other female-named storms before, was gendered female in articles, the number of gender references in all U.S. newspapers decreased from Hurricane David's rate by 7 percent. At 17 gender references in 212 articles, the rate of gender use was much smaller than other female-named storms of the past. Why was this so? Primarily, Alicia affected Texas, thus only 5 cities out of 12 used gender references to describe Alicia. While Houston, which had its reservations about using the female-only naming system in the 1950s, did in fact

²⁹ "Alicia's Zig-Zag," Houston Chronicle, August 18, 1983: 23A.

use gendered references with Alicia, the total number of references was much smaller than the *Miami Herald*. However, the decrease in gender use would not continue with the next storms. Instead, gender use would rise again.

Five years after Alicia, Hurricane Gilbert took a similar path toward the U.S., veering westward across the Gulf of Mexico in 1988. However, Gilbert did not hit the U.S., and instead eventually made landfall on the Mexican Gulf Coast near the town of La Pesca. As the only other Category 5 hurricane to make landfall in the Atlantic basin region since Hurricane Camille in 1969, Gilbert was a momentous hurricane. Overall, it left a death toll of 318 across 10 countries on its stormy path to the Mexican coastline.³⁰

Reaction to such a strong male-named storm throughout the U.S. was noticeably heated. However, like with Alicia, Gilbert's impact region affected discussion of the storm. With only 135 articles appearing about Gilbert in newspapers throughout the U.S., it is obvious that the storm was not perceived as a threat to the mainland U.S. except for "a feared rendezvous with the Texas coastline" that never happened.³¹ As a result, most articles focused on its impact in the Caribbean.

Gilbert "blasted" Jamaica, on its "rampage" across the Gulf.³² Nothing matched the force of the "Mighty Gilbert," proclaimed the *Miami Herald.*³³ And

³⁰ According to the National Hurricane Center, Gilbert's death toll in specific countries included: Mexico—202, Jamaica—45, Haiti—30, Guatemala—12, Honduras—12, Dominican Republic—5, Venezuela—5, United States—3, Costa Rica—2, and Nicaragua—2.

³¹ "200 M.P.H. Winds Batter Mexico Resorts; U.S. Waits; Texas Braces For Worst On Friday," *Los Angeles Times*, September 14, 1988: 1.

³² "Blasted" in: "Hurricane Rips Caymans; Loss Feared Heavy," *Los Angeles Times*, September 13, 1988: 1; "Rampage" in: "Jamaica Raked By Powerful Hurricane," *Los Angeles Times*, September 13, 1988: 5.

its front page emphasized just how "mighty" Gilbert was through a large abovethe-fold layout of satellite imagery that showed just how large Gilbert was.



Front Page, Miami Herald, 1988.

It was the "worst natural disaster" the Caribbean has ever seen, the *New York Times* gravely stated in an article describing the 600,000 homes that were destroyed in Jamaica alone.³⁴ "We" really "dodged a bullet," stated the *Mobile*

³³ "Hurricane Menacing Jamaica: Gilbert Strongest Storm of Season," *Miami Herald*, September 12, 1988: 1A & 10A.

³⁴ "Hurricane Is Reported to Damage Over 600,000 Homes in Jamaica," *New York Times*, September 12, 1988: A14.

Register, as it could have easily swept northward while building "in [the] fertile territory" of the warm Gulf waters as the *Biloxi Sun-Herald* had predicted.³⁵

References to Gilbert's gender throughout the U.S. were similar to those of 1979's Hurricane David. Phrases like "menace" and "monster" continued to appear along with designations of gender such as "he" and "him." However, what is more surprising about discussion of Gilbert is the continued emphasis on illustrating Gilbert as the "strongest" storm to date. While Gilbert was, in fact, one of the strongest storms as a Category 5 hurricane, it was the specific ways Gilbert was made out to be "stronger" that were interesting.

Gilbert was a "brute" as "he" "pounded" "slammed" "flayed" and "blasted" the coast reported newspapers throughout the country.³⁶ The "brunt" of Gilbert's force was felt the most in Jamaica, reported the *Richmond Times-Dispatch*.³⁷ Like the "incredible hulk," Gilbert was a "monster" of the strongest kind, proclaimed the *Raleigh News & Observer*.³⁸ No, the *Houston Chronicle*, disagreed, "monster" was too small of a phrase to use with Gilbert, or "Gilberto as

September 11, 1988: A1 & A8.

^{35 &}quot;Dodged a bullet" in: "Mobile Area Returns To Normal," *Mobile Register*, September 11, 1988: 1 & 8A; "In fertile territory" in: "Next Up: Hurricane Gilbert?" *Biloxi Sun-Herald*,

^{36 &}quot;Brute" in: "Gilbert Rages Into Gulf," *Biloxi Sun-Herald*, September 14, 1988: A1 & A4; "He" in multiple newspaper articles, but as a sample: "Mr. Gilbert," *Houston Chronicle*, September 13, 1988: A14; "Pounded" in: "Jamaica Reels Under Punch From Gilbert: Cayman Islands in Storm's Path," *New Orleans Times-Picayune*, September 13, 1988: A1 & A4; "Slammed" in: "Hurricane Gilbert Slams Jamaica," *Charleston Post & Courier*, September 13, 1988: 1A & 5A; "Blasted" in "Hurricane Rips Caymans; Loss Feared Heavy," *Los Angeles Times*, cited previously.

³⁷ "30 Reported Dead in Jamaica as Gilbert Heads to Caymans," *Richmond Times-Dispatch*, September 13, 1988: A1 & A3.

 $^{^{38}}$ "175-MPH Gilbert Threatens Gulf," $Raleigh\ News\ \&\ Observer,$ September 14, 1988: 1A & 6A.

the Mexicans call it."³⁹ "A hurricane that size deserves to be called Mr. Gilbert," with the utmost respect and fear that comes along with the title.⁴⁰

What is most noticeable about the gender references with Gilbert in the end is that despite its size and impact, there were only 25 gender references in the 135 articles on Gilbert. As a result, gender use in newspaper articles totaled 19 percent. This small percentage is negated slightly when considering the increasing emphasis of the storm as the "hulk" or a "Mr." However, it does illustrate that despite the fact that the storm did not impact the U.S. directly, it was particularly significant in popular culture as the use of gender to describe storms had increased by 11 percent since Hurricane Alicia. This increase in gender use with Gilbert, however, would surprisingly not hold up with the next major storm to actually impact the U.S.

In 1989, Hurricane Hugo made a beeline to the South Carolina coast after passing across the eastern edge of Puerto Rico. Striking just north of Charleston as a Category 4 hurricane, it eventually "shut its evil eye for good" losing its "punch and its name" as it dissipated on its way through North Carolina.⁴¹ At the end of its "march from the sea" the *Raleigh News & Observer* declared that Hugo had left the coastline as scorched as General Sherman.⁴² In fact, Hugo had caused an estimated \$7 billion in damage in the U.S. and \$1 billion in Puerto Rico

³⁹ "Yucatan Resorts Make Ready For Gilbert's Visit," *Houston Chronicle*, September 14, 1988: A16.

⁴⁰ "Mr. Gilbert," Houston Chronicle, cited previously.

^{41 &}quot;Fury and Fragility," Raleigh News & Observer, September 23, 1989: 14A.

 $^{^{\}rm 42}$ "Hugo's March From Sea Churns South Carolina Coast," $Raleigh\ News\ \&\ Observer,$ September 23, 1989: 2A.

and the U.S. Virgin Islands, a vast increase compared to General Sherman's \$1.4 billion toll.⁴³

This "meteorological wild card," stated the *Atlanta Journal-Constitution*, held residents of South Carolina "hostage." ⁴⁴ "Hugo, We Go," declared the *Charleston Post & Courier*, urging residents to get out of the way of the big storm.

'Hugo, We Go'

Hugo, We Go, Charleston Post & Courier, 1989.45

While marking "his passage" with a "brutal battering" this "Power Boxer" "clobbered" with a "headstrong" method, proving there was "nothing erratic" about its behavior, stated the *Baltimore Sun.*⁴⁶ Depictions of Hugo, like satellite imagery, referenced its size and general panic caused by its direct attack on the East Coast. For example, the *Raleigh News & Observer* depicted a very large Hugo as creeping up behind residents unexpectedly. While the image does not

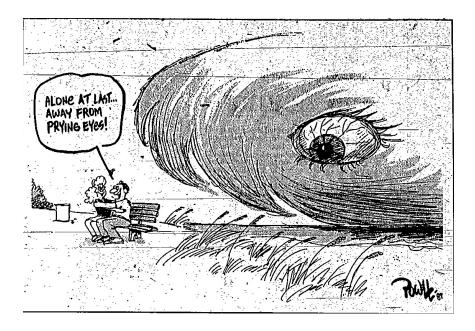
⁴³ Office of Climate, Water, and Weather Services, "Service Assessment Report of Hurricane Hugo September 10-22, 1989," NOAA, May 1990. General Sherman's March to the Sea and "scorched earth" or "chevauchee" policy cost \$100 million in 1865 USD, approximately \$1.4 billion in 2010 USD.

⁴⁴ "Meteorological wild card" in: "Summer Going Out Like A Lion, Upstaging Autumn's Arrival," *Atlanta Journal-Constitution*, September 22, 1989: A12; "Holding residents hostage" in: "Irate Residents Confront Guard at Myrtle Beach," *Atlanta Journal-Constitution*, September 23, 1989: A9.

⁴⁵ "Hugo, We Go," Charleston Post & Courier, September 22, 1989: 18.

⁴⁶ "His passage," "brutal battering," and "Power Boxer" in: "After the Hurricane," *Baltimore Sun*, September 24, 1989: 1A & 19A; "Clobbered" in: "Hurricane Smashes Charleston: 138 MPH Winds, Huge Waves Hit Carolina," *Baltimore Sun*, September 22, 1989: A1 & 2A; "Headstrong" and "nothing erratic" in: "In The Wake of Hurricane Hugo: Hugo Fools Forecasters and Bypasses Maryland," *Baltimore Sun*, September 23, 1989: 1A & 4A.

directly portray Hugo as a male, it is implied that its size is massive, fitting with other discussions of Hugo as an extremely masculine male.



Hugo Lookin' At You, Raleigh News & Observer, 1989.47

The *Houston Chronicle*, for example, stated that the excitement over Hugo's "muscle" and "ugly reputation" were appropriately substantiated as its "blitz" on the coastline had the impact of the Germans while causing the devastation of "Nagasaki." "It's like we've survived an atomic or nuclear bomb," stated a Charleston resident in an interview with the *Raleigh News & Observer*. 49

⁴⁷ "Hugo," Raleigh News & Observer, September 22, 1989: 18A.

⁴⁸ "Muscle" in: "Hugo Hits South Carolina," *Mobile Register*, September 22, 1989: 1A & 6A; "Ugly reputation" in: "Thousands Flee Inland as Hugo Nears," *Houston Chronicle*, September 21, 1989: A1; "Blitz" in: "Southeast Bracing for Hugo," *Houston Chronicle*, September 20, 1989: A1; "Nagasaki" in: "Stronger Hugo Pounds Coast of South Carolina," *Houston Chronicle*, September 22, 1989: A1.

⁴⁹ "It's Like We've Survived An Atomic or Nuclear Bomb," *Raleigh News & Observer*, September 23, 1989: 1A.

'It's like we've survived an atomic or nuclear bomb

Atomic Hugo, Raleigh News & Observer, 1989. 50

The description of Hugo as an atomic bomb was very different than discussion of previous 1960s female storms as atomic. With Hugo, newspapers distinguished the male-named storm by explaining how it was in control, having a defined path and target. However, with female storms of the past, descriptions of their targets and paths were often explained to be erratic and anger-induced. This delineation is significant as it illustrates the difference made in newspapers between male and female named storms.

Like with Hurricane Gilbert, articles in the *Charleston Post & Courier* called for the use of a stronger name for Hugo – "Mr. Hugo."⁵¹ Its impact was just like the "war between the states" proclaimed the *Mobile Register*, again referencing the severity of the damage along the famed South Carolina coastline.⁵² "Hugo the terrorist," blasted the *Miami Herald.*⁵³ It left Charleston

 $^{^{50}}$ "It's Like We've Survived An Atomic or Nuclear Bomb," $\it Raleigh$ $\it News$ & $\it Observer$, cited previously.

⁵¹ "South Carolina Braces for Hurricane Strike," *Charleston Post & Courier*, September 21, 1989: 6A.

^{52 &}quot;Mansions Withstand Hugo's Ire," *Mobile Register*, September 23, 1989: 1A & 3A.

^{53 &}quot;Beachfront Homes Tossed in Winds," Miami Herald, September 23, 1989: 20A.

looking "like a war zone," stated the *Los Angeles Times*.⁵⁴ It left "us" wishing for the "glory days of hurricanes on the East Coast," proclaimed the *New York Times*.⁵⁵ But most importantly, its impact surely made it "The Hurricane of the Century."⁵⁶

With such strong references to Hugo as "Mr. Hugo" and the unstoppable "killer" or "terrorist," it is not surprising that the number of gender references used did increase with Hugo to 27. However, the number of newspaper articles written about Hugo's "march from the sea" exploded to a whopping 390 articles. Due to the large number of articles produced, the gender references did not equate to an increase in gender use overall. In fact, the total percentage of gender use decreased from Gilbert's 19 percent to 7 percent.

KILLBERT & GILBERTO: REPRESENTATIONS OF MALE HURRICANES IN THE CARIBBEAN & MEXICO

As argued in chapter 7, the decision to change the hurricane naming system to include both male and female names was not a unilateral decision implemented by the U.S. in the Caribbean and Mexico as it was in the 1950s. Instead, the Caribbean and Mexico had different experiences with implementation of the 1978-79 naming systems. In 1978, the U.S. had worked out a deal with Mexico to change the names of storms that affected the Pacific Coast side of the country. In doing so, the U.S. agreed to include some of the

⁵⁴ "Charleston Devastated: At Least 9 Dead as Hugo Levels Buildings, Floods Historic City," *Los Angeles Times*, September 21, 1989: 1.

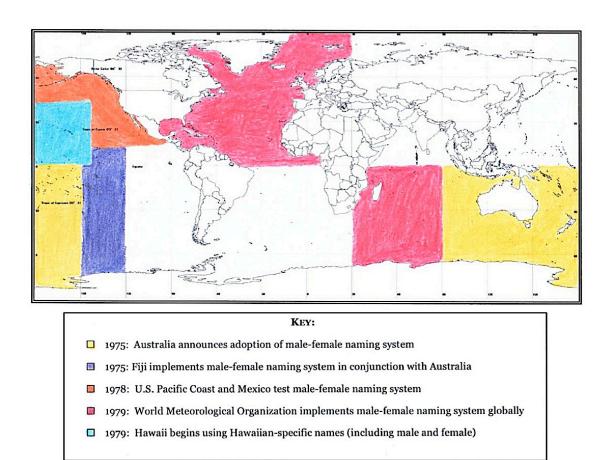
^{55 &}quot;Wary Southeast Watches the Skies," New York Times, September 20, 1989: B9.

 $^{^{56}}$ "Devastated by Hurricane, Montserrat Starts to Rebuild," $\it New York Times, September 22, 1989: A22.$

Mexican Meteorological Organization's suggested names in the naming list, like "Fico." As discussed, Fico ended up affecting Hawaii, however, it was applauded by Mexico as the first storm that was named by its meteorological organization. As a result, male-named storms were accepted from the beginning by Mexico as an effective naming process. Similarly, after the success of the initial Mexican-influenced names that were added to the naming lists, Hawaii proposed using Hawaiian-specific names for storms in the Pacific-Ocean region, as well. These names were adopted in the 1979 season.

In 1979, the World Meteorological Organization, implemented the male-female naming system throughout the world, including the Caribbean region. While Mexico had used the equal-sex system the year before, Caribbean countries had continued with the female-only system. As a result, Hurricanes Bob and David were the first male-named storms to impact the region. It should be noted immediately that all six Caribbean and Central American countries in this dissertation's study used the naming process as implemented and controlled by the World Meteorological Organization from 1979—on. There was no slow adoption of the male-female naming process in other regions of the world for typhoons or cyclones, either. As illustrated by the "red" on Map 3, when the naming process switched, it switched for all countries that did use the naming system and had yet to switch it from female-only to male-female.

Map 3. Implementation of Male-Female Naming System For Hurricanes, Typhoons, & Tropical Cyclones, 1975-1979



Hurricane Bob formed in the Yucatan Peninsula region in 1979 and swept upward to Tennessee, bypassing all Caribbean countries, and minimally affecting the Yucatan region. David, however, was an entirely different story. First spotted south of the Cape Verde Islands, David moved through Dominica, Hispaniola, the Dominican Republic, Cuba, and the Bahamas like a chainsaw. "Big David," as the *Nassau Daily Tribune* called it after it intensified over the islands, was portrayed only peripherally, though. Very few illustrations appeared representing David, and those that did, appeared prior to the storm. For example, the *Nassau Daily*

Tribune included a cartoon illustrating the boarding up of houses to get ready for the storm.

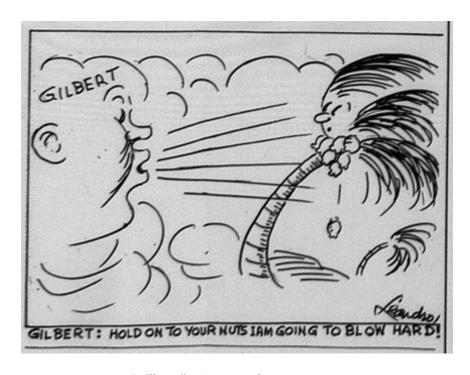


"David," Nassau Daily Tribune, 1979.57

By the time Hurricane Gilbert swept through the Caribbean in 1988, depiction of male storms in the U.S. had become more defined. The same took place in the Caribbean. For example, in the *Kingston Gleaner*, a portrayal of Gilbert illustrates the storm as a defined object within the cartoon itself. While it is not immediately clear that Gilbert is made out to be a "male" storm, looking closer at the illustration, the facial structure and shape of the closely trimmed "hair" gives the impression that Gilbert is male. While the palm tree also appears

^{57 &}quot;David," Nassau Daily Tribune, September 1, 1979: 4.

to have a face, it can be implied that the palm tree represents the islands Gilbert was affecting.



"Gilbert," Kingston Gleaner, 1988.58

Similar to increased definition in depictions of Gilbert, nicknames related to the storm emphasized the idea that Gilbert was seen as a male. For example, when Jamaican residents referred to Gilbert as "Killbert" because of its detrimental death toll, they utilized previous descriptions of male storms as "killers." Similarly, when Mexico changed the spelling of Gilbert to "Gilberto," in Spanish, they attached a male gender immediately to the storm. Representations of the storm followed.⁵⁹

⁵⁸ "Gilbert," Kingston Gleaner, October 22, 1988: 9.

⁵⁹ "Yucatan Resorts Make Ready For Gilbert's Visit," *Houston Chronicle*, cited previously.

Other depictions showcased Gilbert's strength by showing just how much the storm had hurt the residents of the Caribbean. For example, in the *Kingston Gleaner*, a man is shown severely injured. Explaining to his friend that Gilbert had "licked" him, he was stating that the powerful Gilbert had caused him serious harm and then promptly ran away. Also depicted in the image are a house that is boarded up and a fairly clear landscape with bent palm trees, much like what it would look like after a hurricane.



"Beat Up," Kingston Gleaner, 1988.60

The following year Hurricane Hugo swept up along the eastern side of the Caribbean, impacting Cape Verde, the Leeward Island, Guadeloupe, Montserrat, St. Croix and Puerto Rico before heading straight for South Carolina. As with Gilbert, depictions of Hugo represented the storm in characteristically masculine ways. However, this change from previous non-specific illustrations like that of

^{60 &}quot;Beat Up," Kingston Gleaner, September 20, 1988: 8.

David to the more defined masculinity of Gilbert and Hugo is perfectly showcased in a cartoon of Hugo from the *Nassau Daily Tribune*.



Threat of Hugo, Nassau Daily Tribune, 1989.61

As opposed to the image of David that also appeared in the *Nassau Daily Tribune*, Hugo is actually depicted within the cartoon itself. This depiction fits with larger discussions over the size of Category 5 Hugo. Hugo is portrayed as massive, with snarling teeth and a permanently set frown accentuating extreme anger riddled across the "face" of the storm. The Bahamian male paddling furiously away from Hugo appears frightened by the size and potential strength of the storm.

As these selected cartoons from male-named hurricanes that impacted the Caribbean and Mexico illustrate, the new male-female naming process was

_

^{61 &}quot;Threat of Hugo," Nassau Daily Tribune, September 9, 1989: 3.

adopted throughout the region. Similarly, the assignment of gender-specific designations to male-named hurricanes was also quickly adopted. By the end of the 1980s, male-named storms in the Caribbean contributed to the development of larger cultural assignment of masculine stereotypes to storms within the U.S., too.

CONCLUSION: THE RESULT OF USING JACK & DIANE

Figures from the 1970s and 80s hurricanes in the U.S., Caribbean, and Central America provide several insights into the shifting cultural climate. First, that storms were still discussed in terms of regional impact. (See Table 13). For example, in Figure 5, it is possible to see that the Upper South, a region severely affected by Hurricane Hugo, had the most newspaper articles discussing hurricanes in the period. The Gulf South followed next in line. (See Figure 5). Meanwhile, the statistics gathered also show that the use of gender was not negated with the adoption of an equal-sex naming system. While gender use did decrease, it was still consistently used. (See Figure 6). However, when compared to the previous female-only naming period, it is obvious that the debate over descriptors and gender in U.S. society had impacted the way hurricanes were gendered in text. (See Figure 7).

Table 13. Article and gender references by city, 1972-1989

Newspaper	Agnes	David	Alicia	Gilbert	Hugo
	1972	1979	1983	1988	1989
Atlanta Journal-Constitution Articles Gender References	6 11	14 0	9 0	3 1	51 0

Totals For All NewspapersArticlesGender ReferencesPercentage of Gender Use	150 84 56%	218 32 15%	212 17 8%	135 25 19%	390 27 7%
Articles Gender References	31 2	9 0	7 0	6 0	16 2
Richmond Times-Dispatch			_		
	U	U	U	U	U
Articles Gender References	10 6	12 0	9 0	6 0	37 0
Raleigh News & Observer					
Genuel References	U	U	U	U	0
Articles Gender References	17 0	24 6	15 0	9 0	43
New York Times					
Gender References	18	4	3	4	0
New Orleans Times-Picayune Articles	9	14	12	10	10
Gender References	11	0	О	0	О
Mobile Register Articles	18	22	12	19	22
Gender References	10	10	10	0	3
Articles	18	64	25	10	49
Miami Herald					
Gender References	14 11	6	0	1	0
Los Angeles Times Articles	14	12	11	30	24
Gender References	5	6	4	8	2
Houston Chronicle Articles	11	15	16	30	24
Houston Chamiels					
Gender References	5	6	4	7 o	91 12
Charleston News & Courier Articles	11	15	16	7	91
Gender References	8	0	0	11	3
Articles	7	12	10	21	11
Biloxi Daily Herald					-
Gender References	3 0	0	7 0	5 0	5 5
Baltimore Sun Articles	9	10	7	F	22

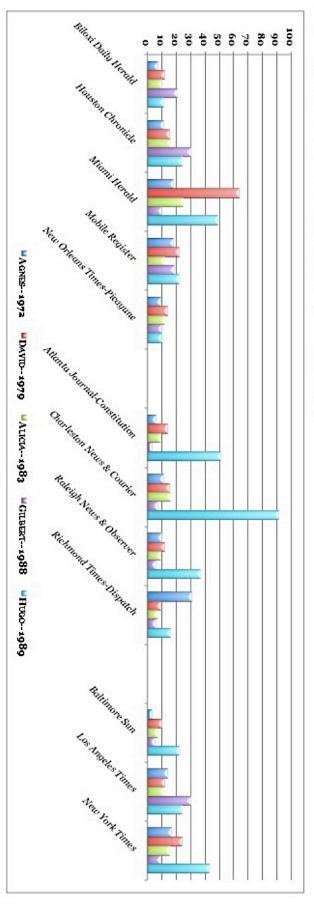


Figure 5. Number of articles by city and region, 1954-1989

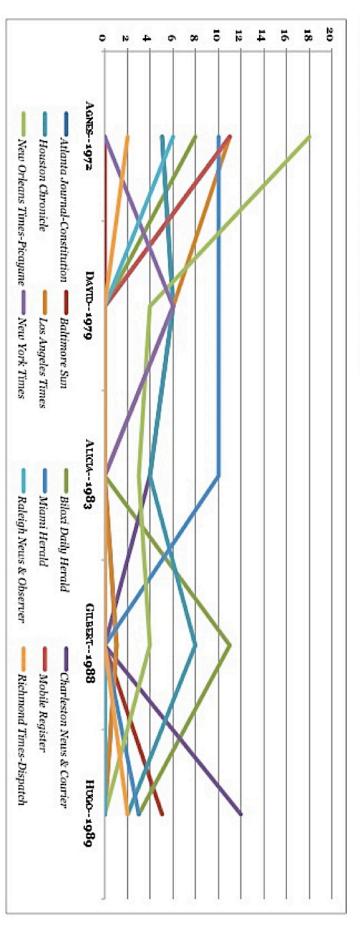


Figure 6. Gender reference use by city, 1972-1989

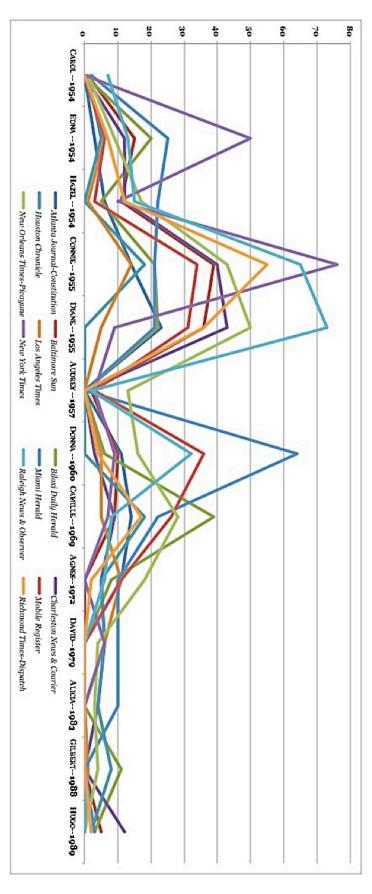


Figure 7. Gender reference use by city, 1954-1989

However, as illustrated in the word clouds on the following page, even though gender was used less frequently, descriptions of storms did change considerably throughout the period. Gone were references to female storms as "witches" and "sluts," however, other female stereotyped descriptions continued. But what is most significant is the introduction of new gendered terminology to describe male-named storms. As "monsters" and "Mr.'s" to "terrorists" and "Generals," the male-named storms from the initial start had a distinctive, übermasculine designation that attempted to segregate them from female-named storms. In addition, while both female storms of the past and male storms of the 1970s and 80s were described as having the strength of atom bombs, unlike "erratic" and "angry" female storms, male storms were said to have carefully chosen targets and defined war-like actions.

_

⁶² Word clouds are a visual design of words and descriptors. I use word clouds here to illustrate the various descriptors used with hurricanes in a succinct manner. Word clouds software can allow the user to input phrases and then sort and place emphasis on the size of repeat phrases. The word clouds used in this dissertation are made through the Tagxedo online software by this author using the descriptive phrases found through statistical analysis of this dissertation's newspaper database. For more on how the descriptive phrases were selected, please see Chapter 3.



Female-Named Storm Descriptors Word Cloud, 1954-1989.63



Male-Named Storm Descriptors Word Cloud, 1979-1989.64

⁶³ "Female-Named Storm Descriptors Word Cloud, 1954-1989," Created by author, *Tagxedo* [Word Cloud software], February 19, 2013.

⁶⁴ "Male-Named Storm Descriptors Word Cloud, 1979-1989," Created by author, *Tagxedo* [Word Cloud software], February 19, 2013.

How this system of sex-segregated definition would continue to play out over the following decades was still up for debate. Would male-named storms develop similar, more violent gendered attributes and descriptors the same way female-named storms did by the end of the 1960s? What sort of phrases would be attached to the storms that might "top" descriptions as monsters and menaces? How would themes of terrorism and an increasingly sexually explicit culture that was fed by media frenzy impact storm descriptions? And finally, would Hugo be the last, and greatest "Hurricane of the Century?"

PART III THE 21ST CENTURY HURRICANE

CHAPTER 9

THE STORM OF THE CENTURY OF THE WEEK: MEDIA & THE MODERN STORM



The Daily Show With John Stewart, Comedy Central, 1999.1

In September 1999, Comedy Central comedian John Stewart began one of the well-known segments on his nightly comedic news show with a baffled tone.² As part of the "Headlines" section, which mockingly discussed the top news stories from around the country, Stewart announced seriously into the camera, "Hurricane Floyd turns north up the eastern seaboard," immediately tipping his

¹ "Headlines-Storm of the Century of the Week-Hurricane Floyd," *The Daily Show with John Stewart*, Episode 04031, September 16, 1999, Posted by *The Daily Show with John Stewart* online, http://www.thedailyshow.com/watch/thu-september-16-1999/headlines---storm-of-thecentury-of-the-week.

² For more on the development of broadcast news like *The Daily Show*, see: Geoffrey Baym, *From Cronkite to Colbert: The Evolution of Broadcast News* (Boulder, CO: Paradigm Publishers, 2010).

audience off to the fact that he would be discussing the current major hurricane, Floyd. Continuing with his segment, Stewart proclaimed solemnly that his team of "semi-meteorologists" on *The Daily Show* staff would be providing, like all other news networks in the country, "up to the minute coverage of the storm of the century of the week."³

As soon as Stewart repeated the last few words of his opening statement, the audience roared with laughter as the pop-up graphic over Stewart's right shoulder appeared. Similarly, while serious-faced during the proclamation, Stewart's expression changed the minute he knew the box had appeared, snickering along with the crowd.



The Daily Show With John Stewart, Comedy Central, 1999.

After collecting himself, Stewart continued his broadcast which included segments with a "meteorologist in the field" being whipped by pouring rain and

³ Ibid.

winds but refusing to wear a coat like the "pansies at The Weather Channel" and snarky statements that New Jersey was "brac[ing] for [the] burning sensation of cleanliness" that would soon be felt when the storm swept through.⁴ Throughout the segment, Stewart's recap of the storm was just as humorous as the segment's title, but presented the facts of the large hurricane's movement and potentially severe damage with significant respect. Nevertheless, Stewart reminded his audience throughout the segment through not-so-subliminal subtext, that this storm of the century could easily be surpassed by the next storm of the century the following week.

While Hurricane Floyd actually was a massive storm that resulted in an enormous amount of damage when it eventually hit the East Coast, John Stewart's playful analysis of the discussion of Floyd and other storms from the past decade was not unfounded. In fact, it was spot on. At the end of the 1980s with a new naming system and a Saffir-Simpson scaling system for storms based on categories firmly in place, the possibility of proclaiming each passing storm as the "worst storm" of an era should have been minimal. However, proclamations that every passing storm was the "storm of the century" continued with fervor. Stewart's observation that this labeling of storms that began in the 1980s had spun out of control by the end of the 1990s captured a major cultural shift affecting the way Americans and others viewed hurricanes – the evolving 24-hour news network and digital age.

4 Ibid.

IT'S 5 O'CLOCK SOMEWHERE: THE 24-HOUR NEWS CYCLE BEGINS

On June 1, 1980, the Cable News Network started broadcasting on a 24-hour basis.⁵ While television programming in the U.S. had steadily increased in strength and numbers since its introduction, the popularity of major programming such as *60 Minutes* and the vast number of standard cable channels by the end of the 1970s had created a market for news that was not limited to regional stations. When the Cable News Network, or CNN as it is popularly known today, appeared in June 1980, it was revolutionary. Up until CNN, news had been delivered by regional stations at set times during the day (like the "5 o'clock news") to fit in with other programming. While exceptions were made during major crises such as the death of a president, or during extremely bad weather like hurricanes, the majority of news broadcasts were limited to a previously scheduled time frame. Similarly, the extent of the news was also often regionally limited and based, filmed and produced in particular areas of the country.

CNN founder Ted Turner aimed to change all of this. Through the use of satellites and cable networks, CNN was able to broadcast a 24-hour cycle of 30-minute news segments globally on its own schedule. As explained by journalism professor Steve Barkin, CNN's "highly flexible news hole" was not governed by other programming, making "it possible to turn most of a day's attention to a single story" on any given day of the week. 6 Similarly, its "reciprocal

⁵ Hank Whittemore, CNN: The Inside Story: How a Band of Mavericks Changed the Face of Television News (New York: Little & Brown, 1990).

⁶ Steve M. Barkin, "The Impact of CNN," American Television News: The Media Marketplace and the Public Interest (New York: M. E. Sharpe, 2003) 104.

arrangements with hundreds of local stations" allowed it to "switch to a catastrophic fire in a Kansas City, Missouri, hotel and stay with the local coverage for ten or twenty minutes — or for two hours." In addition, CNN's satellite broadcasts allowed it to be available everywhere throughout the world, not just with regional cable television packages.

This monumental shift in the way that news could be broadcasted affected the demand for constant information regarding the news. Other networks soon discovered that Americans avidly consumed CNN's constant coverage of major events like the Challenger explosion (1986); the rescue of "Baby Jessica" (1987); the Persian Gulf War (1990); and the O.J. Simpson white bronco high speed chase and resulting murder trial (1994).⁸ By 1996, recognizing CNN's success, both MSNBC News and Fox News had premiered attempting to capitalize on this new demand for news.⁹

In addition to news, CNN also spurned an interest in weather information.

On May 2, 1982, The Weather Channel (TWC) debuted as the 24-hour weather station using data from the National Weather Service. With the slogan "We Take The Weather Seriously, But Not Ourselves," the early broadcasts were "anything but smooth," states Connie Sage in a biography on TWC founder,

⁷ Barkin, 105.

⁸ Bill Kovach and Tom Rosenstiel, *Warp Speed: America in the Age of Mixed Media* (New York: The Century Foundation Press, 1999).

⁹ For more on Fox News see: Scott Collins, *Crazy Like a Fox: The Inside Story of How Fox News Beat CNN* (New York: Penguin Group, 2004); David Brock and Ari Rabin-Havt, *The Fox Effect: How Roger Ailes Turned a Network Into a Propaganda Machine* (New York: Anchor Books, 2012).

¹⁰ Frank Batten and Jeffrey L. Cruikshank, *The Weather Channel: The Improbable Rise* of a Media Phenomenon (Boston: Harvard Business School Press, 2002) 72-73.

Frank Batten.¹¹ In its initial years, the technology was low-key, with weather maps "all hand-drawn on art cards" and segments like "Weather and Your Pet," as the new station attempted to fill its 24-hour time slot on a minimal budget.¹²

On the other hand, TWC was revolutionary, as it was the first station to attempt to broadcast national weather news for all regions, not just local weather. TWC also introduced groundbreaking methods for weather news segments such as the WeatherSTAR, or Satellite Transponder Addressable Receiver, an around-the-clock scroll of local weather forecasts every 8 minutes (also known as "Local on the 8s"). The WeatherSTAR method provided quick information about weather around the country and in local areas, catapulting TWC to become the authority of weather in both the local and national arenas. As a result, local stations throughout the country soon copied the WeatherSTAR method.

After some financial trouble in 1983, TWC reinvented itself, investing considerable money and energy in the development of a robust schedule of weather programming and the introduction of new weather-tracking technology geared for a television audience. ¹³ For instance, TWC created specialized weather shows like *Storm Stories* in an attempt to capitalize on the popularity of specified hour-long specials appearing on CNN, FOX, and MSNBC. As a result of major changes in programming and technology, TWC "grew from 'a man and a

¹¹ Connie Sage, *Frank Batten: The Untold Story of the Founder of The Weather Channel* (Charlottesville: University of Virginia Press, 2011) 121.

¹² Sage, 121.

¹³ TWC was eventually saved by requiring subscription fees from cable providers the same way CNN had. Sage, 128.

map' to the most respected weather news and weather programming network in the country."¹⁴

Correspondingly, the demand for news and weather information multiplied infinitely with the introduction of the Internet. ¹⁵ With growing numbers of Internet users, all major news networks and TWC set up websites to correspond with their on-air programming. Overall, with the dawn of a 24-hour and digital age came the need to consistently feed a public information addiction. To be the "authority" or the "most watched" or "trusted" news/weather station, the programming had to keep up, the graphics exceed all others, and the reporting had to be the most informative and unique. But how did this conquest to be the best and the most watched affect events as they unfolded, particularly natural disasters such as hurricanes?

'YOUR HURRICANE AUTHORITY': CREATING THE CONE OF UNCERTAINTY

The media frenzy of the late 1980s to 2000s significantly impacted the perception and discussion of hurricanes in U.S. society, and it can easily be argued, the world. The push to be the best or the foremost authority meant the

¹⁴ Sage, 131.

¹⁵ While developed as computer-to-computer sharing with the first electronic computers in the 1950s, the Internet as it is known today officially appeared in 1982 with the U.S. government-sponsored Internet protocol suite (TCP/IP). In 1995, the Internet was deregulated and became officially commercial. Since becoming commercial, use of the Internet has grown exponentially; it is estimated that 34% of the World's population uses the Internet today. Vinton Cerf, Interviewed by Bernard Aboba, "How the Internet Came to Be," Posted online 1993, http://www.netvalley.com/archives/mirrors/cerf-how-inet.html. As reprinted from: Bernard Aboba, The Online User's Encyclopedia (Boston: Addison-Wesley, 1993). And, information on internet users today based on reports published by Nielsen Online, International Telecommunications Union, GfK, and local ICT regulators. MiniWatts Marketing Group, "Internet World Stats: Usage & Population Statistics, June 30, 2012," Posted online February 2013, http://www.internetworldstats.com/stats.htm.

investment of significant financial capital into the development of new technologies to track weather "live." This, in turn, spurned greater fascination with the results of severe weather. Similarly, the ability to broadcast breaking news or events continuously without interruption by other programming allowed fascination with hurricanes as an event to build. For example, it is estimated that during peak periods of major storms, The Weather Channel's viewership increases by 5 times its normal audience and "hits" on its website or mobile applications are astronomical.

In addition to live coverage of hurricanes increasing interest in storm tracking, the popularity of new programs like *Storm Stories* on TWC illustrate the growth in demand for programming related to severe storms. While the concept of entertainment related to severe weather has always existed (e.g., William Shakespeare's *The Tempest*, George Stewart's *Storm*, and television specials like *A Lady Called Camille*), the popularity of regular segments like *Storm Stories* or live action reporting showing a well-known weathermen like Jim Cantore or a reporter such as Anderson Cooper being blown over or standing knee deep in the flooded streets permeated the American household from the mid-1980s on. Thus, the image of who reports the weather, what terms they used to describe it, and what it looks like live became reality and not just fantasy or reenactment.

But on a deeper level, modern media created a new way of talking about hurricanes. The desire to one-up the competing networks did not end with special graphics and personnel, it also included the desire to have the best and most engaging ways of describing and showing the events unfolding. When it came to hurricane tracking, this meant the use of modern meteorological tools, special effects or experiments to help the audience visualize damage, and exciting commentary on a storm's movements.

Through all of this came an increased emphasis on new ways to describe a storm as worse than the last. While not intentionally done in a manner that was misleading, the constant coverage of a storm on multiple 24-hour news networks changed the national perspective on hurricanes yet again. No longer a regional problem that might cause peripheral damage, a storm became a global event, experienced by all in living rooms or on the internet throughout the world. On a smaller level, 24-hour and digital age weather reporting introduced and familiarized the public to new terminology such as the "cone of uncertainty," "mandatory evacuation," and "counterflow."

The discussion of impending hurricanes and the storm's aftermath was riveting news. As a result, nicknames and descriptions of storms introduced in one segment quickly turned into a popular phrase used for all news. For example, "the perfect storm" of 1991 was nicknamed by Boston National Weather Service forecaster Robert Case and author Sebastian Junger. The unnamed nor'easter, eventually absorbed by Hurricane Grace, led to tumultuous damage and inspired the book *The Perfect Storm* and subsequent movie. Other types of storms and disasters were nicknamed as well in an attempt to explain overall impact in ways

¹⁶ Bob Chartruk, "NOAA Meteorologist Bob Case, The Man Who Named The Perfect Storm," NOAA News Online, June 16, 2000, http://www.noaanews.noaa.gov/stories/s444.htm.

¹⁷ Sebastian Junger, *The Perfect Storm: A True Story of Men Against the Sea* (New York: Norton, 1997); Warner Brothers Pictures, *The Perfect Storm*, June 30, 2000: 130.

that were similar to hurricanes. In 1993, for instance, "The White Hurricane," a blizzard, also was referred to as "the storm of the century." ¹⁸

In addition to affecting the perception of hurricanes live on air, the digital age also affected the discussion of hurricanes in print. Struggling to keep up with the constant demand for news on 24-hour networks and the Internet, newspapers throughout the country printed larger-than ever editions featuring specialized pictures and commentary on storms and aftermath. Other newspapers, like *USA Today* were created with the specific purpose of competing with the large 24-hour networks, and often included a whole issue devoted to the current disaster. Similarly, some newspapers such as the *New York Times, Washington Post*, and *Wall Street Journal* expanded to include online editions and special features that linked in with larger news hubs and government services like the National Weather Service.

The shift in the increased production of newspaper articles related to hurricanes after the introduction of modern 24/7 news networks is profoundly illustrated by this dissertation's newspaper study. Of the hurricanes studied for this dissertation, the number of newspaper articles increased from 2,304 articles in the pre-24/7 news era to 6,614 articles in the 25 years that followed the

¹⁸ Neal Lott, "The Big One! A Review of the March 12-14, 1993 'Storm of the Century," National Climatic Data Center Research Customer Service Group, Technical Report 93-01, Posted on May 14, 1993, ftp://ftp.ncdc.noaa.gov/pub/data/techrpts/tr9301/tr9301.pdf.

¹⁹ Aurora Wallace, "National News and the Nation: The *New York Times*, the *Washington Post*, the *Wall Street Journal*, and *USA Today*," in *Newspapers and the Making of Modern America* (Westport, CN: Greenwood Press, 2005). For more on the development of U.S. newspapers see: Michael Schudson, *Discovering the News: A Social History of American Newspapers* (New York: Basic Books, 1973).

²⁰ Ibid. For more on newspapers in the digital age see: Pablo J. Boczkowski, *Digitizing the News: Innovation in Online Newspapers* (Cambridge, MA: MIT Press, 2004); and, *Online News and the Public*, Edited by Michael Salwen, Bruce Garrison, and Paul Driscoll (Mahwah, NJ: Lawrence Erlbaum Associates, Publishers, 2005).

introduction of 24/7 news cycles. When dividing this figure by the number of hurricanes studied in each 25-year period to account for a larger number of hurricanes in the latter period, the overall percent of increase in newspaper articles equals 34 percent, or an average of 118 more articles per hurricane.

Table 14. Total number of newspaper articles before and after 24/7 news cycle, 1954-2008

Years	Number of articles	Number of hurricanes in period	Average number of articles per hurricane
1954 – 1979 (prior to 24/7 news)	2,304	10	230
1983 – 2008 (after 24/7 news)	6,614	19	348

Source: Dissertation newspaper database.

As explained later in this chapter and the next, despite the fact that some hurricanes were discussed more than others, the shift in the number of newspaper articles is groundbreaking. Simply put, what these figures illustrate is that the number of newspaper articles about hurricanes dramatically increased after the introduction of 24/7 news and weather networks like CNN and TWC. Combined with interest spurned and created by 24/7 news and weather networks, newspapers printed greater numbers of articles related to hurricanes to satisfy public demand. Similarly, every newspaper throughout the country increased the number of articles printed about hurricanes. Overall, from cones of uncertainty

to recovery, Americans and others were fascinated with the culture that surrounded hurricanes and everything that related to them.

Like 24/7 news and weather networks, newspaper reporters exercised extreme creativity in the massive number of newspaper articles printed about the storms they were covering. Yet, while the total number articles may have changed from one period to the next, how did these articles describe hurricanes in terms of gender? Would the constant media discussion create new gendered references for storms? And, how did the 1990s cultural concern of political correctness impact storm descriptions?

BEYOND JENNIFER AND JASON: THE POLITICALLY CORRECT HURRICANE

In 1995, the article, "Beyond Jennifer and Jason," appeared in the *New York Times* under the "How It Works" section, simply explaining the current hurricane naming process.²¹ Beginning simply, the article stated that 1995 had been an active hurricane season producing the most named storms since the Weather Bureau began naming storms in 1953. Then, the article reviewed the history of the naming process for storms, stating that because of the number of storms during 1995, there was a possibility that the naming list would run out of names. As a result, the Weather Bureau would use the Greek alphabet for all subsequent names if needed. Then the article continued to state well-known facts like, "a storm is named when its winds reach more than 39 miles per hour." Similarly, that all storm names are chosen by the National Weather Service prior

-

²¹ Mireya Navarro, "How It Works: Beyond Jennifer and Jason," *New York Times*, October 13, 1995: A12.

to the start of a season. The article also pointed out that names of hurricanes that were particularly powerful were "retired" much like favorite sports stars' jerseys.

HOW IT WORKS Beyond Jennifer and Jason The Atlantic region's hurristarting with Alpha. The name lists reflect regional cane season, which runs from June 1 to Nov. 30, has been so acand language differences. In the tive this year that it has produced Atlantic region, which includes the most named storms since the the United States, Central Ameri-National Hurricane Center startca and parts of South America, ed assigning names in 1953. Fe-English, Spanish and French are spoken, and names include "Allison," "Pablo" and "Gabrielle." male names were used until 1979, when a policy of alternating male In the Central Pacific region, and female names was adopted. Storms are named in alphabetiwhich includes the Hawaiian islands, people brace for "Akoni," "Lala" and "Halola." cal order from one of six lists of names. Each list is reused every six years. Names beginning with A storm is named when its Q, U, X, Y and Z are excluded bewinds reach more than 39 miles cause of their scarcity. This seaper hour. The name must be easy to pronounce and politically and son is currently up to Roxanne. That means this year's list only culturally sensitive, said Frank C. has four names left: Sebastien, Lepore, a spokesman for the hur-Tanya, Van and Wendy. National ricane center. "You wouldn't want a storm Hurricane Center officials say any subsequent storm would be named after Idi Amin," he said. named after the Greek alphabet, MIREYA NAVARRO RETIRED NAMES Names of the most damaging or deadly Atlantic storms are not used again. A name is retired to avoid confusion in legal actions, insurance claims, studies and other documents that arise in the storm's aftermath. Here are the names that have been retired and the year of the storm 1972 Camille 1969 1954 Hattle 1961 Agnes Edna Alicia 1983 1961 Elena 1985 1954 Carla Hazel Allen 1980 Carmen 1974 Eloise 1975 Hilda 1964 Andrew 1992 Caro 1954 Hugo 1989 Anita 1977 Cella 1970 Fiff 1974 Audrev 1957 Cleo 1964 Flora 1963 Inez 1966 Connie 1955 Frederic 1979 1955 Betsv 1965 1967 1979 Gilbert 1988 1955 Beulah David Janet Bob 1991 Diana 1990 Gloria 1985 loan 1988 1955 Diane Gracie 1959 Donna 1960 Klaus 1990 Dora 1964 Source: Pennsylvania State University, National Hurricane Center, National Weather Service

Beyond Jennifer & Jason, New York Times, 1995.22

While the information given about the naming process and history of hurricane naming was similar to all articles on the naming process before,

²² "Beyond Jennifer and Jason," New York Times, cited previously.

"Beyond Jennifer and Jason" included other policies regarding the naming practice that were entirely new. For example, the article pointed out that, "the name must be easy to pronounce and politically and culturally sensitive." This new addition to the naming process is surprising considering the lack of emphasis on creating mixed lists in the 1950s, but less so since the 1970s with the addition of Mexican-influenced names such as "Fico." However, it emphasized that, "you wouldn't want a storm named after Idi Amin." Instead the storms for 1995 and after reflected "regional and language differences," including names from English, Spanish, French, and Hawaiian dialects.²³

This final statement on political correctness and hurricane names shows the progression of hurricane names from being an easily identifiable, common vernacular descriptor to a carefully, culturally constructed technical term. Hurricanes, which were feminized, were now equal-gendered, and had also become politically correct, much like the era itself. How this political correctness would transfer to common discussion of sex-specified hurricanes in the 1990s and early 2000s, however, was still to be determined.

THE STORM OF THE CENTURY (MAYBE): SPIN & THE HURRICANE

As described in chapter 8, gendered descriptions of hurricanes did persist past the introduction of male names and continued to parallel the overarching use of gendered language in American society. The 1990s to mid-2000s saw similar trends in the use of gender specific descriptors with hurricanes. When

_

²³ "Beyond Jennifer and Jason," New York Times, cited previously.

looking at a visual breakdown of descriptors used with Hurricanes Andrew (1992), Opal (1995), Mitch (1998), Floyd (1999), Keith (2000), Iris (2001), Isabel (2003), Charley (2004), Frances (2004), Ivan (2004), and Jeanne (2004), by gender, it is possible to see that very little actually changed in the description of hurricanes past the 1980s.





Word Cloud Representations of Male & Female-Named Storm Descriptors, 1992-2004.²⁴

²⁴ "Word Cloud Representation of Male-Named Storm Descriptors, 1992-2004," Created by author, *Tagxedo* [Word Cloud software], June 5, 2013; "Word Cloud Representations of Female-Named Storm Descriptors, 1992-2004," Created by author, *Tagxedo* [Word Cloud software], June 5, 2013.

Descriptions of male storms like Andrew, Mitch, Floyd, Keith, Charley, and Ivan, as illustrated in blue, followed traditional patterns including references to extreme storm strength and definitive paths to the coastline. As a result, male descriptions often included references to identifiable stereotypes of masculinity including: burliness, muscles, power, and direction. For example, the *Raleigh News & Observer* stated that "Hurricane Floyd is huge; he's powerful; he's fast; and he's mean."²⁵ Others continued to reference war-like situations and disaster aftermath. The *Miami Herald* explained that Andrew left Florida with "marks like bullet holes" and its neighborhoods looking like "an enchanted forest on LSD" or a "modern-day Pompeii."²⁶ Meanwhile, the *Los Angeles Times* referred to Charley as "Bad-time Charley."²⁷

Also congruent with the 1980s, both male and female-named storms were given titles to signify their importance during this period. For example, the *Charleston Post & Courier* referred to "Diabolical Mitch" as the "Monster of the Caribbean," while the *Biloxi Sun Herald* nicknamed Floyd the "Super-Hurricane," and the *Mobile Register* called Ivan, "Ivan the Terrible." Correspondingly, the

 $^{25}\,\mbox{``Mean'}$ Floyd Imperils Coast," Raleigh News & Observer, September 14, 1999: 1A & 10A.

²⁶ "Marks like bullet holes" in: "Homestead AFB Devastated," *Miami Herald*, August 26, 1992: 17A; "An enchanted forest on LSD" in: "This Time, the Tragedy Lies Outside My Own Front Door," *Miami Herald*, August 26, 1992: 21A; "Modern-day Pompeii" in: "Andrew Humbled Once-Proud Homestead Base," *Miami Herald*, August 28, 1992: 25A.

²⁷ "Bad-time Charley" in: "Charley Bears Down on Florida," *Los Angeles Times*, August 13, 2004: A13.

²⁸ "Diabolical Mitch" and "Monster of the Caribbean" in: "Mitch Aims at Mexico," *Charleston Post & Courier*, October 28, 1998: 1A & 11A; "Super-Hurricane" in: "Super-Hurricane" in: "Big Storms Fascinate Americans," *Biloxi Sun Herald*, September 15, 1999: B1 & B6; and, "Ivan the Terrible" in: "Pianist Takes Hotel Guests' Minds Off Bad Weather," *Mobile Register*, September 17, 2004: A12.

New York Times referred to Isabel as "Intense Isabel," while the Mobile Register called Jeanne, "Mean Jeanne." 29

What did change with descriptors used during this time period was the way in which it was attempted to describe storms as worse than the last. Malenamed storm descriptions often included violent sexual descriptors to delineate the havor they wreaked as opposed to female-named storms. This served to emphasize the difference between male-named storm strength and female-named storms. For example, sexualized descriptions of Andrew as "perverse," "nasty," or "unsated" and statements that Andrew was "having his way" with the coast only reemphasized the distinction between previous storms and this storm. ³⁰ Other male-named storm titles mimicked previous attempts to segregate female and male-named storms. For example, the use of "Mr." in the 1980s was replaced with the term "King" of the hurricanes in the case of Andrew in the *New York Times*.³¹

At the same time that masculine descriptors used with male-named storms were evolving, female-named storm descriptors also altered slightly. Between 1992 and 2004, female-named storm descriptors often used references traditional with male-named storms. For example, references to female storms included descriptions as "monsters," "victimizers," "killers," "holding hostages,"

²⁹ "Intense Isabel" in: "Highlight: Past Hurricanes," *New York Times*, September 15, 2003: A16; and, "Mean Jeanne" in: "Mean Jeanne," *Mobile Register*, September 27, 2004: A1.

³⁰ "Perverse" in: "Devilish Prank of a Storm Steals Our Shade," *Miami Herald*, August 27, 1992: 35A; "Nasty" in: "Andrew is Nasty, Full of Surprises," *Raleigh News & Observer*, August 24, 1992: 1A & 4A; "Unsated" and "having his way" in: "Unsated, Andrew Churns Across the Gulf," *Miami Herald*, August 25, 1992: 8A.

³¹ "King" in: "A Million Are Told to Flee Hurricane in South Florida," *New York Times*, August 24, 1992: A1 & A10.

and "diabolical."³² In addition, sexualized references to female-named storms appeared. For example, "Fast Opal" as the *Miami Herald* had nicknamed the hurricane, was a "stormy gal" reported the *Biloxi Sun Herald*. ³³ Other newspapers often referred to female-named storms following male-named storms as the "evil twin sister" or the "wicked" sister of the male-named storms.³⁴

Overall, when looking at the statistics of the use of gender for storms during this period, it is evident that several major storms had higher rates of gender use, but on the whole, gender use stayed consistent throughout. (See Table 15 and Figure 8). There are two notable figures, first that no gender references were made to Hurricane Keith had in any of the U.S. newspapers due to the fact that Keith did not hit the U.S. However, all other storms were gendered by at least one newspaper in the country. Second, that the *New York Times* did not use specified gender references when referring to hurricanes. Although the descriptive terms used with the storms do indicate the continued association of masculine and feminine traits.

What did fluctuate drastically during this period was the number of newspaper articles produced. As described earlier, newspapers, in competition with other forms of mass media increased production of articles. The result of

^{32 &}quot;Monster" in: "Monster Prowls Atlantic," *Biloxi Sun Herald*, September 13, 2003: A1; "Victimizer" in: "I've Never Seen it Before Like This," *Miami Herald*, October 6, 1995: 1A & 13A; "Killer" in: "Hurricane Iris Heads Toward Yucatan," *Mobile Register*, October 8, 2001: 6B; "Hostage" in: Storms Like Frances 'ulcer-producing' NOAA Experts Say," *Charleston Post & Courier*, September 4, 2004: A7; "Diabolical" in: "Jeanne, Frances: A Diabolic Duo," *Houston Chronicle*, September 27, 2004: A6.

³³ "Fast Opal" in: "Fast Opal, Mixed Signals Made Mess of Evacuation," *Miami Herald*, October 6, 1995: 12A; and, "Stormy gal" in: "A Stormy Name, and a Dark and Stormy Night," *Biloxi Sun Herald*, October 6, 1995: C1.

³⁴ "Evil twin sister" in: "Jeanne, Frances: A Diabolic Duo," *Houston Chronicle*, September 27, 2004: A6; and, "Wicked" in: "Turkey Population at Risk in Hurricane Areas," *Biloxi Sun Herald*, September 26, 2004.

this increased production was the enormous jump in the number of articles about hurricanes. (See Figure 9). Similar to other severely impacted regions of the past, the Gulf South region had the most newspaper articles discussing hurricanes, followed by Upper South region. As a result, the Gulf South region also had the highest use of gender references, seconded by the Upper South region. Overall, when comparing gender references from 1954-on it is evident that the 1992-2004 period had storms with higher numbers of gendered references than the 1972-1989 period. When reflecting on this statistic, it is obvious that the modern media age directly influenced the discussion of hurricanes as gendered objects. (See Figure 10).

Table 15. Article and gender references by city, 1992-2004

Newspaper	Andrew 1992	Opal 1995	Mitch 1998	Floyd 1999	Keith 2000	Iris 2001	Isabel 2003	Charley 2004	Frances 2004	Ivan 2004	Jeanne 2004
Atlanta Journal-Constitution											
Articles	25	52	N	87	ယ	0	4	14	18	48	9
Gender References	Ю	0	0	ω	0	0	0	0	0	0	0
Baltimore Sun											
Articles	4	1	1	4	N	0	7	ហ	17	12	∞
Gender References	0	0	0	10	0	0	2	1	0	1	N
Biloxi Daily Herald											
Articles	36	22	15	13	N	ယ	O	20	17	88	22
Gender References	6	0	33	2	0	0	0	00	0	သ	0
Charleston News & Courier											
Articles	69	N	6	62	ယ	ယ	12	17	12	8	21
Gender References	13	0	0	6	0	0	4	0	0	0	0
Houston Chronicle											
Articles	35	20	ယ	30	N	12	2	21	16	25	17
Gender References	0	ယ	0	6	0	0	0	0	0	0	ယ
Los Angeles Times			`						\		
Articles	11	7	0) II) 1) H	9	14	16	15	4
Gender Kelerences	cc	C	c	c	c	C	c	C	-	c	c
Articles	202	24	9	7	œ	10	10	29	49	42	45
Gender References	15	0	0	8	0	0	0	1	N	1	1
Mobile Register	62	24	x	1	7	00	7	26	27	155 55	66
1)	0	•	0	•)	•	1	•	5	

Totals For All NewspapersArticlesGender ReferencesPercentage of Gender Use	Richmond Times-Dispatch Articles Gender References	Raleigh News & Observer Articles Gender References	New York TimesArticlesGender References	New Orleans Times-Picayune Articles Gender References
602 73 12%	0 &	27 18	34	89 16
202 11 5%	0 5	0 9	0 23	13 0
83 40%	0 5	ο ω	0	0 5
512 47 9%	6	86 12	60	15 2
37 0 0%	0	0 2	0 3	0 3
40 5%	ο ω	0 3	0 5	аа
150 28 19%	23	42 21	0	0 5
227 16 7%	0	21	26	23
261 3 1%	27 0	20	29 0	13 0
547 16 3%	15 0	21	0 33	85
281 13 5%	0	17 7	38	0

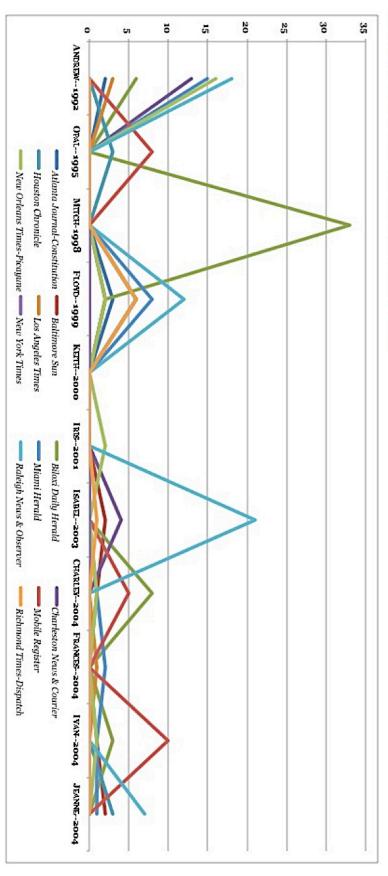


Figure 8. Gender reference use by city, 1992-2004

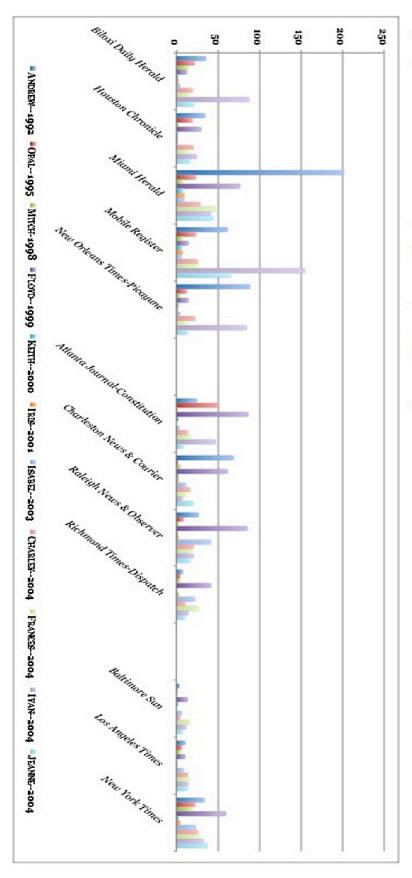


Figure 9. Number of articles by city and region, 1992-2004

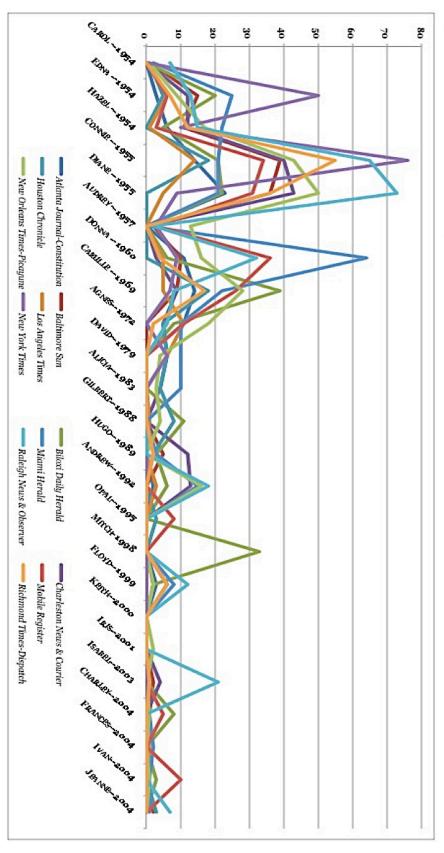
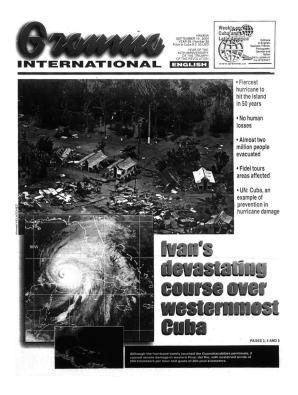


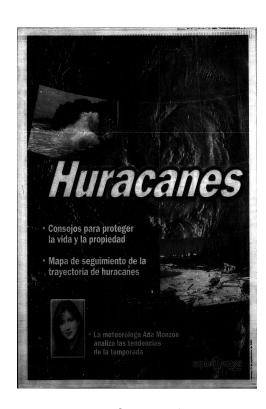
Figure 10. Gender reference use by city, 1954-2004

More Monsters & Gods: Representations of Modern Storms in the Caribbean

Changes in the number of articles produced about storms in the U.S. also occurred in both Mexico and the Caribbean cities during this period. Looking briefly at the style of Caribbean and Mexican newspapers for each hurricane it is evident that similar trends in the adoption of large newspaper segments devoted specifically to hurricanes were also practiced in the Caribbean and Mexico.³⁵







San Juan El Nuevo Dia, 2003.

Similarly, discussions of how and why hurricanes are named also appeared in articles throughout the region. For example, the *Havana Granma International*

³⁵ "Ivan's Devastating Course Over Westernmost Cuba," *Havana Granma International*, September 19, 2004: 1; "Huracanes," *San Juan El Nuevo Dia*, September 12, 2003: 4.

interviewed meteorologists at the Meteorological Institute, a governmentsponsored meteorological organization for Cuba. In the article, the naming process is explained briefly.

Another battle against hurricanes

BY ORFILIO PELAEZ

—Granma daily staff writer—

THE cyclone season for 2004 is indeed fulfilling forecasts made by specialists at the Meteorological Institute in May, when they predicted a total of 13 tropical organ-isms with names (acquired once the isms with names (acquired once they have reached the tropical storm phase), of which seven would become hurricanes.

oped in our geographical area, of which five have been hurricanes, including the extremely dangerous-lyam. An eleventh tropical depression formed in the arch of the Lesser Antilles yesterday afternoon,

which could today become tropical storm Jeanne.

The average number of named phenomena such as these during one season is ten. For that reason, if Jeanne does indeed form, the seasonal average will have been reached despite the fact the hurricane period does not finish until the end of November.

In an interview with Granma, Dr. Maritza Ballestar, a researcher at the Meteorological Institute and principal author of the Cuban forecast model for the season, said that the absence of the El Niño Southern Oscillation (ENSO) phenomenon at least until November, together with a significant warming of the sea in the tropical band of the Atlantic with temperatures above 30 degrees Celsius in the western Carib-

bean, are some of the factors that are favoring the development of cyclonic activity in 2004.

But beyond the probable fulfillment of these predictions, it is interesting to note that from 1998 to date, a higher than average number of tropical cyclones has been recorded every year.

In the years 1998 and 1999 there were 14 and 12, respectively. In 2000, the number of storms stood at 14 and of that total, eight converted into hurricanes, including three extremely intense examples. Alberto, category three on the Salfir-Simpson scale, and isaac and Keith, both at category 4.

category 4.
In 2001, there were 15 tropical storms in our region, of which nine became hurricanes. Of these, two – Iris and Michelle –

were category four, and two, Erin and Fe-lix, category three.

After a slight reduction in 2002, with 12 named cyclones (nine of which became hurricanes), the 2003 season registered 16 tropical storms, including seven hurri canes, three of which were extremely

canes, three of which were extremely in-tense (Kate, Fabian and Isabel, all category five). Last year's season was the longest since 1952, beginning prematurely in April and lasting up until December. The historical record for the greatest

The historical record for the greatest number of cyclones in any one period is that of 1933 when there were 21, followed by 1995 with 19. With respect to the highest number of hurricanes, the year 1969 witnessed 12.

Another Battle Against Hurricanes, Havana Granma International, 2004.36

Overall, discussion of the storms in Caribbean and Mexican newspapers was similar to the U.S. reaction in the layout, number of articles, and use of the U.S.-influenced, WMO-implemented naming system. However, the major question that remains is did these foreign newspapers gender storms past the 1980s? Looking at the *Nassau Daily Tribune*, it is obvious that the answer is yes; storms were consistently gendered past the 1980s.

³⁶ "Another Battle Against Hurricanes," Havana Granma International, September 19, 2004: 3.





Andrew, Nassau Daily Tribune, 1992.

Floyd, Nassau Daily Tribune, 1999.

In images from both Hurricane Andrew in 1992, and Hurricane Floyd in 1999, the storms are depicted in identical ways to male-named storms in the past.³⁷ They are portrayed as large-scale monsters sneaking up on residents and wreaking havoc. These monsters also appear to be very masculine, with strong features and easily identifiable anger fueling extreme strength. Overall, what this brief review of Caribbean and Mexican newspapers from this period shows is that these regions followed U.S. trends in number of articles and gender representation.

LIVING IN THE HURRICANE YEARS: A LOOK BACK AT ALICE TO JEANNE

In 1991, heavy metal singer Alice Cooper joined many other singers in writing a song about hurricanes. "Living in the Hurricane Years," was released

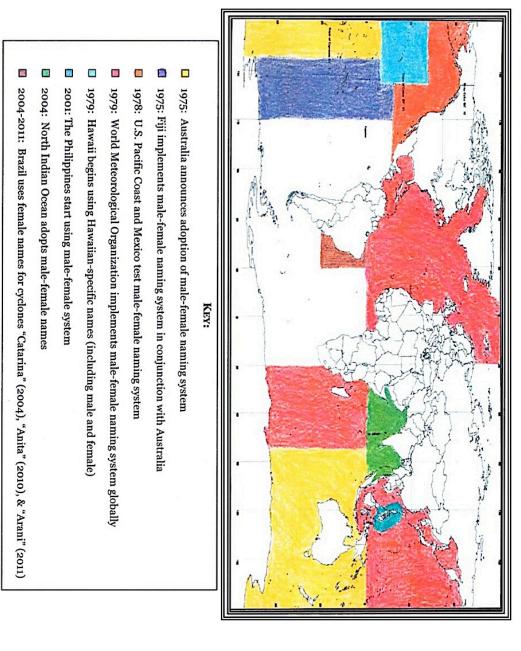
³⁷ "Hurricane Andrew," *Nassau Daily Tribune*, August 23, 1992: 5; "Hurricane Floyd," *Nassau Daily Tribune*, September 13, 1999: 5.

during a pivotal shift in the perception of hurricanes in new forms of mass media.³⁸ The late 1980s, 1990s, and 2000s were definitely the hurricane years, as constant television coverage, an increased number of newspaper articles, and online forums and blogs discussing hurricane impact and experiences permeated everyday U.S. culture. As a result, the hurricane during this period was a national and global event, watched and followed by millions in multiple ways. At no point in history before this had the hurricane been at the forefront of consciousness for so many people. This connected culture surrounding hurricanes yet again resulted in the adoption of completely new terminology and scientific understanding.

As a result, by the late 1990s and early 2000s, several new countries adopted naming systems for tropical storms for the first time. For example, as illustrated in the following map, the Philippines started to use a male-female system in the 1999-2000 season. Meanwhile, the North Indian Ocean region adopted the male-female system for typhoons in 2004. The same year, Brazil used a female name for a storm off its coast, calling it "Catarina." While these storm naming regions were regulated by the World Meteorological Organization, the adoption of these naming systems during this time period was directly influenced by two factors. First, the continued use of naming systems throughout other regions in the world made it possible to suggest introducing a naming system for other tropical storms. But more importantly, the increased discussion of named systems by the media during the 1990s and 2000s heightened interest in named storms overall.

³⁸ Alice Cooper, "Living In The Hurricane Years," Bearsville Studios, July 2, 1991, 3:58.

Map 4. Implementation of Male-Female Naming System for Hurricanes, Typhoons, and Tropical Cyclones, 1975-2011



At the close of the 1990s, John Stewart had joked on his nightly comedy show that the next storm would always be the storm that outrivaled all before it, depending on how the media spun the storm, of course. However, which storm really was the "storm of the century" during the 1990s to mid-2000s? Looking at statistics from key storms during this period, it is obvious that the most discussed storm was Hurricane Andrew in 1992, but the most gendered storm was Hurricane Mitch in 1998. (See Table 15 on pages 277 and 278).

In public memory, though, depending on region, the most recent barrage of four consecutive storms in 2004 (Charley, Frances, Ivan, and Jeanne), lumped together, made up the real "storm of the century." Whether this would be the case in the future, as John Stewart said, was up for debate and modern media was more than ready to support the cause. One thing was certain, after a half-century of naming storms everything from Alice to Jeanne, the naming system had continued even with major changes in the way hurricanes were forecasted, discussed, and commemorated. Inseparable from public memory, and building momentum in a modern media era, the practice of gendering hurricanes was evolving.

As a result, the period of 1990 to 2004 was more than just a discussion about which hurricane was the storm of the century. It was yet again a cultural turning point in the way the gendering of hurricanes was viewed by Americans as a whole. No longer solely dominated by an all-male post-WWII Weather Bureau and media, and influenced by an era of political correctness, the gendered hurricane should have ceased to exist. However, gendered descriptions of hurricanes were not only regurgitated from previous eras, but were reinvigorated

and supplemented by the modern media spin culture. From CNN and TWC to MTV and the Internet, these ideas about hurricanes seeped into every facet of American life. As a result, the confluence of these cultural influences not only impacted, but created the next "perfect storm."

CHAPTER 10

KATRINA YOU BITCH!: POPULAR CULTURE & THE HURRICANE

Sitting on the steps in the Tremé, a neighborhood just outside of the French Quarter, New Orleans poet Gian Smith recites a horror-filled spoken word poem about Hurricane Katrina as graphic images splash across the screen during the second season opening of HBO's hit television series, *Treme*. (See Gian Smith's poem on page 290). Meant to be a teaser for the series, which chronicles the post-Hurricane Katrina realities of a crippled city, Smith sets the tone immediately with the spine-tingling statement, "I got the rain in my veins, the flood water in my blood." As he continues, Smith's cadence and message eerily describe a hellish purgatory created by a "woman." "Katrina had foresight and long-term goals," he states solemnly. "There is no fury like her rage hell bent" – "she's the apocalypse heaven sent," he continues with guarded enmity. Finally, he sums up that he "won't let go" of the "beautiful storm," and as implied, it will not release him.¹

Smith's spoken word poem, accompanied with the simple soundtrack of recognizable New Orleans sounds like a steamboat horn, jazz trumpet, police sirens and gunfire, was an understandable choice for the edgy *Treme* series as it

_

¹ Gian Smith, "O' Beautiful Storm," poem as spoken in "Season 2: O Beautiful Storm Extended Tease," *Treme: Season 2*, HBO Podcasts on iTunes, March 21, 2011, 1:32.

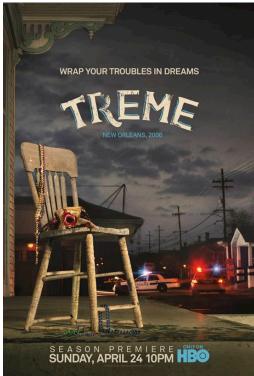
touches briefly on major themes surrounding Hurricane Katrina's aftermath. Debuting right before the five-year anniversary of the storm in April 2010, the show averaged 3.2 million viewers per episode in its first season and is currently renewed for a full five seasons. The sales of its commemorative music CDs, Amazon and iTunes downloads, and DVDs have cemented *Treme* as a hit nationally and internationally.

When placed in context with the fact that the first season debuted five years after Hurricane Katrina, the amount of interest in a show about a long-passed hurricane's aftermath is groundbreaking. Yet, when considering that the show is about Hurricane Katrina, this is not surprising. Hurricane Katrina and its aftermath spurred a massive popular culture movement unlike any other natural disaster in history. From bumper stickers and t-shirts to Mardi Gras beads and music, Katrina and the consumer culture around it, was and continues to be explicitly gendered, proving yet again the irrevocable power of a named natural disaster. More importantly, the reaction to Katrina on multiple fronts – from consumer culture to national reaction to its aftermath – has altered the way that Americans perceive and discuss the sexuality of storms.

² Dave Walker, "How Many People Watched 'Treme' on HBO?" *New Orleans Times-Picayune* on Nola.com, June 27, 2010, http://www.nola.com/treme-hbo/index.ssf/2010/06/how_many_people_watched_treme.html.

O'BEAUTIFUL STORM BY GIAN SMITH Treme Season 2 Teaser Trailer





I got the Rain in my veins...

The floodwater in my blood makes my heart beat harder.

I've got the scent of the death and decay in the wind

Sinking into my nose and under my skin.

She's the music in my ears, and the mold in my soul.

Move with her like bellies to congo drums Write a sonnet to her, serenade her, recite her a poem.

Bump her like sissy bounce or mellow into her like Marsalis.

Let her weave through your brain like a song that's moved you and you can stop the flow.

'Cause Katrina had foresight and longterm goals.

She's Death's greatest stage.

She's the 11th plaque.

She's five men dead in a truck from a murderous rampage.

There is no fury like her rage hell bent. She's the apocalypse heaven sent.

A city's extinction level event.

She's men's residence changing homes, chickens coming home to roost again.

She's the perfect combination of wind and neglect.

And Amir's criminals in City Halls and black robes whose Congressional bills pass at levees expense.

Whose gavel smacks smash homes and crack domes.

O' beautiful storm, I won't let you go.

KATRINA: A NAME THAT WILL LIVE IN INFAMY

Following the disastrous 2004 hurricane season, the Gulf Coast anxiously awaited the 2005 season. As a result, newspapers printed articles about the need to increase "hurricane preparedness" throughout the U.S. as many speculated whether "this one means business." Nearly all newspapers concluded that "when you see Jim Cantore" on television, "it's a bad, bad omen," and unfortunately, they had already seen a lot of him this season.4

While the 2005 season was off to bad start, the early storms were quickly disregarded as the least worrisome storms of the season when the next major storm, Katrina, geared up to hit the Gulf Coast. Hurricane Katrina was an entirely unique and all-encompassing storm that in popular memory lingered much longer than its period of impact. Thus, to gauge the full ramifications of reaction to Hurricane Katrina it is necessary to break from this dissertation's traditional method of discussing a storm and its aftermath. There are three periods of reaction to Katrina that are important to consider when describing the gendering of the storm and its aftermath. The first is the period of initial impact, both on a local stage and a national one. The second is the period of initial recovery, the six-month period following the storm, which while followed closely

³ Discussion of Dennis in 277 newspaper articles throughout the country mimicked previous discussion of powerful male-named storms. Of the 277 newspaper articles, 18 gender references were made, which equated to approximately 6 percent gender use overall. This was equivalent to the 2004 storms. Similarly, descriptive terms used when referring to Dennis were also gendered in traditional methods. References to Dennis as "diabolical" a "monster," "menace" or causing damage equivalent to "bomb blasts" or "flying missiles" all replicate previous terms used to describe male storms. "Hurricane preparedness" in: "Preaching Hurricane Preparedness," *Biloxi Sun-Herald*, July 8, 2005: A2; "This one means business" in: "This One Means Business," *Biloxi Sun-Herald*, July 8, 2005: A2.

^{4 &}quot;This One Has A Lot of Oomph," Miami Herald, July 9, 2005: 1A

on a national stage, diverges dramatically in local memory. The final is the period of official commemoration, the continuation of expression and redefinition of Katrina the storm, Katrina recovery, and Katrina in memory on a national stage at a one-year mark, five-year mark, and upcoming ten-year mark. This period also includes the comparison of subsequent storms to this pivotal cultural marker.

By studying these three periods through focusing on the memory of Katrina as a gendered storm it is possible to fully capture the reaction to the storm on multiple fronts. Similarly, this showcases the impact of the storm on storm naming and gendering today. Overall, as this chapter will show, Katrina, and everything it represents, has permanently transformed the perception of hurricanes in popular culture.

UNDER SIEGE BY KATRINA: LOCAL REACTION

It was "The Storm We Always Feared," the *New Orleans Times-Picayune* proclaimed.⁵ The region was "under siege by Katrina." With horrific images fed to national news networks of New Orleans destroyed and under water with people sitting on rooftops, packed outside an already crowded Superdome, or stranded on bridges, "the first casualties of Hurricane Katrina" were reported with revulsion.⁷ As "the agony of Katrina" was described in the newspaper text

⁵ "Katrina: The Storm We've Always Feared," *New Orleans Times-Picayune*, August 30, 2005: A1.

⁶ Ibid, A1.

⁷ "Pay Phones Pick Up When Cellular Service Fails," New Orleans Times-Picayune, August 31, 2005: A12.

there was yet again an emphasis on the uniqueness of this storm in comparison to others. Asking whether "New Orleans would ever be the same" reporters and the public alike weighed Katrina against other storms.⁸ "Cantankerous Katrina" was "Camille II" as soon as it appeared, proclaimed the *Biloxi Sun-Herald*.⁹ "Cantankerous," scoffed the *Mobile Register*, Katrina was a "killer." Leaving "death and destruction" across the coast, "the hellish aftermath of Hurricane Katrina" was remembered, all agreed, simply as, "catastrophic." ¹¹

Descriptions of Katrina from local newspapers in New Orleans, Mobile, and Biloxi focused on the strength of the storm in reference to other storms. For example, to emphasize the power of this female-named storm, reporters relied on past descriptions of both male and female named hurricanes including war, bombs, and chaos. It "ravage[ed]" the Central Business District and "le[ft] its main artery, Poydras Street, looking little better than a war zone," stated the *New Orleans Times-Picayune*. "Her" "stinging assault" was felt through "smacks," "stabs," "blasts," and "knockout punch[es]" that "victimized" and caused "chaos," others proclaimed. Its shriek had been worse than "banshees," "upend[ing]" life

⁸ "Will New Orleans Ever Be The Same?" New Orleans Times-Picayune, September 1, 2005: A7; "Years of rebuilding expected to create national shortages," New Orleans Times-Picayune, September 1, 2005: A7.

⁹ "Cantankerous Katrina" in: "In Katrina's Sights," *Biloxi Sun-Herald*, August 27, 2005: A1; "Camille II" in: "Roberts Visit Home Is Excruciating," *Biloxi Sun-Herald*, August 31, 2005: A3.

¹⁰ "Others Look at Katrina," *Mobile Register*, August 31, 2005: A17.

^{11 &}quot;Katrina: The Storm We've Always Feared," A1.

¹² "CBD Landmarks In Tatters; Poydras Littered With Debris," *New Orleans Times-Picayune*, August 30, 2005: A8.

¹³ "Her" in: "Gasoline Going Fast; Distributors Say More on Way," *Mobile Register*, September 1, 2005: A12; "Smacks" and "Stinging assault" in: "Storm Smacks Alabama Coast," *Mobile Register*, August 30, 2005: A1; "Stabs" in: "Storm Stabs Airlines," *Mobile Register*, August 30, 2005: A12; "Blasts" in: "Katrina Blasts Baldwin," *Mobile Register*, August 30, 2005: Z1; "Knockout punches" in: "Help Trickles In," *Biloxi Sun-Herald*, September 2, 2005: 1 & 10;

throughout the region.¹⁴ Finally, this "horror show" had stopped its "rampage" and exited leaving the region "on the brink of anarchy" and looking like a mixture of "downtown Baghdad" and the aftermath of "Hiroshima."¹⁵

Both the *Mobile Register* and the *Biloxi Sun-Herald* used gender references when referring to Katrina in text. For example, as the headline for the *New Orleans Times-Picayune* read "CATASTROPHIC" on August 30, an image of Katrina as a woman appeared in the *Mobile Register*. Consciously labeled with a hurricane symbol skull and cross bones tattoo and depicted as a scary, spindly woman with long nails sharpened to inflict severe pain, Katrina fit the image of a woman feared by all.

"**7**7;

[&]quot;Victimized" in: "National Economic Tragedy Likely," *Biloxi Sun-Herald*, August 31, 2005: 11; "Chaos" in: "Katrina's Reign and Chaos Not Welcome," *New Orleans Times-Picayune*, August 31, 2005: A12.

¹⁴ "Banshees" in: "What Happened to the Relief Response," *Biloxi Sun-Herald*, September 2, 2005: 1 & 10; "Upending life" in: "Katrina Upends Bayou La Batre's Way of Life," *Biloxi Sun-Herald*, September 2, 2005: 22.

¹⁵ "Horror show" in: "Baldwin, Mobile Take in Evacuees," *Mobile Register*, September 1, 2005: B1; "Rampage" in: "After Katrina, Some Islanders Have Little to Come Home To," *Mobile Register*, August 31, 2005: B1; "On the brink of anarchy" in: "Brink of Anarchy," *Biloxi Sun-Herald*, September 2, 2005: 21; "Downtown Baghdad" in: "We've Lost Our City," *Biloxi Sun-Herald*, August 31, 2005: 21; "Hiroshima" in: "It Looks Like Hiroshima," *Biloxi Sun-Herald*, August 31, 2005: 6 & 7.



Voodoo Priestess Katrina, Mobile Register, 2005.16

Despite the use of gender in the *Mobile Register* and *Biloxi Sun-Herald*, there were no specific gender references made about Katrina in the *New Orleans Times-Picayune*. ¹⁷ With the *Times-Picayune* itself under duress due to displacement, the then internet-only medium illustrated that reporters had hardly internalized what had happened to the New Orleans they were writing about when mentioning Katrina. Reporting on looting, flooding, rescue efforts, and contraflow issues, reporters' reaction to the hurricane itself was limited to a few articles. By referencing the severity of the storm, comparing it to war zones, other hurricanes, and massive casualties like 9/11, the reporters showed their insecurity with how to explain their ravaged surroundings. This is particularly evident when reviewing the political cartoons circulating in the *Times-Picayune* and other more removed national newspapers. Focusing on families, the

¹⁶ J.D. Crowe, Depiction of Katrina as Voodoo Priestess, *Mobile Register*, August 30, 2005.

¹⁷ Out of 64 newspaper articles about Hurricane Katrina in the *New Orleans Times-Picayune*, no references to Katrina's gender were made.

cartoons from the *Times Picayune* reflect similar objectives. Both show the loss of property and the emphasis on family being the most important thing that Katrina had not destroyed.



New Orleanian Reaction, New Orleans Times-Picayune, 2005.18

In the end, through comparing storms and disasters whether using gendered references or not, reporters from Mobile, Biloxi, and New Orleans concluded that no other storm had been as bad as Katrina. In doing so, they effectively separated Katrina in the minds of locals as a unique, "perfect storm" that should be remembered.¹⁹ How the storm would be portrayed on a national stage, however, was an entirely different story.

_

¹⁸ S. Kelly, *New Orleans Times-Picayune*, August 30, 2005: Io8; S. Kelly, *New Orleans Times-Picayune*, September 1, 2005: A12.

 $^{^{19}\,\}mathrm{``Katrina}$ Bulks Up To Become A Perfect Storm," New Orleans Times-Picayune, August 28, 2005: A1.

A HORROR SHOW: NATIONAL REACTION TO KATRINA

The Katrina that was described in the *New Orleans Times-Picayune*, *Biloxi Sun-Herald*, and *Mobile Register* differed dramatically from the Katrina depicted in newspapers throughout the country. Removed from the impact zone and influenced by the 24-hour news coverage of Katrina's effect on the Gulf Coast region, national coverage of the storm was gritty, apocalyptically narrated, and heavily-laden with gendered references.

From the get-go, Katrina was a "doomsday scenario" stated the *Charleston Post & Courier*. The "coastal defenses" were already weakened with the 2004 season, reported the *New York Times*. Now, with "Nature's revenge" in full swing in the following season, it was pure "chaos." The "atomic bomb" finally went off, confirmed the *Houston Chronicle*, as "nearly 80% of [New Orleans was now] under water." In the end, the *Raleigh News & Observer* stated, New Orleans looked like "Pompeii," and Mississippi, "Hiroshima." 4

As described, Katrina had behaved like a "Little Andrew" at first as "she churned north" and "slapped the Florida Keys." Then Katrina turned into a

²⁰ "Storm Claims at Least 55: New Orleans Spared Full Fury of Katrina; Gulf Coast Towns Deal with Devastation," *Charleston Post & Courier*, August 30, 2005: 1A & 4A.

²¹ "After Centuries of 'Controlling' Land, Gulf Residents Learn Who's Really the Boss," *New York Times*, August 30, 2005: A14.

²² "Nature's revenge" in: "Nature's Revenge," New York Times, August 30, 2005: A18.

²³ "Atomic bomb" in: "Swept Off With a Broom," *Houston Chronicle*, September 1, 2005: A22; "80% under water" in: "New Orleans: 80% of the City Under Water; Mississippi: Death Toll Surpasses 100 & May Go Much Higher 'Heartbreaking," *Houston Chronicle*, August 31, 2005: A1.

 $^{^{24}}$ "Katrina Leaves Despair As Water, Death Toll Rise," $Raleigh\ News\ \&\ Observer,$ August 31, 2005: 1A & 13A.

²⁵ "Little Andrew" and "slapped the Florida Keys" in: "Gaining Power, Katrina Heads for Land Again," *Charleston Post & Courier*, August 27, 2005: A1 & A9; "She churned north" in: "The Hot & Bothered Ask: 'Where Is FPL?'" *Miami Herald*, August 28, 2005: 1A.

"menacing" "monster" that "wreak[ed] havoc" "bearing down" with "full fury."²⁶ Like "a toxic gumbo" the storm "walloped" with "major blows" on the already "weather beaten" New Orleans.²⁷ With "slow and uncoordinated" movements that were both "deadly" and "fickle," the storm then "barreled" past New Orleans and "ripped" up the Gulf Coast.²⁸ In the end, the region looked worse than an "atomic bomb" "strike zone" as Katrina had "swept" some regions off the map with "a broom."²⁹

As headlines like "New Orleans Slides Into Chaos" and reports of looting and "anarchy" in New Orleans appeared in newspapers throughout the country, attention on the aftermath of Katrina soon focused almost explicitly on the city.³⁰ As "a city awash in death," New Orleans "face[d] the fight of its life" after this traumatic experience, stated the *Atlanta Journal-Constitution*.³¹ While some newspapers like the *Raleigh News & Observer* questioned whether to "Rebuild it or move it?" within days after the storm, others reflected grimly on the New

_

²⁶ "Menacing" in: "Hurricane Lashes a City Abandoned," *Los Angeles Times*, August 29, 2005: A1 & A11; "Monster" in: "Life and Death Make Everything Else Unimportant," *Baltimore Sun*, August 31, 2005: 1A; "Wreaked havoc" and "bearing down" in: "Hurricane Packs Punch on the Energy Markets," *Los Angeles Times*, August 30, 2005: C1 & C2; "Full fury" in: "Dozens Killed, Damage Heavy as Katrina Roars In," *Los Angeles Times*, August 30, 2005: A1 & A12.

²⁷ "Toxic gumbo" in: "Nothing but a Nightmare," *Raleigh News & Observer*, September 2, 2005: 1A & 15A; "Walloped" in: "Hurricane Packs Punch on the Energy Markets," *Los Angeles Times*, cited previously; "Major blows" in: "Hurricane Is Felt on Many Fronts," *Los Angeles Times*, August 31, 2005: C1 & C5.

²⁸ "Slow and uncoordinated" in: "A Diminished FEMA Scrambles to the Rescue," *Los Angeles Times*, September 1, 2005: A23; "Deadly" and "fickle" in: "Katrina Plucks 7 From Disparate Backgrounds," *Miami Herald*, August 27, 2005: 1A; "Barreled" and "ripped" in: "Misery and Water Keep Rising," *Los Angeles Times*, August 31, 2005: A1 & A20.

²⁹ "Atomic bomb," "swept," and "a broom" in: "Swept Off With a Broom," *Houston Chronicle*, cited previously; "Strike zone" in: "Katrina," *Richmond Times-Dispatch*, August 30, 2005: A8.

³⁰ "New Orleans Slides Into Chaos; U.S. Scrambles to Send Troops," *Los Angeles Times*, September 1, 2005: A1.

³¹ "City Awash in Death Faces Fight of its Life," *Atlanta Journal-Constitution*, September 1, 2005: A1.

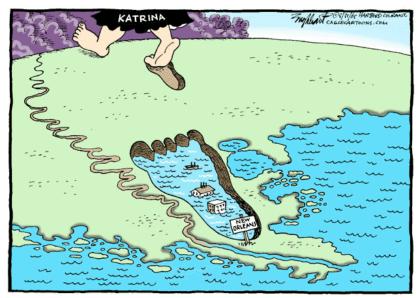
Orleans that once was. 32 For example, the *Baltimore Sun* asked readers to "Share Your Memories of New Orleans" as it might be gone for good. 33

While newspaper coverage throughout the storm all proclaimed Katrina the worst storm of all, only 4 of the 9 U.S. cities studied used gender explicitly in text. Despite the fact that very few specific gender references were made in articles, all newspapers used gendered descriptors of past hurricanes to illustrate Katrina. For example, Katrina was described as "fickle" "wreaking havoc" "chaotic" and "slapping." Similarly, while gender was subliminally present in New Orleans political cartoons, it was explicit in photographs and cartoons in national newspapers. Using traditional representations of the housewife to more specified New Orleans references, the Katrina portrayed on a national scale was a bad woman in every aspect.

The most explicit example of this was in the *Hartford Courant* where Katrina was blatantly represented as a woman. Stomping across the southern United States, she left a giant footprint where New Orleans should be as she swung her skirt happily along the Mississippi River to the north. In the image, New Orleans is clearly marked with a little sign and rooftops with people sitting on top of them, leaving no room for suggestion as to who has caused this damage to New Orleans – it was a woman, as clearly marked by the "Katrina" label on the skirt. Similarly, by depicting Katrina as barefoot and the "land" she is walking on as sand, the cartoon suggested that the task of destroying New Orleans was like a walk on the beach for this bad woman.

³² "Ahead for New Orleans: Rebuild it or Move it?" *Raleigh News & Observer*, September 2, 2005: 14A.

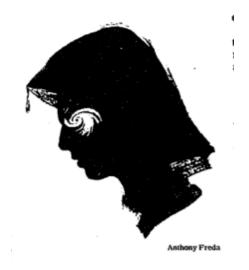
^{33 &}quot;Share Your Memories of New Orleans," Baltimore Sun, September 2, 2005: 2C.



Large Footprints, Hartford Courant, 2005.34

Other newspapers were less explicit about their representations of Katrina. However, gender was still present in all the images. For example, in the *New York Times*, a peculiar cartoon appeared related to Katrina. In the image, a female figure as clearly illustrated by the hair and facial features is shown to have a hurricane symbol in its eye. At first glance, it is obvious that the cartoonist's depiction could be read in two ways. First, that the woman was seeing Hurricane Katrina. Second, that the woman, in fact, was Hurricane Katrina.

³⁴ Bob Englehart, Depiction of Katrina, *Hartford Courant*, August 27, 2005.



Stormy Eye, New York Times, 2005.35

Combining local and national newspapers together, a total of 979 articles appeared discussing Katrina, the most of any storm to date. With the vast number of newspaper articles, only 24 gender references were used in text. In comparison to local newspapers, national newspapers followed similar trends in gender use and depiction. While local newspapers did use gender within text more frequently than national newspapers, it is obvious that national newspapers did portray Katrina as a gendered storm as well. However, Katrina was soon followed by Hurricane Rita, changing perception of the storm yet again.

RITA & WILMA: DÉJÀ VU KATRINAS

Less than a month after Hurricane Katrina, a subsequent storm, Hurricane Rita threatened the Gulf Coast again. Sweeping along a familiar path, residents just returning home from Hurricane Katrina were told to flee the oncoming storm.

³⁵ Anthony Freda, Katrina, New York Times, August 31, 2005: A18.

"Rita rakes Florida Keys," proclaimed the *Charleston Post & Courier*, signaling the first of Rita's damage.³⁶ The "pinwheeling threat" "ballooned in size and pulsed" as it headed west towards Louisiana, leaving "calling cards," along the entire coastal region.³⁷

"Louisiana shivers as hurricane shifts," wrote the *Los Angeles Times*, while remarking that "she's a biggie" to be feared in the same light as Katrina.³⁸ "Rita and her hellish predecessor" "menaced" "lashed out" "slapped" "sideswiped" "charged" and loomed "ominous[ly]." Finally, "she" set "her sights" on Louisiana. It was "like a one-two punch," wrote the *New Orleans Times-Picayune*, "we're already on our backs [because of Katrina] and we're trying to get up and you're kicking us while we're down."³⁹ Finally, Rita turned towards Texas, "vent[ing] her fury" to leave its final "strike zone" "battered."⁴⁰

What can be seen immediately when reviewing the reaction to Rita in the national newspapers is the return to the pre-established system of gendering female hurricanes.⁴¹ Rita was described as a "she," "her," "slap[ping]," "leaving calling cards," and "venting her fury." Statistically, 1,072 articles appeared in newspapers around the country discussing Rita. Not surprisingly, 59 gender

³⁶ "Rita Rakes Florida Keys: Katrina Evacuees Leaving Houston," *Charleston Post & Courier*, September 21, 2005: 1A & 9A.

³⁷ "Rita Lashes Out At Texas," *Charleston Post & Courier*, September 24, 2005: A1 & 7A.

^{38 &}quot;Louisiana Shivers as Hurricane Shifts," Los Angeles Times, September 23, 2005: A16.

³⁹ "Pinwheeling threat" in: "Campus Crowd Unhappy With Decision to Stay Open," *Miami Herald*, September 21, 2005: 3B; "Ballooned in size and pulsed" in: "Region Braces For Floods; Winds May Hit Category 2," *Miami Herald*, September 20, 2005: 1A; "Calling cards" in: "Rita Could Tear Into Oil Industry," *New Orleans Times-Picayune*, September 22, 2005: B7.

⁴⁰ "Vent her fury" in: "Rita Vents Her Fury," *Houston Chronicle*, September 24, 2005: A1; "Strike zone" in: "In Rita's Strike Zone," *Houston Chronicle*, September 25, 2005: A18; "Battered" in: "Battered but Still Flying," *Houston Chronicle*, September 25, 2005: B5.

⁴¹ Out of 144 newspaper articles about Hurricane Rita, 3 references to Rita's specific gender were made. *New Orleans Times-Picayune*, September 22-25, 2005.

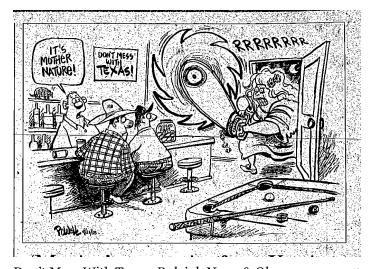
references were made in the articles, an increase from gender reference made in Katrina related articles. The staggering number of articles describing Rita and the increase in gender references was directly related to continued discussion of both storms. In most of the articles about Rita, Katrina is mentioned. Similarly, articles referring to Rita's gender also usually mentioned Katrina as a gendered storm as well.

Visual representations of Rita also confirmed this trend. For example, in the *New Orleans Times-Picayune* Rita is represented as Mother Nature, walking behind Katrina evacuees in Houston, Texas. Carrying a rolling pin, this angry woman whose bra strap is showing is noticeably out of her element, or more specifically the home. Threatening to beat the Katrina evacuees yet again as if rolling out pesky hardened dough, the feminized image of Rita, a.k.a. Mother Nature, reflects the increasing return of "the bad woman" to hurricane description.



Rita/Mother Nature, New Orleans Times-Picayune, 2005.42

Meanwhile, in the *Raleigh News & Observer*, Rita is represented as Mother Nature again, while holding a chainsaw. In the image, Rita appears to be threatening not only Texas, but particularly, the men of Texas.



Don't Mess With Texas, Raleigh News & Observer, 2005. 43

⁴² Depiction of Rita/Mother Nature, *New Orleans Times-Picayune*, September 22, 2005: B8.

^{43 &}quot;Don't Mess With Texas," Raleigh News & Observer, September 22, 2005: 14A.

The *Raleigh News & Observer* cartoonist Sandy Huffaker presents both Katrina and Rita in the following image. As illustrated, Katrina is introducing her "baby sister" Rita on a stage at an S&M show. The sultriness of both Katrina and Rita is at the forefront of this image but both of the female storms are portrayed as ugly and class-less. This yet again points out the use of sexuality to illustrate the "bad women" in society.



Madam Katrina's S&M Show, 2005.44

Representations of Rita as a female were found in multiple international newspapers, as well. In Sweden, Rita appears as a voluptuous woman, drooling at the mouth over a delicious slice of Texas. Meanwhile, a Bulgarian newspaper featured Katrina and Rita as mannish-looking ballerinas with chainsaw tutus hoisting up a helpless President George W. Bush.

-

 $^{^{44}\,\}mathrm{Sandy}$ Huffaker, "Madam Katrina's S&M Show," Caglecartoons.com, September 21, 2005.



Voracious Rita, Norra Västerbotten, 2005, and Hurricane Ballet, Sega, 2005.45

Following Rita, when "Hurricane Wilma metastasized from a Cat 1 to a Cat 5 hurricane overnight," on October 19, 2005, the *New Orleans Times-Picayune* opinion articles screamed, "Not Another One!"46 Publishing a map of where Hurricane Katrina bodies were found in the city the same day, Wilma the, "slow moving tempest," was exasperating.⁴⁷ Also the same day, an article described how the World Meteorological Organization had to "turn to the Greek alphabet" for more storm names as the 2005 season's list had been depleted.⁴⁸ The *Raleigh News & Observer* even nicknamed Wilma, "Groundhog Hurricane" while

⁴⁵ Olle Johansson, "Voracious," *Norra Västerbotten*, as posted on CagleCartoons.com, September 23, 2005; and, Christo Komarnitski, "Hurricane Ballet," *Sega*, as posted on CagleCartoons.com, September 22, 2005.

⁴⁶ Ivor Van Heerden and Mike Bryan, The Storm: What Went Wrong and Why During Hurricane Katrina—the Inside Story from One Louisiana Scientist (New York: Viking, 2006); "Not Another One! Alpha Storm Forms," New Orleans Times-Picayune, October 23, 2005: A2.

⁴⁷ "Mexican Coast Thrashed As Hurricane Wilma Stalls," *New Orleans Times-Picayune*, October 23, 2005: A2.

⁴⁸ "Not Another One! Alpha Storm Forms," A2.

the *Charleston Post & Courier* stated that surely this was the "hurricane season from hell."⁴⁹

Since "Wilma hasn't decided what she's going to do," groaned the *Houston Chronicle* all on the Gulf Coast were forced to wait queasily. Meanwhile, the *New York Times* hopefully proclaimed, "we do not want her coming up toward New England."⁵⁰ In Miami, signs appeared stating, "Go Home Wilma, Fred Is Waiting For You," referencing Wilma Flintstone, the popular prehistoric cartoon character.⁵¹ Yet Wilma arrived in Florida just to "drag her heels," striking with a "ruinous dash across the state," stated the *New Orleans Times-Picayune*.⁵² Wilma was, "like a rocket," with "erratic" movements while "she" "pushed her way through."⁵³ At the end of Wilma's "howling," residents breathed a sigh of relief, but remained cautious about the next storm, "Alpha."⁵⁴

In the end, discussion of Wilma in newspapers throughout the country reflected consistent trends of gendering female storms. Of the 239 articles that described Wilma's movements, 18 gender references were made. The descriptors used for Wilma again mimicked previous female storms. Similarly, throughout

_

⁴⁹ "Wilma Slams Tourist Hot Spots," *Raleigh News & Observer*, October 22, 2005: 1A & 12A; "Hurricane Hell," *Charleston Post & Courier*, October 25, 2005: 2B.

⁵⁰ "Wilma's Already Dousing Florida," *Houston Chronicle*, October 23, 2005: A12; "Drought to Flood, Just like That," *New York Times*, October 23, 2005: CT5.

^{51 &}quot;No Let Up In Mexico; A Warning in S. Florida," *Miami Herald*, October 23, 2005: 1A.

⁵² "Drag her heels" in: "Wilma Knocks Wind Out Of Florida Keys," A14; "Ruinous dash" in: "Florida Starts Cleaning Up From Wilma," New Orleans Times-Picayune, October 26, 2005: A4.

⁵³ "Like a rocket" in: "Wilma takes aim at Florida," *Biloxi Sun Herald*, October 24, 2005: A1 & A4; "Erratic" in: "Florida Waiting on Slow Wilma," *Mobile Register*, October 22, 2005: A1; "She" in: "All South Florida is Warned," *Mobile Register*, October 23, 2005: A12; "Pushed her way through" in: "In Cancun Hotel, They Shouldered the Hurricane," *Los Angeles Times*, October 23, 2005: A14.

⁵⁴ "Howling" in: "Warm Earth, Bigger Storms," *Baltimore Sun*, October 23, 2005: 1A; "Alpha" in: "Wilma Lashes Mexico Resorts," *Los Angeles Times*, October 23, 2005: A1 & A11.

articles about Wilma, references to the aftermath and strength of both Rita and Katrina appeared.

Asking for It: The Impact of the Feminization of New Orleans Post-Katrina

Despite panic over Rita and Wilma, Katrina became the representative storm of the entire 2005 hurricane season. Within the six-month period following the storms, public discussion of the hurricanes focused primarily on Katrina alone. Similarly, discussion of the regions affected by the hurricane season also narrowed to focus solely on New Orleans. New Orleans' Katrina experience became the symbolic representation of a time period and regional situation. As a result, in popular culture, "Katrina," the name, came to represent everything to do with the storm, the aftermath, and the ensuing cultural climate. Fleshed out through mediums of expression in popular culture, Katrina, as a feminized object became a social commentary on a multitude of cultural situations that had never entered into a description of a hurricane before. Similarly, descriptors used to describe this new type of feminized hurricane and aftermath expanded.

From the beginning of the storm's impact and continuing years after, discussions of the reason why Katrina wrought such extreme damage in New Orleans have been framed in explicitly gendered terms. While other cities experiencing devastating storms also experience a period of examination framed in gendered terms, such as "weakness" or descriptions of "being held hostage," it

is often short-lived. Due to the intensity of Katrina, the continuous failure of relief support, and the longer history of New Orleans itself, the negative feminization of Katrina caused an implicit association of femininity to New Orleans.

New Orleans has a long history as a city known for frivolity and licentiousness, thus, when a storm enters the area, as it has done many times in the past, there has continuously been a discussion on whether the storm was there to wipe out the sin that exists in the city. While this concept of a storm sent to wipe out sin exists in other cities and time periods, it is particularly prevalent in New Orleans. As such, when Katrina struck New Orleans with momentous force, almost immediately religious pundits and blogs proclaimed it divine retribution.

However, as the aftermath of the storm continued to play out on the media circuit in the following months, references to New Orleans changed – with the city itself becoming increasingly feminized. Delayed federal response and fumbled local response to the disaster played out with slanderous terminology referencing the storm's aftermath and New Orleans in a combination of sexually and racially biased terms. For example, as described by the *New Orleans Times-Picayune*: "They act as if we are a burden. They act as if we wore our skirts too short and invited trouble." As a result of one storm, the feminized post-Katrina New Orleans became akin to a responsible rape victim or the undeniably negative

_

⁵⁵ "It's Time For A Nation To Return The Favor," *New Orleans Times-Picayune*, November 19, 2005: 1A.

image of a "welfare mother" looking for handouts in an already-taxed disaster relief system.

The act of the feminization of New Orleans only increased the production of this concept of sexual deviancy illustrated through the storm's aftermath. As a result, this new narrative of a storm's destruction post-Katrina has expanded the definition of a gendered storm to include the city's influence as well. In the case of New Orleans, the feminized storm wiped out sin in a city deemed sexually and civically delinquent, incapable of a structure without corruption. Feeding off of this image of a city infested with sin, the storm in popular memory became a reflection of all that was deemed sexually or culturally deviant including the process of reconstructing the broken city. No longer just an "erratic woman" or a "crazed housewife," this storm became a Jezebel — immoral, rotten, and corrupt — a truly evil woman for years to come. As a result, it has forever shifted the image of what describes a gendered storm and how long scandalous descriptions remain attached.

CONSUMING KATRINA: THE STORM IN MEMORY

One of the easiest examples to illustrate this change in descriptions of Katrina over time and the tenacity of their existence is through the memorabilia produced for private and tourist consumer markets. Immediately following Katrina, several newspapers throughout the country printed articles about t-shirts for sale that stated that the owner had "survived Katrina." While this

⁵⁶ "Evacuees Flee New Storm," Mobile Register, September 21, 2005: 8A.

trend in selling t-shirts related to hurricanes had existed since the 1980s, within 6 months following Katrina many other items were produced related to the disaster. Based on known consumer items related to Katrina, a study of 204 different Katrina-based products can be divided up into 40 different categories. These categories were based on the type of item produced and include: tours, t-shirts, painted roof tiles, picture frames, furniture, bumper stickers, charity/benefit items, board games, wine, cocktails, costumes, blue tarp products, MRE products, candy wrappers, lapel pins, Christmas/holiday cards, kitchen towels, umbrellas, coasters, soap, mouse pads, floor mats, koozies, stickers, sew on patches, flags, key rings, notebooks, beads, and jewelry.⁵⁷

While television shows such as *Treme*, music, literature, and art were also Katrina consumer items, they were not included in this particular study due to the large number of items produced. For example, currently, there are 5,411 peer-reviewed academic articles, 7,503 books available for purchase on Amazon.com, and over 7,930,000 links accessible in a Google.com search on "Hurricane Katrina." It is expected that these numbers will continue to rise over time.⁵⁸

Initial review of consumer items excluding music, literature, and art, shows that they follow larger historical trends in disaster capitalism.⁵⁹ For both

⁵⁷ Liz Skilton, Consuming Katrina Project Database, (Unpublished) 2007-2013. Extreme gratitude is given to the Louisiana State Museum's Dr. Karen Leathem and Curator Wayne Phillips for the input and support of this research, including access to the "Hurricane Katrina," textiles and costumes collection at the Louisiana State Museum.

⁵⁸ Peer-reviewed articles accessed through JSTOR and EBSCO search engines, Amazon and Google items found in a search performed on November 1, 2013.

⁵⁹ The study of disaster capitalism, as it is commonly referred to due to Naomi Klein's work, *The Shock Doctrine*, refers to the capitalistic gain surrounding a post-disaster rebuilding process. While Klein's work primarily focuses on corporate capitalistic gain, disaster capitalism,

man-made and natural disasters, there are several major consistencies found with disaster products. First, they tend to be visually significant, representing key moments or images related to the disaster itself or they are original or copied items of commemorative pieces from the disaster. Second, while produced for capitalistic gain, many benefit charitable organizations dedicated toward the rebuilding process after the disaster. Pamphlets, special music albums, and books, like the Camille...She Was No Lady booklet featured at the beginning of Chapter 5, have all been popular mechanisms for doing this. Third, the prevalence of these items is often limited to the disaster's regional area and very rarely branches out from it both in production and consumption of the items. Disasterbased products also serve the purpose of memorializing a disaster. It is important to recognize that in addition to capitalistic opportunity, the production of the items for consumption also serves a psychological purpose as a coping mechanism. As such, while many items focus on a disaster's larger economic and physical losses, some are witty and humorous, making fun of otherwise bleak situations.

All of these qualities are found through the consumer items produced after Katrina. For instance, some items represent key moments or images related to

as used here covers consumer products produced for capitalistic gains. Historically, many disasters have been capitalized upon afterwards through the production of disaster-specific consumer items. These marketable disaster items have been produced and sold both regionally and nation-wide. For example, disaster related material include: Civil War memorabilia such as reenactment clothing, postcards, or chess sets; Hindenburg Blimp framed disaster photos and handmade replicas; and, bottled "tornado wind" sold after major tornadoes. For more on disaster capitalism see, Naomi Klein, *The Shock Doctrine: The Rise of Disaster Capitalism*, 1st ed. (New York: Picador, 2008). For Civil War postcards see, Alfred S. Lippman Collection, "Civil War Postal Covers," Louisiana Research Collection, Special Collections, New Orleans, LA. Framed Hindenburg Blimp photos and blimp replicas are available at the Lori Ferber Presidential Memorabilia website, http://www.loriferber.com/. Meanwhile, cans of bottled tornado wind are often available at roadside vendors near major tornado sites (this author found one in Kansas in 2007).

the disaster such as the New Orleans "Before And After Hurricane Katrina," postcards.⁶⁰ Meanwhile, others are original items from the disaster that have been made into commemorative pieces like the repurposed 9th Ward roof tiles or woodwork.⁶¹

Congruent with other disasters, the major market for Katrina-based items initially came from locals themselves and focused attention on smaller local issues surrounding recovery. A popular example of this was the Defend New Orleans movement, geared at preserving local pride and expressing anger over negative public commentary over rebuilding New Orleans.⁶² Similarly, while images of spray-painted refrigerators and signs circulated throughout the country, larger displays meant for consumption and not for purchase were also set up throughout the city highlighting frustration at local conditions.⁶³ A perfect example of this included the controversial Lakeside Shopping Mall Christmas Display Village featuring a New Orleans "Blue Tarp" Christmas.

_

⁶⁰ New Orleans Before And After Hurricane Katrina postcards, 2005, \$5. The World Wind Store, "Before And After Hurricane Katrina," Café Press, ID # 31242849, September 14, 2005, http://www.cafe press.com/+new_orleans_before_and_after,31242849.

⁶¹ 9th Ward Roof Tiles That Were Blown Off During Katrina, now re-painted art pieces, \$20. "9th Ward Roof Tiles," Picture taken by author at Fleurty Girl Store on Magazine Street, New Orleans, LA, April 11, 2011.

⁶² DEFEND New Orleans T-shirt, \$25. "DEFEND New Orleans T-shirt," Defend New Orleans (Online), http://defendneworleans.com/.

⁶³ While images of Katrina fridges circulated predominantly through the internet on websites and blogs, there were art books printed with collected images of them. See: Katheryn Krotzer Laborde, *Do Not Open: The Discarded Refrigerators of Post-Katrina New Orleans* (Jefferson, NC: McFarland Press, 2010).





Lakeside Shopping Mall Blue Tarp Houses Christmas Display, December 2005.64

However, while some Katrina items were geared towards local markets others were targeted at national markets and emphasized broader themes related to Katrina and the Gulf Coast. A great example of this was the "The Blame Game" board game, a game mimicking various key figures (like President Bush, Governor Kathleen Blanco, and FEMA Director Michael Brown) and places (such as the Superdome, FEMA trailers, and the Danziger Bridge) related to Hurricane Katrina that were brought under severe public scrutiny. This product yet again reinforced the connection of the city's corruption and failures post-storm with storm descriptors.

⁶⁴ Lakeside Shopping Mall Blue-Tarp Christmas Display, 2006, as discussed in Bayoucreole's Weblog, "The Superbowl of the South," December 2010, http://bayoucreole. wordpress.com/category/nawlins-news/.



"The Blame Game" Board Game, distributed during Krewe de Vieux 2006 and currently sold on www.zzzinger.com for \$10.65

Overall, the plethora of products produced surrounding Katrina and the rebuilding process is staggering simply because local and national production of these items took place from the beginning. The vast number of disaster-related items with Katrina is directly linked to the broad interest in storm recovery and continued focus on New Orleans and the storm in mass media. This broader interest in a disaster caused a wider disbursement of consumer items as there was a larger demand for them. But what makes Katrina disaster consumption so unique is the longevity and continued production of these items today.

Of the 204 Katrina consumer items analyzed in this study, 80 percent of them still are being sold in New Orleans and the surrounding area. Similarly, in addition to the 204 locally produced items, several non-local internet websites sell Katrina-related memorabilia internationally. For instance, Café Press, a company that will print self-produced images on anything from t-shirts to bumper stickers currently lists the availability of: 1,880 Katrina-related t-shirts;

-

 $^{^{65}}$ "The Blame Game Board Game," was sold at www.zzzinger.com in 2006, it is no longer available.

2,130 bumper stickers; 344 posters and other art; 2,230 mugs; and, 16 wall calendars.⁶⁶ Other websites like Amazon.com and Ebay.com list more objects for purchase — including several "authentic" collectible items such as "MP" Military Police Badges, "Hurricane Katrina Challenge Coins," and, "shoes worn during Katrina." ⁶⁷

What is most noticeable, but not surprising, about Katrina consumer items is the prevalence of discussion of race, class, and gender in the memorabilia throughout the many years of its production and consumption. In the 204 products studied, race, class, and gender can easily be found in most. For instance, in Katrina-related Mardi Gras beads it is very easy to spot all three of these categories. While several commemorative beads were produced, such as the well-known Chalmette FEMA trailer beads, others were much more explicit.⁶⁸

_

^{66 &}quot;Katrina Memorabilia," http://www.cafepress.com/.

⁶⁷ In order: Mpdoughboy153, "MP Brassard Hurricane Katrina worn OBSOLETTE1980s-90s," Ebay, Item No. 330586178483, http://cgi.ebay.com/MP-Brassard-Hurricane-Katrina-worn-OBSOLETTE-1980s-90s-/330586178483?pt=LH_DefaultDomain_0&hash=item 4cf878c3b3.

⁶⁸ FEMA Trailer Mardi Gras Beads, 2006. From BobbyofNOLA, "Chalmette Mardi Gras," Flckr Album, http://www.flckr.com/photos/bobbyofnola/3476848870/.



In order, "Chocolate City," "Caucasian FEMA Trailer," "Looterman," 2005 Beads.⁶⁹

For example, a Caucasian FEMA trailer bead presented a lounging couple outside their trailer home with a blue roof house in the background. Meanwhile, in the "Chocolate City" beads, a reference to then New Orleans Mayor Ray Nagin's infamous comment that New Orleans was deserted except for African Americans is visible. Including FEMA checks, Louisiana Purchase Cards, a cityscape covered in chocolate, and a refrigerator taped up, the beads illustrate a strong racial and class-related bias linked with storm victims. Similarly, the "Looterman" beads illustrate an African American man running while carrying a television in his hands, referencing perceived mass looting and racial stigmatization in the media. Also illustrated are FEMA trailers, blue tarp houses, and the classic fridge taped up. However, while race and class were extremely popular themes in

⁶⁹ "Chocolate City Beads," "Looterman Beads," and "Caucasian FEMA Trailer Beads" were thrown during 2006 Mardi Gras Parades. They are also available for sale online. Millergw, "New Orleans 'Chocolate City' MG Bead," Ebay, Item No. B185, http://www.ebay.ca/itm/ws/eBay ISAPI.dll?ViewItem&item=110359771509; "New Orleans 'Loot Er Man' Bead..Hurricane Katrina," Ebay, Item No. B184, http://www.ebay.com/itm/NEW-ORLEANS-LOOT-ER-MAN-BEAD-HURRICANE-KATRINA-B184-/110359 771821; "Hurricane Katrina 'FEMA Trailer' Mardi Gras Bead," Ebay, Item No. B182, http://www.ebay.ca/itm/ws/eBayISAPI.dll?ViewItem&item=2003 16735540#ht_2686wt_796.

Katrina commemorative items, gender representation was particularly heated, especially since Katrina was a female-named storm with already explicit gender descriptors attached in addition to the new feminized city-related slurs gaining momentum in popular use.

GENDER & POST-KATRINA PRODUCTS

Some Katrina-related products were geared specifically towards certain genders. In the case of women, women's t-shirts and clothing, commemorative pins, bags, kitchen towels, and jewelry were all produced. For instance, kitchen towels sold in neighboring Chalmette, Louisiana, stated, "God Bless This Lousy FEMA Trailer!" a play on the popular kitchen towels, "God Bless This Home."⁷⁰ The towel also highlighted local frustration at federal and national reaction to the current predicament of Katrina victims.

Higher end of items for sale were also available and included specially designed New Orleans jewelry by Mignon Faget. Ranging from \$160 to \$1,100 the anniversary amulet portrays a hurricane symbol with a fleur-de-lis that could be made into a necklace or a lapel pin. ⁷¹ Another luxury item produced was the Hurricane Katrina/New Orleans Hermès scarf that came in navy blue, black and orange for \$320.⁷²

⁷⁰ "Hurricane Katrina Ephemera Collection," Louisiana State Museum, cited previously.

⁷¹ Mignon Faget Jewelry, "Anniversary Amulet," Product No. 5365, http://www.mignonfaget.com/shop/product/amulets/5365.html.

⁷² Hermes, "Hurricane Katrina/New Orleans Scarf," as referenced in Deidra Woolard, "Hermes Scarf to Benefit New Orleans," http://www.luxist.com/tag/hurricane +relief/.

However, these gender-specific products pale in comparison to other gendered consumer products related to Katrina. Right after the storm, humorous bumper stickers saying "New Orleans: Proud To Swim Home," and t-shirts like, "NOPD: Not Our Problem Dude," circulated connecting New Orleanians through humor. ⁷³ But soon, appearances of darkly humored "Blow Me" stickers with a little hurricane next to the letters cropped up, and the feminization of Katrina, the storm, and its aftermath, took on an even more sexualized portrayal.



"Blow Me" bumper sticker, \$4.49.74

Frustrated references to FEMA, Katrina and Louisiana Governor Kathleen Blanco also appeared referencing Katrina's increased sexualization. One bumper sticker in particular stated, "FEMA Sucks, Katrina Blows, Blanco Swallows." Others continued this trend in linking political figures to the current disaster situation with Katrina. For example, one bumper sticker read, "Bill & Monica Is Better

_

^{73 &}quot;New Orleans: Proud to Swim Home," is a derivation of the New Orleans Youth Leadership Council's "New Orleans: Proud to Call it Home" project in effect since 1994. Youth Leadership Council. "New Orleans: Proud Call it Home," http://young to leadershipcouncil.org/site11.php; and the example, "New Orleans: Proud to Swim Home," from PerfectlyPinkBlogSpot, "New Orleans: Proud To Swim Home!!" 25, http://jessaatpefectlypink. blogspot.com/ 2008/07/new-orleans-proud-to-swim-home.html.

⁷⁴ Done as a charity project by a company that makes "Bite Me" gear, proceeds went to Katrina victims. These bumper stickers, t-shirts, mugs, hats, and aprons can still be purchased at BlowMeWear.com. "Blow Me," Blow Me Wearables, www.blowmewear.com/katrina.html.

Than Bush & Katrina," while another stated, "Had Katrina Been Named, 'Terri Schavo' Maybe Bush Would Have Reacted Faster."⁷⁵

Meanwhile, on Bourbon Street, t-shirts of a similar nature appeared. Discussing Katrina performing fellatio on whoever is wearing the shirt, the t-shirt specifically referenced Katrina as a woman performing this sexual act.



Bourbon Street T-shirts, "Katrina Gave Me A Blow Job," \$23.76

Another t-shirt popularly sold on Bourbon Street represents a younger, more flirtatious, but still sexualized image of all three hurricanes – Katrina, Rita, and Wilma – portraying the storms as "Girls Gone Wild." This t-shirt was one of the very few items produced that commemorate all three storms, not just Katrina, and yet it is one of the most gendered items – representing Spring Break teens flaunting their sexuality for leering masculine audiences.

⁷⁵ Skilton, Consuming Katrina Database, cited previously. The "Bill & Monica" and "Terri Schavo" bumper stickers are also still available for sale on the Café Press website at cafepress.com.

 $^{^{76}\,\}mathrm{As}$ seen and purchased by author in French Quarter, New Orleans, Louisiana, October 16, 2008.



"Girls Gone Wild: Katrina, Rita, & Wilma," T-shirt, \$23.77

Other t-shirts appeared with similarly sexualized slogans such as: "I Got Blown, Pissed On & Fucked By Katrina/What A Whore," "Katrina Can Blow Me!/She Won't Keep Me Away From Mardi Gras," and, "She Blew Me Like A Cat 5."⁷⁸

Popular images of houses spray-painted with the slogan "Katrina You Bitch!" were also circulated. Not labeled as a "bitch" by the National Weather Service, or any other official organizations, the evolution of "Katrina You Bitch!" was almost instantaneous as negative discussions of a feminized or weakened New Orleans and storm aftermath increased. First appearing on houses, this popular slogan was made into everything from t-shirts and bumper stickers to Mardi Gras floats within six months after the storm.

⁷⁷ "Girls Gone Wild T-Shirt," available for purchase in t-shirts and sweatshirts at Mardi Gras Zone, http://mardigraszone.com/store/images/ggwild-hurricanes-tshirt.JPG.

⁷⁸As mentioned in: K. Macomber, C. Mallinson, and E. Seale, "'Katrina That Bitch!' Hegemonic Representations of Women's Sexuality on Hurricane Katrina Souvenir T-Shirts," *The Journal of Popular Culture* 44, no. 3 (June 2011): 525-544.







The Evolution Of "Katrina You Bitch!" Products & Slogan: House on Magazine Street, October 2005; Float for Krewe de Vieux, January 2006; T-shirt produced 2006.⁷⁹

As illustrated through the consumer items related to Katrina, gender became a predominant theme expressed in popular memory of Katrina and definitely played a role in commercial memory. As information about the consumer items were collected over a five-year period, the items for sale shifted slightly, but not considerably. Unsurprisingly, though, the explicitly gendered items had a greater retention rate than some of the other consumer items produced. Similarly, the number of products available actually increased at the five-year anniversary mark for Katrina. While it could be argued that anniversaries of disasters bring new interest in objects related to them, the research collected for this dissertation confirms that the disaster's continued cultural significance played a major role in the increase. Katrina has become enmeshed in New Orleans' culture and will not be forgotten anytime soon — through memory and production of consumer items.

⁷⁹ In order: Ernieattorney, "Magazine St. Sign—Katrina You Bitch," Flikr Album, October 17, 2005, http://www.flickr.com/photos/ernieattorney/ 53461148/; Le Krewe d'État, "Katrina You Bitch!" Rotten To The Corps Parade, 2006, Image taken by Chuck T., Mardi Gras '06 Album, February 24, 2006, http://www.flickr.com/photos/sazerac/sets/72057 594083235628/; "Katrina You Bitch!," Handmade T-shirt, Featured at People Get Ready Blog, "New Orleans Pride Displayed In T-Shirts," November 4, 2005, Image No. Prg005, http://peoplegetready.blogspot.com/2005/11/new-orleans-pride-displayed-in-t-shirt.html.

However, what does this all mean in terms of the future of not only Katrina-related consumption but also hurricane-related product consumption in general? Was Katrina a fluke? Will there ever be another natural disaster that will have such a large capitalist product base? And, will the products cover all three areas of race, class, and more particularly, gender, like Katrina disaster products have?

Katrina consumption has redefined the way disaster is memorialized. The idea that making t-shirts and bumper stickers might be the new standard for disaster commemoration is a possibility. Similarly, while New Orleans' previous tourism industry helped produce many of the items being bought and sold today, internet companies offering disaster memorabilia have continued to grow because of interest in Katrina material. This growth of disaster production entities will have a dramatic effect on the future of disaster consumption. While one would hope that there is never a disaster of Katrina's magnitude again, culturally and politically, the history of disaster cautions otherwise. So far, though, due to its size and longevity, Katrina disaster consumption is an unparalleled case in disaster capitalism history. More specifically, what sexually explicit Katrina products like "Katrina You Bitch!" t-shirts and "Katrina Blows, FEMA Sucks, Blanco Swallows" bumper stickers illustrate is the continual tie between a feminized New Orleans and gendered storm descriptors. Combining these two histories, Katrina became the most gendered disaster both at the time and has altered the perception of hurricanes for years to come.

Is There Anything Worse Than A Bitch?: The Future of Gendered Hurricanes

It is specifically because of the long-standing attribution of gendered names and stereotypes to hurricanes that Katrina was originally referred to as a woman. However, the unique experience of the catastrophic devastation caused by Katrina fueled an elaborate use of gender as a coping mechanism for the rebuilding of civil society past destruction. The increased media coverage, access to multiple media forms for discussion, and marketing of a post-storm New Orleans and Gulf Coast area through disaster capitalism caused Katrina's definitions to become increasingly worse over time. Due to this, Katrina became the most sexualized, most gendered disaster yet.

Reflecting what Susan Faludi has described as an extremely sexualized post-9/11 culture prone to retroactively gendering major disasters, the language used to describe Katrina post-storm is so sexualized and demeaning to women that it points to similarities in larger political symbolism applied with previous female hurricanes. ⁸⁰ With problems arising over responsibility for the

⁸⁰ Susan Faludi has argues that after 9/11 a gendered debate over how the U.S. would react to an attack on its soil transpired. Faludi also argues that 9/11 quickly became an event that was retroactively gendered as the U.S. entered into a "War on Terror" and a period where a resurgence of the masculine male and feminine female occurred. This culture influenced the retroactive gendering with Hurricane Katrina. For more on gender and 9/11 see: Susan Faludi, The Terror Dream: Fear And Fantasy In Post- 9/11 America (New York: Metropolitan Books, 2007) and the second edition The Terror Dream: Muth and Misogunu in an Insecure America (New York: Picadour, 2008). To see more on 9/11 the event and aftermath in historical perspective consult: National Commission on Terrorist Attacks Upon the United States, The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks Upon the United States (New York: W.W. Norton & Co., 2004); Eric Foner, Give Me Liberty: An American History, 2nd Edition (New York: W. W. Norton & Co., 2008); James Roark, et. al., The American Promise: A History of the United States, Vol. II: From 1865, 4th Edition (New York: Bedford/St. Martin's, 2008); articles by Marilyn Young, Elaine Tyler May, Amy Kaplan, and Mary Dudziak in September 11 in History: A Watershed Moment? Edited by Mary L. Dudziak (Durham: Duke University Press, 2003); article by Alan Brinkley in Joyce Appleby, Alan Brinkley, James

"catastrophe" that was Katrina, pre-established systems of political obligation and female disaster symbolism were combined. Impacted by a culture obsessed with sex, Katrina became the affixed, tangible target for accusations and slander in a way similar to previous female hurricanes. However, Katrina became the most sexualized disaster yet due to the tumultuous political and hyper-sexualized cultural spheres in which it took place.

Similarly, in a post-Feminist context, Katrina represents a continued vilification of women that did not decrease with equal sex naming. In fact, Katrina's sexualization is actually more profane than previous female hurricanes. Why is this? Looking initially at the success of "Katrina You Bitch!" as a phrase it could be argued that it was primarily due to its ability to set Katrina apart from all other previously gendered hurricanes as the worst in history.

However, on a larger level, like other notable gender references used with storms, the use of bitch with Katrina only helped to accelerate the use of the word in overall society. As with the increasing prevalence of the use of the word witch or no lady in the postwar era to derogatorily refer to women and hurricanes, in the late 1990s and 2000s, the use of the word bitch escalated. While the term bitch, "applied opprobriously to a woman," had been in use since the 1400s, it became a regularly used slur due to its use on television.⁸¹ First appearing on television sitcoms in the late 1970s, the term was associated to a female hurricane

McPherson and Donald Ritchie, The American Republic Since 1877 (New York: Glencoe/McGraw Hill, 2007).

81 "Bitch," Oxford English Dictionary Online, 2nd Edition, 2013, http://www.oed.com. libproxy.tulane.edu:2048/view/Entry/19526?rskey=XTP6eE&result=3#eid.

by 1985.⁸² However, it was not used again in reference to a hurricane until after Katrina. The reason behind this gap in usage was that the term was not frequently used in modern media due to regulatory standards.⁸³

Between 1998 and 2007, as standards were relaxed, the use of the word *bitch* on television, "tripled from 431 uses on 103 prime-time episodes in 1998 to 1,277 uses on 685 shows in 2007."⁸⁴ While this increase is staggering on its own, when reviewing the shift in the use of the word *bitch* between 2005 — when Hurricane Katrina struck the Gulf Coast — and 2007, it is possible to see that the use of the word *bitch* has increased by 50 percent on television in the post-Katrina period.⁸⁵ While regulations about the use of the word on television have changed allowing the word to be used more frequently, the prevalence of its use

⁸² "Bitch" used on television in Saturday Night Live 1977, in: Tom Shales and James Andrew Miller, *Live From New York: An Uncensored History of Saturday Night Live As Told By Its Stars* (New York: Little Brown & Company, 2002); Hurricane Elena the "bitch" in: "Andrew Slides By," *Biloxi Sun Herald*, August 26, 1992: 1.

⁸³ The Federal Communications Commission overseas the regulation of standards on television. As explained on their website: "in 1973, the U.S. Supreme Court established the following criteria to determine whether speech is obscene: (1) whether the average person, applying contemporary community standards, would find that the work, taken as a whole, appeals to prurient interest; (2) whether the work depicts or describes in a patently offensive way sexual conduct specifically defined by applicable state law; and (3) whether the work, taken as a whole, lacks serious literary, artistic, political, or scientific value. In 1978, the Court stated that whether the work could be deemed 'patently offensive' would depend on context, degree and time of broadcast. The Commission's generic definition of "indecency" is one that applies to language that describes, in terms patently offensive as measured by contemporary community standards for the broadcast medium, sexual or excretory activities and organs." Updated regulations were introduced through The Telecommunications Act of 1996 ("1996 Act"). The 1996 Act allowed for parental guidelines regarding television programming to warn of illicit content (effective by March 12, 1998). This act also allowed a loophole in which explicit content could be shown if properly advertised and protected (e.g., the Playboy Channel). Federal Communications Commission, "Program Contents Regulations," June 1, 2011, http://www.fcc.gov/guides/ program-content-regulations.

⁸⁴ "More Than Ever, You Can Say That On Television," *New York Times*, November 14, 2009: A1.

⁸⁵ As quoted in the *New York Times*, the use of bitch, "is up from 30 uses on 15 shows in all of 2007 and just six instances on four programs in 2005." This equates to a 200% use of bitch in 2007, and a 150% use of bitch on television shows in 2005, or a 50% increase in the use of the word. Ibid.

by the media – particularly with Katrina and the disaster memorabilia produced as a result of it – has no doubt contributed to the increased use of the word overall, especially when referring to hurricanes.

But the major question related to Katrina and gender references is what type of effect Katrina description has had on the future of gendered storms? *Bitch*, in modern society, like *witch* or *no lady* in the 1950s and 1960s, is currently the most demeaning insult given to a woman. While other words describe women as sexual objects, *bitch* evokes a "sense of feral, hell-hath-nofury rage" and "visceral fear and anger" that is irrefutable.⁸⁶ In a society where emphasis on describing the next storm as worse than the last has become the norm, how is it possible to "top" the phrase, *bitch* when referring to a vicious female-named storm? And, what would be the male-named storm equivalent descriptor?

Linguistics professor Geoffrey Nunberg writes in his book, *Ascent of the A-Word*, that "people sometimes talk about *bitch* and *asshole* as if they were just names of the females and males of a single species," but "the words are clearly different in meaning." *Bitch* "is a much more general term" that "serves as a misogynistic term of abuse that seizes on whatever unappealing trait comes to hand." As a result, the possible adjective pairings are endless. Similarly, the gendered derogatory meaning attached to *bitch* in current society almost always genders the noun female or effeminate. In the case of hurricanes, and

⁸⁶ Geoffrey Nunberg, Ascent of the A-Word: Assholism, The First Sixty Years (New York: Public Affairs, 2012) 134-135.

⁸⁷ Ibid, 134.

⁸⁸ Ibid, 134.

descriptions of them, there are no other words at this time that when used hold as much cultural power. Calling a storm a *bastard*, an *asshole*, and so forth, do not carry the same sort of meaning. Yet this does not mean that descriptions of the storms following Katrina did not attempt to negate this fact.

As described the *New Orleans Times-Picayune*, Hurricane Gustav, the first major threat to New Orleans after Katrina in 2008, was a colossal disappointment performance-wise. While grateful that Gustav had not lived up to "apocalyptic predictions" as the "Mother of All Storms," a title given to it by New Orleans Mayor Ray Nagin during a press conference, Gustav was initially described as the bigger, badder version of Katrina through its assigned male gender. ⁸⁹ Images of Gustav before the storm such as the one below from the *Minneapolis Press-Register* illustrate it as a masculine male, one with muscles, strength, a hefty beard, and anger. As Katrina illustrations showed a vindictive or negligent woman, Gustav was presented as a man in charge who knew what he was doing.

_

 $^{^{89}\,\}mathrm{``If}$ You Can't Predict The Future You're In Trouble," New Orleans Times-Picayune, September 3, 2008: B7.



Gustav And The GOP Convention90

However, despite visual representations of Gustav prior to the storm as a masculine male, effeminate masculine descriptions of Gustav were applied in text and discussion post-storm as a way of negating previous hype. Gustav made an "impotent" strike at Louisiana with a "bark worse than its bite," claimed one article.⁹¹ The "weaker" storm in comparison to Katrina, "galloped ashore," stated another.⁹²

Jokes about Gustav's appearance during Southern Decadence, the Gay and Lesbian festival held in New Orleans, also made newspapers throughout the

⁹⁰ Depiction of Gustav, JD Crowe, "Gustav/GOP Convention," *Minneapolis Press-Register*, August 31, 2008, Accessed online August 19, 2009, http://blog.al.com/jdcrowe/2008/08/.

^{91 &}quot;Bark Worse Than Its Bite," New Orleans Times-Picayune, September 2, 2008: A9.

⁹² "Safe At Home: Cat. 2 Storm Strikes Nearly Empty South La.," New Orleans Times-Picayune, September 2, 2008: A1 & A8.

country.⁹³ While references to Katrina, which had also appeared during Southern Decadence, argued Katrina was vengeance against a "sin-filled" city, the connotations with Gustav post-storm were very different.⁹⁴ Instead of the force "sent in to wipe out sin," as the storm had been portrayed prior to hitting New Orleans, Gustav's post-storm portrayal was that he appeared because he liked the party.⁹⁵ One comedian even proposed that Gustav might be the first "Gay Hurricane" because of its appearance during the celebratory weekend.⁹⁶ Online bloggers also discussed Gustav's impact on Southern Decadence, one in particular stated that, "Southern Decadence was tied up, flogged and topped by Gustav."⁹⁷

While the reaction to Gustav illustrates a potential new trend in gender descriptions applied to male storms (über-masculine before the storm; effeminate after the storm if the storm had not been "powerful enough"), statistics in this dissertation's study show that this trend was short-lived. In fact, gender references to Hurricane Ike, also in 2008, for instance, dropped significantly, despite its devastating effect on Galveston, Texas. In the 368

^{93 &}quot;Hurricane Gustav Curtails Southern Decadence," Gay Cities Online, August 30, 2008, http://www.gaycities.com/outthere/181/hurricane-gustav-curtails-southern-decadence/.

⁹⁴ "Demo Apologizes for Storm Remark," *New Orleans Times-Picayune*, September 1, 2008: A3.

⁹⁵ Chris Rose, "Meet the Co-grand Marshal of the 37th Annual Southern Decadence Celebration," *New Orleans Times-Picayune Online*, August 29, 2008, http://blog.nola.com/chrisrose/2008/08/meet one this years cogrand ma.html.

 $^{^{96}}$ Van Chew, "Gay Hurricane." For the original comedian's comments see: Van Chew, "Gay Hurricane," BET Comic View, July 15, 2006, http://www.youtube.com/watch? V=liK_knD125.

⁹⁷ Jason Vincik, "Gustav Kills Southern Decadence—New Gay Lake Party Emerges in Dallas," Anythingbutstraight Blog, September 3, 2008, http://anythingbutstraight.blogspot.com/2008/09/gustav-kills-southern-decadence-newgay.html.

newspaper articles that appeared related to the storm, only 6 gender references were made. As illustrated in Table 16, this was a significant decrease from the Katrina period storms.

Table 16. Article and gender references by city, 2005-2008

Newspaper	Dennis	Katrina	Rita	Wilma	Ike
	2005	2005	2005	2005	2008
Atlanta Journal-Constitution					
Articles	17	107	51	11	7
Gender References	2	2	7	0	0
Baltimore Sun					
Articles	5	49	27	10	2
Gender References	0	1	0	0	0
Biloxi Daily Herald	40	101		4.0	10
Articles	49	134	45	13	19
Gender References	0	15	0	0	2
Charleston News & Courier		-6		- (
Articles	4	56	49	26	12
Gender References	0	0	3	3	0
Houston Chronicle					
Articles	11	151	242	24	132
Gender References	1	1	16	2	3
Los Angeles Times				- (_
Articles	12	$72 \\ 0$	66	26	9
Gender References	0		4	2	0
Miami Herald					
Articles	34	43	44	40	19
Gender References	9	3	9	3	0
Mobile Register	60			-0	
Articles	68	141	160	28	43
Gender References	3	2	7	3	0
New Orleans Times-Picayune					
Articles	33	64	144	10	$\frac{52}{1}$
Gender References	3	0	3	3	
New York Times					
Articles	27	68	166	31	52
Gender References	0	0	3	1	0

Totals For All Newspapers Articles Gender References Percentage of Gender	277 18 6%	979 24 2%	1,072 59 6%	239 18 8%	368 6 2%
Gender References	О	0	0	О	0
Richmond Times-Dispatch Articles	7	32	25	1	8
Gender References	0	0	7	1	0
Raleigh News & Observer Articles	10	62	53	19	13

The decrease in gender references with Ike is not surprising, despite the fact that Ike wiped out Galveston. When compared with Katrina, as was done in newspapers throughout the country, Ike did not have the same sort of cultural response and political impact that Katrina did. As a result, it did not surpass Katrina in linguistic description, nor the combination of Katrina, Rita and Wilma in gendered references. (See Figure 11) Similarly, the hype over Gustav was a reaction to the post-Katrina period. Gustav struck the emotionally and physically scarred New Orleans that was actively participating in disaster consumerism. As a result, reaction to Gustav was heightened. Had Ike struck New Orleans, it is possible that gender use would have increased in text.

Overall, the number of newspaper articles for the 2005 to 2008 hurricanes surpass all other time periods at a total of 2,935 articles. It is not surprising due to the impact location of the hurricanes in the period that the highest number of articles and highest rate of gender use appear in newspapers of the Gulf South region. (See Figures 11 & 12) What is surprising is the fact that unlike the 1992-

2004 period, the *New York Times* does use gender to describe storms during the 2005-2008 period, while the *Richmond Times-Dispatch*, does not. The articles that appeared in the *New York Times* during the 2005-2008 period were more diverse than in past periods. With larger and special editions focused on the hurricanes from the time period, several articles or reporters from the Gulf South region also appeared in the *New York Times*. Meanwhile, the *Richmond Times-Dispatch* printed the least amount of articles on hurricanes during the 2005-2008 period. While descriptive references to gender were still used in text, it can easily be concluded that the limited number of articles discussing the storms directly impacted the use of gender in the *Richmond Times-Dispatch*.

When looking at the patterns in gender use from 1954 to 2008 as illustrated in Figure 13, it is clear that gender use appears to be slowly dissipating. However, as illustrated from the fluctuations in usage over time and the hypersexualized cultural climate of the post-9/11 and post-Katrina era, it is a definite possibility that gender use could be on the rise again, depending on the storm.

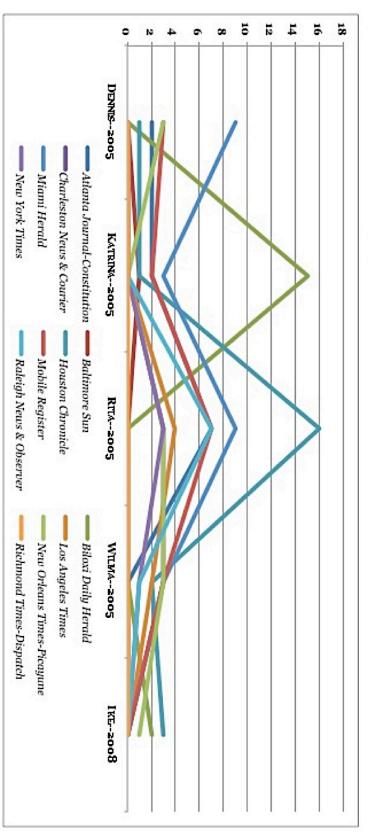


Figure 11. Gender reference use by city, 2005-2008

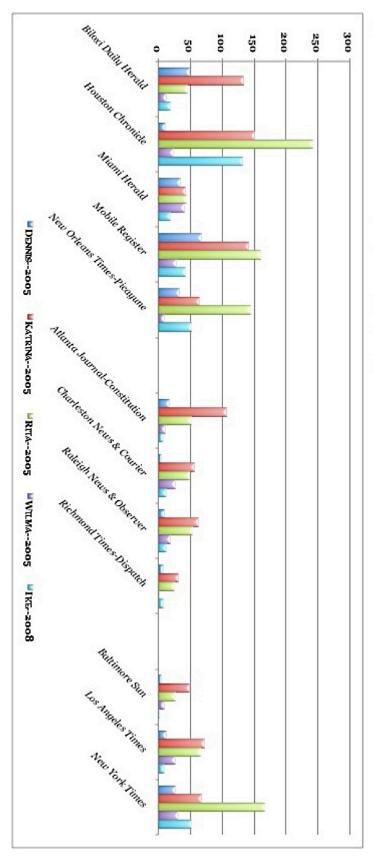


Figure 12. Number of articles by city and region, 2005-2008

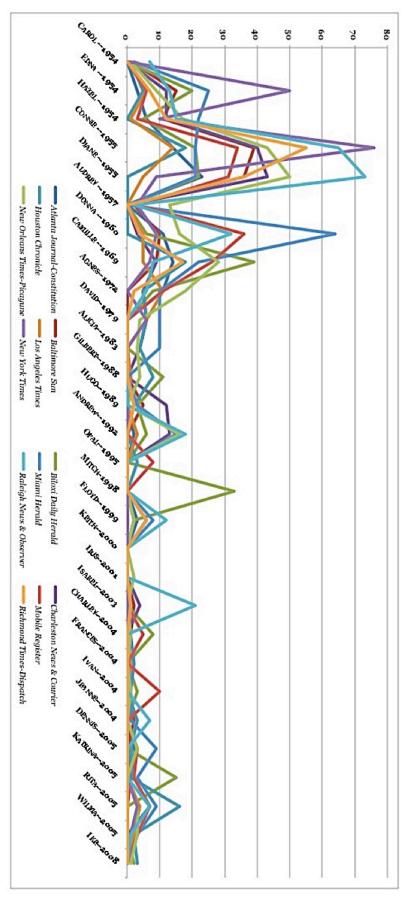
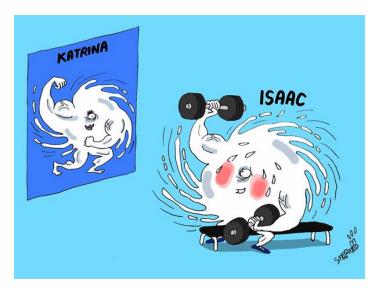


Figure 13. Gender reference use by city, 1954-2008

In 2011, Hurricane Irene became the media proclaimed, "next Katrina" due to its size and potential impact. The fact that Irene was a female-named storm played a direct role in discussion about it. From following the Twitter feed for Irene, "the meanest bitch to hit the Jersey Shore," to viewing photos from boarded up businesses in New York City telling Irene to "blow" them, it was immediately apparent that the language used to describe Katrina was transferred to new female-named storms.⁹⁸ Additionally, in referencing the opening to a popular MTV television show *The Jersey Shore* which is set on the Jersey seashore, a famous playground for youthful and often illicit activity since the days of Coney Island and Atlantic City, it is also obvious that the trend in referencing a city, or in this case, region's history had also transferred with the storm.

This past year, this trend continued as two major storms hit the U.S. The first, Hurricane Isaac which impacted the Gulf Coast; the second, Hurricane Sandy that struck the Eastern seaboard. Reaction to Isaac throughout the U.S. played up the masculinity of the storm as well as its size. Representations in newspapers, for example, often featured Isaac attempting to build enough strength to surpass Hurricane Katrina.

^{98 &}quot;@HurriicaneIrene," Twitter Feed, http://twitter.com/#!/HurriicaneIrene.



Isaac at the Gym, Lebanon Daily Star, 2012.99

While Isaac did not impact the Gulf Coast with the ferocity expected, Hurricane Sandy devastated the Northeast, particularly New Jersey, again. Like with Hurricanes Katrina and Irene, Sandy was referred to by traditional feminine descriptors used with past storms as well as Katrina-related descriptors, like "bitch." Creative examples of this include an illustration of a hurricane-tracking map showing hurricane Sandy as a character from the movie, *Grease*. Like Sandy in *Grease*, the hurricane is "maturing" to become a more sexualized and "bad" woman as it nears the coastline. The image, while produced by a random individual, appeared on the *Huffington Post*'s website, The Weather Channel, and Bravo television's "Watch What Happens Live With Andy Cohen" show, to name a few places.

^{99 &}quot;Isaac," *Lebanon Daily Star*, August 28, 2012, http://www.dailystar.com.lb/Cartoons.aspx?id=946#axzz2640K7H8J.

¹⁰⁰ Jill Filipovik, "Stop Calling Sandy a Bitch: It Was a Storm, Not a Woman to Hate," *The Guardian*, November 2, 2012, online, http://www.guardian.co.uk/commentisfree/2012/nov/02/stop-calling-sandy-bitch-jill-filipovic.



Hurricane Sandra Dee, Toddhale.com, 2012.101

Consumer items related to Hurricane Sandy also appeared for sale after the storm. In New Orleans, a t-shirt representative of the same style used with Katrina ("NOLA>Hurricane") appeared with the slogan, "NJ>Hurricane." Another t-shirt for sale had a more sexually explicit phrase, "Sandy's A B*tch."



"Sandy's A B*tch," CONSURV Online, 2012, \$20.102

¹⁰¹ As appeared in: "'Frankenstorm,' A Mix of Hurricane Sandy and Early Snow May Ruin Halloween 2012," *Huffington Post*, October 25, 2012, http://www.huffingtonpost.com/2012/10/25/hurricane-sandy-frankenstorm-halloween-2012_n_2019252.html#slide=1687842.

This vernacular transference of the word *bitch* to storms like Irene and Sandy confirms the sustained impact of not only Katrina but a gendered storm in general. As proven by Katrina, Irene, and Sandy, the continued vilification of women occurs through hurricane gendering in today's sex-driven society. Similarly, these storms also prove that there is still a persistent dissemination and consumption of gendered American descriptions of hurricanes throughout the world in the twenty-first century, over half a century after initial introduction. How the gendered hurricane will evolve over the next half century is largely dependent on who is in control of the naming system and how gender is defined in popular culture. One thing is certain, the current trend in weighing whether a city "deserved" the storm and applying these debates through the use or neglect of sexualized descriptors of the storm and its aftermath is the most common trajectory for the foreseeable future.

"Sandy's A B*tch," CONSURV, Last accessed June 5, 2013, http://consurv.bigcartel.com/product/sandy-s-a-btch.com.

EPILOGUEA COLD HARD WINTER FOR NAMING SYSTEMS



"Snowicane Dorva," 30 Rock, January 2013.1

Immediately after Hurricane Sandy was heralded as a "bitch," a new discussion arose over another environmental naming system. In November 2012, The Weather Channel announced that it would implement a new naming system for snowstorms and ice storms that resembled the hurricane naming system for the 2012-2013 year.² The TWC winter storm naming system used mythological figures and gods as names for the storms, such as "Athena," "Dante," and "Nemo."

¹ "Hogcock!/Last Lunch," 30 Rock, NBC, January 30, 2013.

² "Weather Channel Names Nor'easter, National Weather Service Says Not So Fast," Foxnews.com, November 7, 2012, http://www.foxnews.com/weather/2012/11/07/weather-channel-names-noreaster-national-weather-service-says-not-so-fast/print#.

The same day, the U.S. National Weather Service promptly issued a statement denouncing The Weather Channel's new naming system. As described in the statement, "the NWS does not use names of winter storms in our products. Please refrain from using the term Athena in any of our products."

The outright denial of TWC's winter storm naming system by the National Weather Service was met with curiosity among media outlets throughout the The popular television show, 30 Rock, even openly mocked both naming systems – the hurricane naming system and the winter storm naming system – by suggesting that the names chosen were not extremely original, and tended to always represent women of a particular class and race. However, when considering the past history with the hurricane naming system, the National Weather Service's response to a private meteorological organization introducing an unstandardized naming system was not surprising. According to the National Weather Service, hurricanes and other tropical cyclones to this day are the only weather forces officially named. Similarly, the only naming system to be used with these storms is the naming system approved by the National Weather Service and the World Meteorological Organization. This process of naming, refined over decades, and solely controlled by the National Weather Service and World Meteorological Organization, allows for easy identification of these destructive natural forces and regulates the use of names among multiple forms of media.

_

³ "National Weather Service: Just Say No to Athena," Washington Post, November 7, 2012.

TWC's introduction of a new naming system for winter storms violated the National Weather Service's policies, but TWC used the storm naming system during the winter season anyways. As a result, other media throughout the U.S. also used TWC's naming system in their own discussion of winter storms during the season. Due to this, specific gender references to describe winter storms were used in a similar way as is done with hurricanes. However, hyper-sexualized references to winter storms, like "bitch," were not used. In fact, by February 2013, popular memes and cartoons illustrating "Winter Storm Nemo" often derided the new naming system asking why a dangerous winter storm was even named in the first place, let alone after a Disney cartoon character fish.



Winter Storm Nemo, Latinos Post, February 2013.4

What the debate over winter storm names does in the context of hurricane naming history is bring to light a reinvigorated round of discussion about why

⁴ "Winter Storm Nemo: Why Is The Northeast Blizzard Named After a Cartoon Fish," *Latinos Post*, February 8, 2013, http://www.latinospost.com/articles/11642/20130208/winterstorm-nemo-why-northeast-blizzard-named.htm.

hurricanes are named in the first place and how these names impact society today. From The Weather Channel's perspective, the major question posed is why is it only possible to name hurricanes, not other storms? And, what does this say about the process of naming and gendering storms that the winter storms named did have gendered references immediately associated with them, like hurricanes? On the other side, the National Weather Service's response poses the question of is it necessary to name every natural force? And, what should be the qualifications for which forces are named? Are tornadoes and earthquakes next? Finally, who is responsible for monitoring and controlling the naming system? Should privatized meteorology – or the state – a concern from the earliest days of the Weather Bureau, play a role in naming decisions?

One thing is for certain based on the more than a half century of tracing the use of gender in popular culture in this dissertation, once a name is attached, gender descriptors inevitably follow. Consequently, the possibility of calling a winter storm "no lady" or a "bitch" could be a likely evolution of winter storm naming descriptions. However only time will tell whether The Weather Channel's winter storm naming system will become the next Clement Wragge-like cautionary tale of storm naming gone awry or mark the evolution of a new way our society views and describes the environment. Either way, what we call the wind – whether it is Maria or Nemo – really does matter.

BIBLIOGRAPHY

PRIMARY SOURCES

ARCHIVAL & MANUSCRIPT COLLECTIONS

- Bolton, Roxcy O'Neal. Papers, M94. State Library and Archives of Florida, Tallahassee, FL.
- Hurricane Katrina Ephemera Collection. Louisiana State Museum, New Orleans, LA.
- Hurricane Katrina Research Center. University of Southern Mississippi-Gulf Coast, Biloxi, MS.
- National Oceanic and Atmospheric Association Regional Library, Miami, Florida.
- Records of the Defense Civil Preparedness Agency. Record Group 397. National Archives and Records Administration, College Park, MD.
- Records of the Federal Emergency Management Agency. Record Group 311. National Archives and Records Administration, College Park, MD.
- Records of the National Oceanic and Atmospheric Association. Record Group 370. National Archives and Records Administration, College Park, MD.
- Records of the Office of the Secretary of Defense. Record Group 330. National Archives and Records Administration, College Park, MD.
- Records of the Weather Bureau, 1735-1979. Record Groups 27 & 130. National Archives and Records Administration, College Park, MD.

BOOKS

Bohun, Ralph. A Discourse Concerning the Origine And Properties Of Wind. With An Historical Account of Hurricanes, and other Tempestuous Winds. Oxford: W. Hall for Tho. Bowman, 1671.

- Bird, Caroline. Born Female: The High Cost of Keeping Women Down. New York: Pocket Books, 1969.
- Brown, Helen Gurley. *Sex and the Single Girl*. New York: Barnes & Noble, 1962.
- Carson, Rachel. *Silent Spring*. 1st Edition, 1962. Boston: Houghton Mifflin, 2002.
- de Beauvoir, Simone. *The Second Sex*. Translated by Constance Borde and Sheila Malovany-Chevallier. New York: Vintage Books, 1989.
- de Charlevoix, Pierre François Xavier. "1682-1761." *History and General Description of New France*. Translated and Edited by John Gilmary Shea. Vol. 6. New York: Francis P. Harper, 1900.
- de Oviedo, Gonzalo Fernandez. *De la natural historia de las Indias*. Edited by Enrique Alvarez Lopez. Madrid, 1942.
- Dumont, M. "1720-1740." Historical Collections of Louisiana, vol. 5: Historical Memoirs of Louisiana, From the First Settlement of the Colony to the Departure of Governor O'Reilly in 1770, With Historical and Biographical Notes. New York: Lamport, Blakeman and Law, 1853.
- Fassig, Oliver L. *Hurricanes of the West Indies*. U.S. Weather Bureau Bulletin X. Washington, D.C.: U.S. Government Publications, 1913.
- Firestone, Shulamith. *The Dialectic of Sex: The Case for Feminist Revolution*. New York: Bantam Books, 1970.
- Fitzgerald, F. Scott. The Great Gatsby. New York: Charles Scribner Sons, 1925.
- Friedan, Betty. *The Feminine Mystique*. 1st Edition, 1963. New York: W. W. Norton, 1997.
- Greer, Germaine. *The Female Eunuch*. 1st Edition, 1972. New York: Harper Perennial Modern Classics, 2008.
- Hakluyt, Richard. "Narrative By Christopher Columbus: Navigations, Voyages, Traffiques and Discoveries of the English Nation in America." *The Principle Navigations, Voyages, Traffiques and Discoveries of the English Nation*. Vol. 12. Edinburgh: E & G, 1884.
- Hearn, Lafcadio. *Chita: A Memory Of Last Island*. New York: Harper Brothers Publishers, 1889.
- Hurston, Zora Neale. *Their Eyes Were Watching God*. Philadelphia: J. B. Lippincott, 1937.

- Junger, Sebastian. *The Perfect Storm: A True Story of Men Against the Sea*. New York: Norton, 1997.
- Kinsey, Alfred C. *Sexual behavior in the Human Male*. Philadelphia: W. B. Saunders, 1948.
- ---. Sexual behavior in the Human Female. Philadelphia: W. B. Saunders, 1953.
- Lederer, William and Eugene Burdick. *The Ugly American*. New York: W.W. Norton & Company, 1958.
- Miller, Casey and Kate Swift. *Words and Women*. New York: iUniverse, Inc., 2000. First published in 1976.
- Millett, Kate. *Sexual Politics*. 1st Edition, 1969. New York: University of Illinois Press, 2000.
- "Narrative by Bartolomé Las Casas." Tears of the Indians: Being an Historical and True Account of the Massacres and Slaughters of Above Twenty Millions of Innocent People: Committed by the Spaniards in the Islands of Hispaniola, Cuba, Jamaica &c., As Also, in the Continent of Mexico, Peru & Other Places of the West Indies, To the Total Destruction of Those Countries. Translated by J. Philips. London: J.C. for Nath. Brook, 1655.
- National Commission on Terrorist Attacks Upon the United States. The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks Upon the United States. New York: W.W. Norton & Co., 2004.
- Percy, Walker. Lanterns on the Levee. New York: Alfred A. Knopf, 1941.
- Piddington, Henry. Conversations About Hurricanes For The Use Of Plain Sailors. London, 1853.
- Redfield, William C. On The Several Hurricanes of the Atlantic, And Their Relation to the Northers of Mexico And Central America With Notices of Other Storms. New Haven: B. L. Hamlen, 1846.
- Rose, Chris. 1 Dead in Attic: After Katrina. New York: Simon & Schuster Paperbacks, 2007.
- Schlafly, Phyllis. A Choice Not An Echo. Perre Marquette Press, 1964.
- Shaw, Napier. *Manual of Meteorology*. 2nd Edition. Cambridge: Cambridge University Press, 1938.
- Sisterhood Is Powerful: An Anthology. Edited by Robin Morgan. New York: Random House Paperbacks, 1970.

- Soto, Juan Pedro. *Usmaíl*. St. John: Sombrero Publishing Company, 1959.
- Steinbeck, John. *The Grapes of Wrath*. New York: The Viking Press, 1935.
- Stewart, George Rippey. Earth Abides. New York: Random House, 1945.
- ---. Fire. New York: Random House, 1948.
- ---. Names on the Land: A Historical Account of Place-Naming in the U.S. Boston: Hougton Mifflin, 1945.
- ---. Storm. New York: Random House, 1941.
- ---. Storm. New York: Sun Dial Press, 1941.
- ---. Storm. London: Hutchinson Press, 1942.
- ---. Storm. New York: Sun Dial Press, 1943.
- ---. Storm. New York: Council on Books in Wartime, 1943.
- ---. Storm. New York: Editions for the Armed Services, 1946.
- ---. Storm. New York: The Modern Library, 1947.
- ---. Storm. Lincoln: University of Nebraska Press, 1983.
- ---. Storm. Berkeley: Heyday Books, 2003.
- Strunk, William, Jr., and E. B. White. *The Elements of Style*. New York: MacMillan Publishing Company, 1972.
- Women in Sexist Society: Studies in Power and Powerlessness. Edited by Vivian Gornick and Barbara K. Moran. New York: New American Library, 1971.

CORRESPONDENCE & INTERVIEWS

- Barris, Bernard. Phone interview and correspondence with author. August 14, 20, 22, 2013.
- Bolton, Roxcy O'Neal. Phone interview with author regarding access to her collection and answers to questions regarding documents in collection. September 1, 2011.
- ---. Phone interview with author regarding Martha Ingle and original "Cease & Desist Order." March 23, 2013.

- Bryson, Reid. Transcript of Interview 320. University of Wisconsin Oral History Project. April 1986.
- Caroff, Philippe. Email correspondence with Gary Padgett regarding SW Indian Ocean Naming. October 3, 2012.
- Cerf, Vinton. Interviewed by Bernard Aboba. "How the Internet Came to Be." Posted online in 1993, http://www.netvalley.com/archives/mirrors/cerf-how-inet.html. As reprinted from: Bernard Aboba, *The Online User's Encyclopedia*. Boston: Addison-Wesley, 1993.
- Dorst, Neal. Email correspondence with author regarding official history of naming traditions. August 14, 2012.
- - -. Email correspondence with author regarding George Stewart's impact on hurricane naming. August 14, 2012.
- ---. Email correspondence with author regarding Australia's 1975 tropical storm naming system change. August 16, 2012.
- ---. Email correspondence with author regarding contacts. August 20, 2012.
- ---. Email correspondence with author regarding use of names in post-WWII period. August 21, 2012.
- ---. Email correspondence with author regarding Region IV meeting in 1978. August 21, 2012.
- ---. Email correspondence with author regarding 1947 use of hurricane names. August 31, 2012.
- ---. Email correspondence with author regarding Queensland magazine and Greek alphabet storm naming. September 11, 2012.
- ---. Email correspondence with author regarding the link between Clement Wragge and George Stewart. September 12, 2012.
- ---. Email correspondence with author regarding Reid Bryson and Typhoon Naming. September 26, 2012.
- ---. Email correspondence with author regarding lecture on hurricane names at the NOAA Regional Miami Library, October 19, 23, 24, 25, 2012.
- Fleming, James Rodger. Email correspondence with author regarding hurricane naming history suggestions and the forwarding of the author's email to others who might be able to help answer questions. August 15, 2012.
- Frank, Neil. Email correspondence with Neal Dorst regarding hurricane naming tradition, as passed on to author. August 21, 2012.

- ---. Telephone interview performed by Neal Dorst. August 20, 2012. As cited in email correspondence from Neal Dorst to author, August 21, 2012.
- Kreps, Juanita. Interview performed by Lynn Haessly. January 17, 1986.

 Southern Oral History Program Collection, University of North Carolina at Chapel Hill. Interview C-0011, #4007. Last accessed online October 4, 2012, at http://docsouth.unc.edu/sohp/browse/themes.html?theme_id=6&category_id=30.
- Lawrence, Miles. Email correspondence regarding naming evolution. August 20, 2012.
- Norcross, Brian. Email correspondence with author regarding Clement Wragge and other *They Call The Wind Maria* play naming story. August 14, 2012.
- ---. Email correspondence with author regarding Clement Wragge and Queensland newspaper articles. August 15, 2012.
- Padgett, Gary. Email correspondence with author regarding initial years of name adoptions as known at the time. August 14, 2012.
- ---. Email correspondence with author regarding 1947 and 48 storm names. August 15, 2012.
- ---. Email correspondence with author regarding Brisbane Warning Center accounts of Wragge's naming system, as passed on in an email from Brisbane forecaster Jeff Callahan. August 16, 2012.
- ---. Email correspondence with author regarding WMO naming system and suggested contacts. August 20, 2012.
- ---. Email correspondence with author regarding SW Indian Ocean Naming. October 3, 2012.
- ---. Email correspondence with author regarding the dates of adoption of the naming system throughout the world. September 12, 2012.
- ---. Email correspondence with author regarding clarification of dates and regions of adoption of the naming system throughout the world. September 12, 2012.
- Sivels, Andre. Email correspondence with author regarding NOAA collections at the National Archives and Records Administration, July 25, 2012.
- Theberg, Albert J. Email correspondence with James Rodger Fleming regarding the author's email requesting information about the hurricane naming system history. August 15, 2012.

DIGITAL COLLECTIONS

"Television Weather." Minnesota Historical Society Online. Last accessed on October 1, 2012, http://www.mnhs.org/exhibits/weather/section5.htm.

EPHEMERA

- "9th Ward Roof Tiles." Available at Fleurty Girl Store. New Orleans, LA, April 11, 2011.
- "Blow Me." Blow Me Wearables, www.blowmewear.com/katrina.html.
- BobbyofNOLA. "Chalmette Mardi Gras." Flckr Album, http://www.flckr.com/photos/bobbyofnola/3476848870/.
- Davidson, Jim. *Camille...She Was No Lady*. Post-Storm Gulf-Coast Fundraising Benefit Booklet. Batesville, AK: Dav-Mac Publishing, 1969.
- "DEFEND New Orleans T-shirt." Defend New Orleans (Online). Last accessed June 6, 2013, http://defendneworleans.com/.
- Ernieattorney. "Magazine St. Sign—Katrina You Bitch." Flikr Album, October 17, 2005, http://www.flickr.com/photos/ernieattorney/ 53461148/.
- "Girls Gone Wild T-Shirt." Available for purchase in t-shirts and sweatshirts at Mardi Gras Zone, http://mardigraszone.com/store/ images/ggwild-hurricanes-tshirt.JPG.
- Hermes. "Hurricane Katrina/New Orleans Scarf." As referenced in Deidra Woolard, "Hermes Scarf to Benefit New Orleans," http://www.luxist.com/tag/hurricane +relief/.
- "Hurricane Katrina." Ephemera. CaféPress.com, Last accessed June 5, 2013.
- "Hurricane Katrina 'FEMA Trailer' Mardi Gras Bead." Ebay, Item No. B182, http://www.ebay.ca/itm/ws/eBayISAPI.dll?ViewItem&item=2003 16735540#ht_2686wt_796.
- "Katrina Gave Me A Blow Job I'll Never Forget." T-shirt. As seen by author on Bourbon Street, New Orleans, LA, on August 20, 2007.
- "Katrina You Bitch!" Handmade T-shirt, Featured at People Get Ready Blog. "New Orleans Pride Displayed In T-Shirts." November 4, 2005, Image No. Prg005, http://peoplegetready.blogspot.com/2005/ 11/new-orleans-pride-displayed-in-t-shirt.html.

- "Katrina You Bitch!" Mardi Gras Float. Mardi Gras '06 Album, Rotten To The Corps Parade, 2006. Image taken by Chuck T. on February 24, 2006. Accessed on August 29, 2009. http://www.flickr.com/photos/sazerac/sets/72057594083 235628/.
- "Lakeside Shopping Mall Blue-Tarp Christmas Display, 2006." As discussed in Bayoucreole's Weblog, "The Superbowl of the South." December 2010, http://bayoucreole.wordpress.com/category/nawlins-news/.
- Le Krewe d'État. "Katrina You Bitch!" Rotten To The Corps Parade, 2006. Image taken by Chuck T., Mardi Gras '06 Album, February 24, 2006, http://www.flickr.com/photos/sazerac/sets/72057 594083235628/.
- Michelangelo. "Creation of Adam." Sistine Chapel Ceiling in the Vatican Museums, 1511.
- Mignon Faget Jewelry. "Anniversary Amulet." Product No. 5365, http://www.mignonfaget.com/shop/product/amulets/5365.html.
- Millergw. "New Orleans 'Chocolate City' MG Bead." Ebay, Item No. B185, http://www.ebay.ca/itm/ws/eBayISAPI.dll?ViewItem&item=11035977150 9.
- Mpdoughboy153. "MP Brassard Hurricane Katrina worn OBSOLETTE1980s-90s." Ebay, Item No. 330586178483, http://cgi.ebay.com/MP-Brassard-Hurricane-Katrina-worn-OBSOLETTE-1980s-90s-/330586178483?pt=LH DefaultDomain 0&hash=item 4cf878c3b3.
- "New Orleans 'Loot Er Man' Bead..Hurricane Katrina." Ebay, Item No. B184, http://www.ebay.com/itm/NEW-ORLEANS-LOOT-ER-MAN-BEAD-HURRICANE-KATRINA-B184-/110359 771821.
- "New Orleans: Proud to Swim Home." From PerfectlyPinkBlogSpot, "New Orleans: Proud To Swim Home!!" July 25, 2008, http://jessaatpefectlypink. blogspot.com/ 2008/07/new-orleans-proud-to-swim-home.html.
- "Sandy's A B*tch." CONSURV. Last accessed June 5, 2013, http://consurv.bigcartel.com/product/sandy-s-a-btch.com.
- "The Blame Game Board Game." 2006, www.zzzinger.com.
- Youth Leadership Council. "New Orleans: Proud to Call it Home." http://young leadershipcouncil.org/site11.php.

GOVERNMENT PUBLICATIONS

- "Aeronautical Telecommunications: Annex 10 to the Convention on International Civil Aviation," Vol. II, Ch. 5.
- Board of Regents, Smithsonian Institution. "The Meteorological Work of the Smithsonian Institution." *Annual Report of the Board of Regents Showing the Operations, Expenditures, and Condition of the Institution.* Washington: Government Printing Office, 1893. United States National Museum. Last accessed through Google Books on October 4, 2012, http://books.google.com/books?id=tnjfe4vEBGwC&pg=PA639&hl=en#v=onepage&q&f=false.
- Fassig, Oliver L. *Hurricanes of the West Indies*. U.S. Weather Bureau Bulletin X. Washington: U.S. Government Publications, 1913.
- International Telecommunication Union. "Appendix 16: Phonetic Alphabet and Figure Code." Geneva: ITU, 1959.
- Lott, Neal. "The Big One! A Review of the March 12-14, 1993 'Storm of the Century." National Climatic Data Center Research Customer Service Group. Technical Report 93-01. Posted on May 14, 1993, ftp://ftp.ncdc.noaa.gov/pub/data/techrpts/tr9301/tr9301.pdf.
- Norton, Grady. "Hurricanes of the 1950 Season." *Monthly Weather Review* (January 1951) 8-15.
- Office of Climate, Water, and Weather Services. "Service Assessment Report of Hurricane Hugo September 10-22, 1989." NOAA. May 1990.
- "Reorganization Plan No. IV of 1940." 5 F.R. 2223, 54 Stat. 1238. By act June 4, 1940, ch. 231, §1, 54 Stat. 230.
- Rose, L. J. "Aviation's ABC: The Development of the ICAO spelling alphabet." ICAO Bulletin. November 2, 1956: 12-14.
- War Department. "Practical Use of Meteorological Reports and Weather Maps." Office of the Chief Signal Officer, Division of Telegrams and Reports for the Benefit of Commerce. Washington: R. Beresford Printer, 1871. Last accessed through National Archives Open Library on October 3, 2012, http://openlibrary.org/books/OL23453755M/The_Practical_Use_of_Meteorological_Reports_and_Weather_Maps.
- "Weather Is The Nation's Business: The Report of the Department of Commerce Advisory Committee on Weather Services to The Honorable Secretary of Commerce." Washington: U.S. Government Printing Office, 1953.

"What's In A Name? The Phonetic Alphabet Goes International." *Topics of the Weather Bureau*. Vol. II, No. 3 (March 1952): 38.

MEDIA

- "@HurriicaneIrene." *Twitter*. Live Feed, http://twitter.com/#!/HurriicaneIrene.
- Alice in Wonderland. Directed by Claude Geronimi, Wilfred Jackson, and Hamilton Luske. Walt Disney, Inc., 1959: 75 minutes.
- Cooper, Alice. "Living In The Hurricane Years." Bearsville Studios, July 2, 1991, 3:58.
- Department of Agriculture. "A Lady Called Camille." AVA11983VNB1, 1971.

 Accessed on YouTube, posted by Public.Resource.Org on October 5, 2008. http://www.youtube.com/watch?v=3XSF_V3BXWQ.
- "Headlines-Storm of the Century of the Week-Hurricane Floyd." *The Daily Show with John Stewart*. Episode 04031, September 16, 1999. Posted by *The Daily Show with John Stewart* online, http://www.thedailyshow.com/watch/thu-september-16-1999/headlines---storm-of-the-century-of-the-week.
- "Hogcock!/Last Lunch." 30 Rock. NBC, January 30, 2013.
- Lerner, Alan J. and Frederick Loewe. Paint Your Wagon: The Musical. 1951.
- Rebel Without A Cause. Directed by Nicholas Ray. Warner Brothers, 1955: 111 minutes.
- Shakespeare, William. *The Tempest*. 1623. Edited by Stephen Orgel. Oxford: Oxford University Press, 1987.
- Smith, Gian. "O' Beautiful Storm." Poem as spoken in "Season 2: O Beautiful Storm Extended Tease." *Treme: Season 2.* HBO Podcasts on iTunes, March 21, 2011, 1:32.
- The Perfect Storm. Warner Brothers Pictures, June 30, 2000: 130.
- The Weather Girls. *It's Raining Men*. Columbia Records, 1982.
- Walt Disney's A Wonderful World of Color. *A Storm Called Maria*. Aired on November 27, 1959: 60 minutes.

NEWSPAPERS

- Atlanta Constitution. Atlanta, GA. Accessed at Loyola University, New Orleans, LA.
- Atlanta Daily World. Atlanta, GA. Accessed through ProQuest Historical Newspapers Database at Tulane University, New Orleans, LA.
- Atlanta Journal-Constitution. Atlanta, GA. Accessed at Loyola University, New Orleans, LA.
- Australian Queenslander. Queensland, Australia. Accessed through Inter-Library Loan at Tulane University, New Orleans, LA.
- Baltimore Sun. Baltimore, MD. Accessed through ProQuest Historical Newspapers Database at Tulane University, New Orleans, LA.
- Biloxi Daily Herald. Biloxi, MS. Accessed at University of Southern Mississippi, Hattiesburg, MS.
- Biloxi Sun Herald. Biloxi, MS. Accessed at University of Southern Mississippi, Hattiesburg, MS.
- Brisbane Courier. Brisbane, Australia. Accessed through Inter-Library Loan at Tulane University, New Orleans, LA.
- Charleston News & Courier. Charleston, SC. Accessed at College of Charleston Library, Charleston, SC.
- Charleston Post & Courier. Charleston, SC. Accessed at College of Charleston Library, Charleston, SC.
- Chicago Tribune. Chicago, IL. Accessed through ProQuest Historical Newspapers Database at Tulane University, New Orleans, LA.
- Christian Science Monitor. Boston, MA. Accessed through ProQuest Historical Newspapers Database at Tulane University, New Orleans, LA.
- Daily States/Item. New Orleans, LA. Accessed at Tulane University, New Orleans, LA.
- Daytona Beach News Journal. Daytona Beach, FL. Accessed at Florida International University, Miami, FL.
- Denver Post. Denver, CO. Accessed through ProQuest Historical Newspapers Database at Tulane University, New Orleans, LA.
- Des Moines Register. Des Moines, IA. Accessed at University of Northern Iowa, Cedar Falls, IA.

- Diario de la Marina. Havana, Cuba. Accessed at Library of Congress, Washington, D.C.
- Dublin Irish Times. Accessed through ProQuest Historical Newspapers Database at Tulane University, New Orleans, LA.
- El Mundo. San Juan, Puerto Rico. Accessed at Library of Congress, Washington, D.C.
- *El Nuevo Dia*. San Juan, Puerto Rico. Accessed at Library of Congress, Washington, D.C.
- *El Universal*. Mexico City, Mexico. Accessed at Library of Congress, Washington, D.C.
- Granma. Havana, Cuba. Accessed at Library of Congress, Washington, D.C.
- Granma International. Havana, Cuba. Accessed at Library of Congress, Washington, D.C.
- Houston Chronicle. Houston, TX. Accessed at Rice University, Houston, TX.
- Huffington Post. Accessed online at, http://www.huffingtonpost.com.
- Latinos Post. Accessed online at, http://www.latinospost.com.
- Le Nouvelliste. Port-au-Prince, Haiti. Accessed at Library of Congress, Washington, D.C.
- Los Angeles Times. Los Angeles, CA. Accessed through ProQuest Historical Newspapers Database at Tulane University, New Orleans, LA.
- Louisiana Weekly. New Orleans, LA. Accessed at Louisiana Research Collection, New Orleans, LA.
- Jamaica Daily Gleaner. Kingston, Jamaica. Accessed at Library of Congress, Washington, D.C.
- Miami Herald. Miami, FL. Accessed at Florida International University, Miami, FL.
- Minneapolis Press-Register. Minneapolis, MN. Accessed at University of Minnesota, Minneapolis, MN.
- Mobile Press-Register. Mobile, AL. Accessed at Mobile Public Library, Mobile, AL.
- Mobile Register. Mobile, AL. Accessed at Mobile Public Library, Mobile, AL.

- Nassau Daily Tribune. Nassau, Bahamas. Accessed at Library of Congress, Washington, D.C.
- Nassau Herald. Nassau, Bahamas. Accessed at Library of Congress, Washington, D.C.
- New Orleans Daily Picayune. New Orleans, LA. Accessed at Tulane University, New Orleans, LA.
- New Orleans Times-Picayune. New Orleans, LA. Accessed at Tulane University, New Orleans, LA.
- New Times, Miami's News & Arts Weekly. Accessed at State Library and Archives of Florida, Tallahassee, FL.
- New York Journal & Guide. New York, NY. Accessed through ProQuest Historical Newspapers Database at Tulane University, New Orleans, LA.
- New York Times. New York, NY. Accessed at Tulane University, New Orleans, LA.
- New York Times Magazine. New York, NY. Accessed through ProQuest Historical Newspapers Database at Tulane University, New Orleans, LA.
- Raleigh News & Observer. Raleigh, NC. Accessed at North Carolina State University, Raleigh, NC.
- Richmond Times-Dispatch. Richmond, VA. Accessed at Library of Congress, Washington, D.C.
- The Guardian. Accessed online at, http://theguardian.co.uk.
- Washington Post. Accessed through ProQuest Historical Newspapers Database at Tulane University, New Orleans, LA.
- Washington Star. Accessed through ProQuest Historical Newspapers Database at Tulane University, New Orleans, LA.

SECONDARY SOURCES

BOOKS

- Anderson, Karen. Wartime Women: Sex Roles, Family Relations, and the Status of Women During World War II. Santa Barbara: Greenwood Press, 1981.
- Appleby, Joyce, Alan Brinkley, James McPherson and Donald Ritchie. *The American Republic Since 1877.* New York: Glencoe/McGraw Hill, 2007.
- Arsenault, Ramond. "The Public Storm: Hurricanes and the State in Twentieth-Century America." In *American Public Life and the Historical Imagination*. Edited by Wendy Gamber, Michael Grossberg, and Hendrik Hartog. South Bend: University of Notre Dame Press, 2003.
- Ashby, Ruth and Deborah Gore Ohrn. *Herstory: Women Who Changed the World*. New York: Viking, 1995.
- Barkin, Steve M. "The Impact of CNN." *American Television News: The Media Marketplace and the Public Interest.* New York: M. E. Sharpe, 2003.
- Barnes, Jay and Steve Lyons. *Florida's Hurricane History*. Durham: The University of North Carolina Press, 2007.
- Barron, Hal. *Mixed Harvest: The Second Great Transformation in the Rural North*, *1870-1930*. Chapel Hill: University of North Carolina Press, 1997.
- Barry, John. *Rising Tide: The Great Mississippi Flood of 1927 and How It Changed America*. New York: Simon & Schuster, 1997.
- Barry, Kathleen. Susan B. Anthony: A Biography of a Singular Feminist. Bloomington IN: 1st Books Library, 2000.
- Batten, Frank and Jeffrey L. Cruikshank. *The Weather Channel: The Improbable Rise of a Media Phenomenon*. Boston: Harvard Business School Press, 2002.
- Baxandall, Rosalyn and Linda Gordon. *Dear Sisters: Dispatches from the Women's Liberation Movement*. New York: Basic Books, 2000.
- Baym, Geoffrey. From Cronkite to Colbert: The Evolution of Broadcast News. Boulder, CO: Paradigm Publishers, 2010.
- Bechtel, Stefan. Roar of the Heavens. New York: Citadel Press Books, 2006.
- Berry, Mary. Why ERA Failed: Politics, Women's Rights, and the Amending Process of the Constitution. Bloomington: Indiana University Press, 1988.

- Bigwood, Carol. *Earth Muse: Feminism, Nature, and Art*. Philadelphia: Temple University Press, 1993.
- Bilstein, Roger. *Flight in America: From the Wrights to the Astronauts.* 3rd Edition. Baltimore: Johns Hopkins University Press, 2001.
- Bitter Fruit: African American Women in World War II. Edited by Maureen Honey. Colombia: University of Missouri, 1999.
- Bixel, Patricia Bellis and Elizabeth Hayes Turner. *Galveston And The 1900 Storm: Catastrophe and Catalyst*. Austin: University of Texas Press, 2000.
- Boczkowski, Pablo J. *Digitizing the News: Innovation in Online Newspapers*. Cambridge, MA: MIT Press, 2004.
- Books in Action: The Armed Services Editions. Edited by John Y. Cole. Washington: Library of Congress, 1984. Library of Congress. Online at, http://catdir.loc.gov/catdir/toc/becites/cfb/84600198.html.
- Breines, Wini. *Young, White, and Miserable : Growing up Female in the Fifties.* Chicago: University of Chicago Press, 2001.
- Brinkley, Douglas. *The Great Deluge: Katrina, New Orleans, and the Mississippi Gulf Coast.* New York: Harper Collins, 2006.
- Brock, David and Ari Rabin-Havt. *The Fox Effect: How Roger Ailes Turned a Network Into a Propaganda Machine.* New York: Anchor Books, 2012.
- Bullard, Robert. *Dumping in Dixie: Race, Class, and Environmental Quality*. Boulder: Westview Press, 2000.
- Butler, Judith. *Gender Trouble: Feminism and the Subversion of Identity*. New York: Routledge, 2006.
- ---. *Undoing Gender*. New York: Routledge, 2004.
- Canaday, Margot. *The Straight State: Sexuality & Citizenship in Twentieth-Century America*. Princeton: Princeton University Press, 2009.
- Choy, Catherine Ceniza. *Empire of Care: Nursing And Migration In Filipino American History*. Durham: Duke University Press, 2003.
- Clark, John G. *New Orleans, 1718-1812: An Economic History*. Baton Rouge: Louisiana State University Press, 1970.
- Clift, Eleanor and Tom Brazaitis. *Madam President: Shattering The Last Glass Ceiling*. New York: Scribner, 2000.

- Cohen, Lizabeth. A Consumers' Republic: The Politics of Mass Consumption in Postwar America. New York: Vintage Books, 2004.
- Collins, Scott. *Crazy Like a Fox: The Inside Story of How Fox News Beat CNN*. New York: Penguin Group, 2004.
- Coontz, Stephanie. *The Way We Never Were : American Families and the Nostalgia Trap.* New York: BasicBooks, 2000.
- Cott, Nancy F. *The Grounding of Modern Feminism*. New Haven: Yale University Press, 1987.
- Cowdrey, Albert. *This Land, This South: An Environmental History*. Lexington: University Press of Kentucky, 1995.
- Critchlow, Donald. *Phyllis Schlafly and Grassroots Conservatism: A Woman's Crusade*. Princeton NJ: Princeton University Press, 2005.
- Daniels, Pete. *Breaking the Land: The Transformation of Cotton, Tobacco, and Rice Cultures Since 1880.* Champaign: University of Illinois Press, 1986.
- Decades of Discontent: The Women's Movement, 1920—1940. Edited by Lois Scarf and Joan M. Jensen. Westport, CN: Greenwood Press, 1983.
- de Grazia, Victoria. *Irresistible Empire : America's Advance Through Twentieth-Century Europe*. Cambridge: Belknap, 2006.
- D'Emilio, John and Estelle Freedman. *Intimate Matters: A History of Sexuality in America*. Chicago: The University of Chicago Press, 1997.
- Devlin, Rachel. *Relative Intimacy: Fathers, Adolescent Daughters, and Postwar American Culture*. Chapel Hill: University of North Carolina Press, 2005.
- Dixon, Bill. Last Days of Last Island: The Hurricane of 1856, Louisiana's First Great Storm. Lafayette: University at Lafayette Press, 2009.
- Douglas, Susan. Where the Girls Are: Growing up Female with the Mass Media. New York: Times Books, 1995.
- Do You Know What It Means To Miss New Orleans. Seattle: Chin Music Press, 2006.
- DuBois, Ellen. Feminism and Suffrage: The Emergence of an Independent Women's Movement in America, 1848-1869. Ithaca: Cornell University Press, 1999.
- Dunlap, Thomas. Saving America's Wildlife. Princeton: Princeton University Press, 1988.

- Dunn, Gordon and Banner Miller. *Atlantic Hurricanes*. Baton Rouge: Louisiana State University, 1964.
- Echols, Alice. *Daring to be Bad: Radical Feminism in America*, 1967-1975. Minneapolis: University of Minnesota Press, 1989.
- Ehrlich, Paul. *The Population Bomb*. Cutchogue, NY: Buccaneer Books, 1995.
- Emanuel, Kerry. *Divine Wind: The History and Science of Hurricanes*. Oxford: Oxford University Press, 2005.
- Enloe, Cynthia. Bananas, Beaches and Bases: Making Feminist Sense of International Politics. Updated Ed. Berkeley: University of California Press, 2000.
- Evans, Sara. *Born for Liberty: A History of Women in America*. 1st Edition. New York: Free Press Paperbacks, 1997.
- Faludi, Susan. Backlash: The Undeclared War Against American Women. New York: Three Rivers Press, 1991.
- ---. *The Terror Dream: Fear And Fantasy In Post- 9/11* America Ne York: Metropolitan Books, 2007.
- ---. The Terror Dream: Myth and Misogyny in an Insecure America. New York: Picadour, 2008.
- Fiege, Mark. Irrigated Eden: The Making of an Agricultural Landscape in the American West. Seattle: University of Washington Press, 1999.
- Fleming, James Rodger. *Fixing the Sky: The Checkered History of Weather and Climate Control.* New York: Columbia University Press, 2010.
- Foner, Eric. *Give Me Liberty: An American History*. 2nd Edition. New York: W. W. Norton & Co., 2008.
- Frank, Thomas. *The Conquest of Cool: Business Culture, Counterculture, and the Rise of Hip Consumerism*. Chicago: University of Chicago Press, 1998.
- Gaard, Greta. *Ecofeminism: Women, Animals, Nature*. Philadelphia: Temple University Press, 1993.
- Garrow, David. *Liberty and Sexuality: The Right to Privacy and the Making of Roe v. Wade.* Berkeley: University of California Press, 1998.
- Griffith, Elisabeth. *In Her Own Right: The Life of Elizabeth Cady Stanton*. New York: Oxford University Press, 1984.

- Haiken, Elizabeth. *Venus Envy : A History of Cosmetic Surgery*. Baltimore: Johns Hopkins University Press, 1997.
- Hartmann, Susan M. *From Margin to Mainstream: American Women and Politics Since 1960.* New York: Temple University Press, 1989.
- Haunted By Empire: Geographies of Intimacy in North American History. Edited by Ann Laura Stoler. Durham: Duke University Press, 2006.
- Hays, Samuel P. Beauty, Health, and Permanence: Environmental Politics in the United States, 1955-1985. Cambridge: Cambridge University Press, 1989.
- Historical Essays on Meteorology, 1919-1995. Edited by James Rodger Fleming. Boston: American Meteorological Society, 1996.
- Hole, Judith and Ellen Levine. *Rebirth of Feminism*. New York: Quadrangle Books, 1971.
- Honey, Maureen. *Creating Rosie the Riveter: Class, Gender and Propaganda During World War II.* Amherst: University of Massachusetts Press, 1984.
- Horowitz, Daniel. Betty Friedan and the Making of "The Feminine Mystique": The American left, the Cold War, and Modern Feminism. Amherst: University of Massachusetts Press, 2000.
- Hunt, Michael. *Ideology & U.S. Foreign Policy*. Yale University Press, 1988.
- Jones, Leigh and Rhiannon Meyers. *Infinite Monster: Courage, Hope, and Resurrection in the Face of One of America's Largest Hurricanes*. Dallas: Penland Scott Publishers, 2010.
- Kaledin, Eugenia. *Mothers and More: American Women in the 1950s.* Boston: Twayne Publishers, 1984.
- Kelman, Ari. *A River and Its City: The Nature of Landscape in New Orleans*. Berkeley: University of California Press, 2003.
- Kerber, Linda. *No Constitutional Right To Be Ladies: Women and the Obligations of Citizenship.* New York: Hill & Wang, 1998.
- Kessler-Harris, Alice. *Out to Work: A History of Wage-Earning Women in the United States, 20th Century Edition*. New York: Oxford University Press, 2003.
- Keys, David. *Catastrophe: An Investigation into the Origins of the Modern World.* London: Century Books, Ltd., 1999.

- Kirp, David L., Mark G. Yadof, and Marlene Strong Franks. *Gender Justice*. Chicago: University of Chicago Press, 1986.
- Kleinberg, Eliot. *Black Cloud: The Great Florida Hurricane of 1928*. New York: Carroll & Graf Publishers, 2003.
- Klein, Ethel. *Gender Politics: From Consciousness to Mass Politics*. Cambridge: Harvard University Press, 1985.
- Klein, Naomi. *The Shock Doctrine: The Rise of Disaster Capitalism.* New York: Picador, 2008.
- Kovach, Bill and Tom Rosenstiel. Warp Speed: America in the Age of Mixed Media. New York: The Century Foundation Press, 1999.
- Laborde, Katheryn Krotzer. *Do Not Open: The Discarded Refrigerators of Post-Katrina New Orleans*. Jefferson, NC: McFarland Press, 2010.
- Larson, Erik. *Isaac's Storm: A Man, a Time, and the Deadliest Hurricane in History.* New York: Vintage Books, 1999.
- Lears, T. J. Jackson. Fables of Abundance: A Cultural History of Advertising in America. Basic Books: New York, 1994.
- Levit, Nancy. *The Gender Line: Men, Women, and the Law.* New York: NYU Press, 2000.
- Ludlum, David M. Early American Hurricanes, 1492-1870. Boston: American Meteorological Society, 1963.
- McKibben, Bill. *The End of Nature*. New York: Random House Trade Paperback, 1989.
- McLuhan, Marshall. *The Mechanical Bride : Folklore of Industrial Man*. Corte Madera CA: Gingko Press, 2002.
- MacKinnon, Catharine A. Sexual Harassment of Working Women: A Case of Sex Discrimination. New York: Yale University Press, 1979.
- Mansbridge, Jane. *Why We Lost the ERA*. Chicago: University of Chicago Press, 1986.
- Marks, Craig and Rob Tannenbaum. *I Want My MTV: The Uncensored Story of the Music Video Revolution*. New York: Plume, 2011.
- Mathews, Donald. *Sex, Gender, and the Politics of ERA: A State and the Nation*. New York: Oxford University Press, 1992.

- May, Elaine Tyler. *Homeward Bound: American Families in the Cold War Era*. New York: Basic Books, 2008.
- Meyer, Leisa. *Creating G.I. Jane*. New York: Colombia University Press, 1998.
- Merchant, Carolyn. *Ecological Revolutions: Nature, Gender, and Science in New England*. Chapel Hill: University of North Carolina Press, 1989.
- ---. The Death of Nature: Women, Ecology, and the Scientific Revolution. New York: Harper & Row, 1989.
- Meyerowitz, Joanne. *Not June Cleaver: Women and Gender in Postwar America*, 1945-1960. Philadelphia: Temple University Press, 1994.
- Mezey, Susan Gluck. *In Pursuit of Equality: Women, Policy, and the Federal Courts.* New York: Palgrave Macmillan, 1991.
- Mitman, Gregg. *Reel Nature: America's Romance with Wildlife on Films.* Cambridge, MA: Harvard University Press, 1999.
- Mohr, James. *Abortion in America*. Oxford: Oxford University Press, 1979.
- Moore, Brenda. To Serve My Country, to Serve My Race: The Story of the Only African American WACs Stationed Overseas During World War II. New York: NYU Press, 1996.
- Morgan, Robin. Sisterhood Is Powerful: An Anthology of Writings From the Women's Liberation Movement. New York: Random House, 1970.
- Mulcahy, Matthew. *Hurricanes and Society in the British Greater Caribbean*, *1624-1783*. Baltimore: Johns Hopkins University Press, 2006.
- Nunberg, Geoffrey. *Ascent of the A-Word: Assholism, The First Sixty Years*. New York: Public Affairs, 2012.
- Online News and the Public. Edited by Michael Salwen, Bruce Garrison, and Paul Driscoll. Mahwah, NJ: Lawrence Erlbaum Associates, Publishers, 2005.
- Pérez, Louis. Winds of Change: Hurricanes & The Transformation of Nineteenth Century Cuba. Chapel Hill: University of North Carolina Press, 2001.
- Phillips, Ulrich Bonnell. *Life and Labor in the Old South*. Boston: Little, Brown, & Co., 1929.
- Rabinow, Paul. *The Foucault Reader: An Introduction to Foucault's Thought*. New York: Penguin Press, 1991.

- Renda, Mary. *Taking Haiti: Military Occupation & the Culture of U.S. Imperialism, 1915-1940.* Chapel Hill: University of North Carolina Press, 2001.
- Rhodes, Richard. *The Making of the Atomic Bomb*. New York: Simon and Schuster, 1988.
- Roark, James, et. al. *The American Promise: A History of the United States, Vol. II: From 1865.* 4th Edition. New York: Bedford/St. Martin's, 2008.
- Rogin, Michael. Ronald Reagan, The Movie and Other Episodes in Political Demonology. Berkeley: University of California Press, 1987.
- Roorda, Eric. *The Dictator Next Door: The Good Neighbor Policy and the Trujillo Regime in the Dominican Republic, 1930-45.* Durham: Duke University Press, 1998.
- Rosenberg, Emily. *Spreading the American Dream: American Economic and Cultural Expansion*, 1890-1945. New York: Hill and Wang, 1982.
- Rosen, Ruth. *The World Split Open: How the Modern Women's Movement Changed America*. New York: Penguin, 2006.
- Rosenthal, Rose. *Not All Soldiers Wore Pants: A Witty World War II WAC Tells All.* Rochelle Park, NJ: Ryzell Books, 1993.
- Rupp, Leila. *Mobilizing Women for War: German and American Propaganda*, 1939-1945. Princeton: Princeton University Press, 1978.
- ---. Worlds of Women: The Making of an International Feminist Movement. Princeton, NJ: Princeton University Press, 1997.
- Sage, Connie. Frank Batten: The Untold Story of the Founder of The Weather Channel. Charlottesville: University of Virginia Press, 2011.
- Scharff, Virginia. *Seeing Nature Through Gender*. Lawrence, KS: University Press of Kansas, 2003.
- Schudson, Michael. Discovering the News: A Social History of American Newspapers. New York: Basic Books, 1973.
- Scott, Joan Wallach. "Gender: A Useful Category of Historical Analysis." In *Gender And The Politics Of History*. New York: Columbia University Press, 1988.
- September 11 in History: A Watershed Moment? Edited by Mary L. Dudziak. Durham: Duke University Press, 2003.

- Shales, Tom and James Andrew Miller. Live From New York: An Uncensored History of Saturday Night Live As Told By Its Stars. New York: Little Brown & Company, 2002.
- Sheets, Bob and Jack Williams. *Hurricane Watch: Forecasting The Deadliest Storms On Earth.* New York: Vintage Books, 2001.
- Simpson, Robert H. and Herbert Riehl. *The Hurricane and Its Impact*. Baton Rouge: Louisiana State University Press, 1981.
- Sochen, June. *Herstory: A Woman's View of American History*. New York: Alfred Publishing Co., 1974.
- Solinger, Rickie. *Wake up Little Susie: Single Pregnancy before Roe v. Wade*, 2nd Edition. New York: Routledge, 2000.
- Spretnak, Charlene. "Critical & Constructive Contributions of Ecofeminism." In *Worldviews and Ecology*, 181-189. Edited by Peter Tucker and Evelyn Grim. Philadelphia: Bucknell Press, 1993.
- Spruill, Marjorie. *One Woman, One Vote: Rediscovering the Woman Suffrage Movement.* Troutdale, OR: NewSage Press, 1995.
- Steinberg, Ted. *Acts of God: The Unnatural History of Natural Disaster in America*. Oxford: Oxford University Press, 2000.
- Strasser, Susan. *Never Done : A History of American Housework.* New York: Henry Holt, 2000.
- ---. Waste and Want: A Social History of Trash. 1st Edition. New York: Holt, 2000.
- Tannehill, Ivan Ray. *Hurricanes, Their Nature and History: Particularly Those of the West Indies and the Southern Coasts of the United States.*Princeton: Princeton University Press, 1956.
- ---. The Hurricane Hunters. New York: Dodd Mead, 1955.
- Tarrant, Shira. When Sex Became Gender. New York: Routledge, 2006.
- "Television." The World Book Encyclopedia. Chicago: World Book, Inc., 2003.
- Tomblin, Barbara Brooks. *G.I. Nightingales: The Army Nurse Corps in World War II.* Lexington: University Press of Kentucky, 2003.
- Tone, Andrea. *Devices and Desires: A History of Contraceptives in America*. 1st Edition. New York: Hill and Wang, 2002.

- Tyler, Pam. Silk Stockings and Ballot Boxes: Women and Politics in New Orleans, 1920-1963. Athens: University of Georgia Press, 2009.
- *Uncommon Ground: Rethinking the Human Place in Nature.* Edited by William Cronon. New York: W.W. Norton & Co., 1996.
- Van Heerden, Ivor and Mike Bryan. *The Storm: What Went Wrong and Why During Hurricane Katrina—the Inside Story from One Louisiana Scientist.* New York: Viking, 2006.
- Wagnleitner, Reinhold. *Coca-colonization and the Cold War: The Cultural Mission of the United States in Austria after the Second World War.* Chapel Hill: University of North Carolina Press, 1994.
- Wallace, Aurora. "National News and the Nation: The *New York Times*, the *Washington Post*, the *Wall Street Journal*, and *USA Today*." In *Newspapers and the Making of Modern America*. Westport, CN: Greenwood Press, 2005.
- Ware, Susan. *Beyond Suffrage: Women in the New Deal*. Cambridge: Harvard University Press, 1981.
- Weeks, Jeffrey. "Sexuality." In *Major Problems in the History of American Sexuality*, 2-9. Edited by Kathy Peiss. Boston: Houghton Mifflin Company, 2002.
- Whittemore, Hank. *CNN: The Inside Story: How a Band of Mavericks Changed the Face of Television News*. New York: Little & Brown, 1990.
- Whorton, James. *Before Silent Spring: Pesticides and Public Health in Pre-DDT America*. Princeton: Princeton University Press, 1975.
- Wilmot, Marlene Harvey. *Bluff-to-Bluff: The 1935 Republican Valley Flood.* Greeley: Wilmot Ventures, 1995.
- Wilson, Alexander. *The Culture of Nature: North American Landscape from Disney to the Exxon Valdez.* Cambridge MA: Blackwell, 1992.
- Winters, Harold A., et. al. *Battling the Elements: Weather and Terrain in the Conduct of War*. Baltimore: Johns Hopkins Press, 1998.
- Woloch, Nancy. *Women and the American Experience*. 5th Edition. New York: McGraw-Hill, 2011.
- Worster, Donald. *Dust Bowl: The Southern Plains in the 1930s*. Oxford: Oxford University Press, 2004.
- ---. The Ends of the Earth: Perspectives on Modern Environmental History. New York: Cambridge University Press, 1988.

GOVERNMENT PUBLICATIONS

- Blake, Eric, Christopher Landsea and Ethan Gibney. "The Deadliest, Costliest, and Most Intense United States Tropical Cyclones From 1851 to 2010 (and Other Frequently Requested Hurricane Facts). NOAA Technical Memorandum, NWS NHC-6. Miami: National Weather Service, 2011.
- Hebert, Paul, Jerry Jarrell and Max Mayfield. "The Deadliest, Costliest, and Most Intense United States Hurricanes of This Century (and Other Frequently Requested Hurricane Facts). NOAA Technical Memorandum, NWS TPC-1. Washington: U.S. Department of Commerce.

PERIODICALS

- Barker, David and David Miller. "Hurricane Gilbert: Anthropomorphizing a Natural Disaster." *Area* 22, no. 2 (June 1990): 107-116.
- Johnson, Sherry. "El Nino, Environmental Crisis and the Emergence of Alternative Economies in the Hispanic Caribbean in the 1760s-1770s." William and Mary Quarterly 62 (July 2005): 365-410.
- Macomber, K., C. Mallinson, and E. Seale. "Katrina That Bitch!' Hegemonic Representations of Women's Sexuality on Hurricane Katrina Souvenir T-Shirts." *The Journal of Popular Culture* 44, no. 3 (June 2011): 525-544.
- O'Neill, Charles Edwards. "The French Regency and the Colonial Engineers: Street Names of Early New Orleans." *Louisiana History: The Journal of the Louisiana Historical Association*. Vol. 39, No. 2 (Spring 1998) 207-214.
- Schwartz, Stuart B. "The Hurricane of San Ciriaco: Disaster, Politics, and Society in Puerto Rico, 1899-1901." *The Hispanic American Historical Review* 72, no. 3 (August 1992): 303-334.
- Tengan, Ty P. Kawika. "Remembering Panalau: Masculinities, Nation, and Empire in Hawai'i and the Pacific." *The Contemporary Pacific* (University of Hawai'i Press) 20 (2008): 27-53.
- Westbrook, Robert B. "I Want a Girl, Just Like the Girl That Married Harry James': American Women and the Problem of Political Obligation in World War II." *American Quarterly* 42, no. 4 (December 1990): 587-611.

SOFTWARE

Google Maps. Last accessed August 7, 2012.

Tagxedo. Last accessed June 12, 2013.

TALKS

Dorst, Neal. "They Call the Wind Mahina: A History of the Naming of Tropical Cyclones." Talk given October 23, 2012. Atlantic Oceanographic and Meteorological Laboratory, Coral Gables, Florida.

Websites

- "Bitch." Oxford English Dictionary Online. 2nd Edition, 2013, http://www.oed.com. libproxy.tulane.edu:2048/view/Entry/19526? rskey=XTP6eE&result=3#eid.
- Caglecartoons.com. Last accessed on June 5, 2013.
- Chartruk, Bob. "NOAA Meteorologist Bob Case, The Man Who Named The Perfect Storm." NOAA News Online. Posted June 16, 2000, http://www.noaanews.noaa.gov/stories/s444.htm.
- Chew, Van. "Gay Hurricane." BET Comic View. Posted July 15, 2006, http://www.youtube.com/watch? V=liK_knD125.
- "Climatology of Tropical Cyclones in Western Australia." Australian Government: Bureau of Meteorology. Last accessed February 4, 2013, http://www.bom.gov.au/cyclone/climatology/wa.shtml.
- "Evolution of the National Weather Service Timeline." NOAA Online. Last accessed August 25, 2012, http://www.nws.noaa.gov/pa/history/timeline.php.
- Federal Communications Commission. "Program Contents Regulations." Last accessed June 1, 2011, http://www.fcc.gov/guides/ program-content-regulations.

- "Hurricane." Oxford English Dictionary Online. 2nd Edition, 1989. Posted November 2010, http://www.oed.com.libproxy.tulane.edu: 2048/Entry/89594.
- "Hurricane Gustav Curtails Southern Decadence." Gay Cities Online. Posted August 30, 2008, http://www.gaycities.com/outthere/181/hurricane-gustav-curtails-southern-decadence/.
- MiniWatts Marketing Group. "Internet World Stats: Usage & Population Statistics, June 30, 2012." Posted online February 2013, http://www.internetworldstats.com/stats.htm.
- "Miss Hurricane Hunter 1956." Air Weather Reconnaissance Association Website. Last accessed August 14, 2012, http://www.awra.us/gallery-febo5.html.
- National Hurricane Center. "Hurricanes in History." National Weather Service. Last accessed on August 17, 2012. http://www.nhc.noaa.gov/outreach/history/.
- "Roxcy Bolton, Pioneer Feminist." Roxcy Bolton Collection. Florida Memory Project Online. Created October 6, 2009, http://www.floridamemory.com/OnlineClassroom/Roxcy Bolton/index.cfm.
- "Tempest," and "Tempeste." *Oxford English Dictionary Online*. 2nd Edition, 1989. Posted November 2010, http://www.oed.com.libproxy.tulane.edu: 2048/Entry/198906.
- Vincik, Jason. "Gustav Kills Southern Decadence—New Gay Lake Party Emerges in Dallas." Anythingbutstraight Blog. Posted September 3, 2008, http://anythingbutstraight.blogspot.com/2008/09/gustav-kills-southern-decadence-new-gay.html.
- "Weather Channel Names Nor'easter, National Weather Service Says Not So Fast." Foxnews.com. November 7, 2012, http://www.foxnews.com/weather/2012/11/07/weather-channel-names-noreaster-national-weather-service-says-not-so-fast/print#.
- "Weather on the Air: Exploring the History of Broadcast Meteorology." Blog posted March 25, 2010, http://weatherontheair.com/2010/03/25/whoelse—but-the-weatherman/.
- Women In Military Service For America Memorial Foundation. "Highlights in the History of Women in the Military." Last accessed on September 15, 2012, http://www.womens.memorial.org/Education/timeline.html.

"Women in the Weather Bureau During World War II." NOAA History: A Science Odyssey. Last updated June 8, 2006, http://www.history.noaa.gov/stories_tales/women6.html.

BIOGRAPHY

Elizabeth Skilton is currently a Visiting Instructor at the University of Louisiana at Lafayette. Including her recent Ph.D. in History from Tulane University, Skilton received her M.A. in History from Tulane University in 2010, and a B.A. in History and Sociology from Case Western Reserve University. Her overall research interests focus on the intersection of gender and the environment described in popular culture, particularly that of hurricanes.