

Volume Seven 2019-2020



JAMES MADISON

UNDERGRADUATE RESEARCH JOURNAL

“The process of discovery and analysis in research provides one of the most powerful, high-impact learning experiences any undergraduate can have.”

- Jonathan Alger,
President of James Madison University



Table of Contents

Letter from the Editors and Editorial Board Members	4
Volume 7 Faculty Reviewers and Acknowledgments	5
The Russo-Japanese War: Origins and Implications Benjamin Mainardi <i>Political Science</i>	6
Variation in Women's Political Representation Across Countries Julianna Heck <i>Political Science</i>	15
MOVE: Philadelphia's Forgotten Bombing Charles Abraham <i>History</i>	27
Collective Identity in Germany: An Assessment of National Theories Sean Starkweather <i>International Affairs</i>	36
Christmas Criminals: A Routine Activity Approach to Crime on U.S. Holidays Wyatt Lam <i>Sociology</i>	49
An Analysis of Technological Components in Relation to Privacy in a Smart City Kayla Rutherford, Ben Lands, and A. J. Stiles <i>Integrated Science and Technology</i>	59

Letter from the Editors

Dear Reader,

After two semesters, the challenges of a global pandemic, and a university-wide transition to online learning, we are proud to present Volume Seven of the *James Madison Undergraduate Research Journal*!

During the 2019-2020 academic year, Managing Editor Logan Roddy led a dedicated crew of interns, editors, and designers in publishing the first installments of Volume 7. In the Fall 2020 semester, Managing Editors Kim Stuart and Jennifer Switzer took up the mantle of leadership, working with a team of newcomers and experienced returners to deliver the finishing touches on our volume and lay the groundwork for future editorial boards.

The transition to managing the publication in an entirely digital space proved to be a new adventure for us all, but the Editorial Board has maintained its momentum. This volume represents research from a variety of disciplines, including Political Science, History, Sociology, and Integrated Science and Technology. These works, along with pieces published in previous volumes, have been downloaded over 32,000 times in the past year by researchers around the world. As our journal continues to grow in scope, we have continued to value the support of 200+ faculty experts across the JMU campus who have served as reviewers since our first issue.

Volume 7 stands as a testament to the ways that James Madison University as a whole adapts and achieves academic excellence. *JMURJ* is proud to have provided undergraduate students with a platform to showcase their research and scholarship to their peers around the globe. This would not be possible without the community we have developed, both within James Madison University and beyond. Whether you are a long-time supporter or a first-time reader, we thank you for your patronage and hope you enjoy the valuable research and scholarship created by JMU's undergraduate students.

The *JMURJ* Editorial Board

Meet the Board

Managing Editors

Logan Roddy
Kimberlyn Stuart
Jennifer Switzer

Lead Editors

Laura Baird
Kenny Graham
Sarah Hann
Tess Miracle
Jessica Tosi

Webmaster

Zach Welker

Editors

Leah Coffey
Aleah Crystal
Nick Dunard
Lindsay Faules
Taralyn Guthrie
Sarah Hann
Jay White

Designers

Tori Carpenter
Homer Eliades
Declan Sofield

Marketing Team

Isabelle Amato
Angela Lin
Sara M.
Clara Peirce
Rochelle Podolsky

ISAT Liaison

Nolan Harrington

Advisor

Kevin Jefferson



Volume Seven Faculty Reviewers

Dr. Melinda Adams, <i>Political Science</i>	Dr. David Jones, <i>Political Science</i>
Dr. Jessica Adolino, <i>Political Science</i>	Dr. Gabrielle M. Lanier, <i>History</i>
Professor Kate Arecchi, <i>Theatre and Dance</i>	Dr. Claire Lyons, <i>Psychology</i>
Dr. Stephanie Baller, <i>Health Sciences</i>	Dr. Lisa McGuire, <i>Social Work</i>
Professor Rodolfo Barrett, <i>Learning Centers</i>	Dr. Benjamin Meade, <i>Justice Studies</i>
Dr. Sarah Brooks, <i>Art, Design and Art History</i>	Dr. Shana Meganck, <i>Political Science</i>
Dr. Martin Cohen, <i>Political Science</i>	Dr. Talé Mitchell, <i>Media Arts and Design</i>
Dr. Erika Collazo, <i>Health Sciences</i>	Dr. Yenisei Montes de Oca, <i>Foreign Languages, Literatures, and Cultures</i>
Dr. Andrew Connell, <i>Music</i>	Dr. Colleen Moore, <i>History</i>
Dr. Kerry F. Crawford, <i>Political Science</i>	Dr. Ji Hyung Park, <i>Political Science</i>
Dr. David Dillard, <i>History</i>	Dr. Joshua Pate, <i>Hospitality, Sport and Recreation Management</i>
Dr. David Ehrenpreis, <i>Art, Design and Art History</i>	Dr. Jenny Ramirez, <i>Art History</i>
Dr. Samy Sayed El-Tawab, <i>Integrated Science and Technology</i>	Dr. Tomás Regalado-López, <i>Foreign Languages, Literatures, and Cultures</i>
Dr. Theresa M. Enyeart Smith, <i>Health Sciences</i>	Dr. Sharlene Richards, <i>Communication Studies</i>
Professor Jared Featherstone, <i>Learning Centers</i>	Dr. Bryan Saville, <i>Psychology</i>
Dr. Dolores Flamiano, <i>Media Arts and Design</i>	Professor Joshua Streeter, <i>Theatre and Dance</i>
Dr. Louise Gilchrist, <i>Pre-PT/Pre-OT Advisor</i>	Dr. Jeffrey Tang, <i>Integrated Science and Technology</i>
Dr. Keith Grant, <i>Political Science</i>	Dr. John Tkac, <i>Foreign Languages, Literatures, and Cultures</i>
Dr. Steven Guerrier, <i>History</i>	Dr. Laura Trull, <i>Social Work</i>
Dr. Maura Hametz, <i>History</i>	Dr. Tim Walton, <i>Intelligence Analysis</i>
Dr. Shah Mahmoud Hanifi, <i>History</i>	Dr. Maria Theresa Wessel, <i>Health Sciences</i>
Dr. Glenn P. Hastedt, <i>Justice Studies</i>	
Dr. Yongguang Hu, <i>History</i>	
Dr. Aimee Johnson, <i>Health Sciences</i>	

Acknowledgments

We thank the 200+ faculty reviewers who have volunteered their time through the first seven volumes of *JMURJ*, starting with the 45 faculty reviewers listed above who reviewed for Volume 7. Traci Zimmerman and Michael Smith, past and current Directors of the School of Writing, Rhetoric and Technical Communication, remain enduring champions for *JMURJ*. We also want to acknowledge Vice Provosts Keith Holland and Anthony Tongen, Ms. Becky Rohlf, and Mr. Ben Delp in the Office of Research and Scholarship for their assistance. We thank JMU Creative Media for their contributions to our publication. We have also enjoyed ongoing technical support from WRTC's Sandra Purington and Kristin Knapp and the Learning Centers' Joan Fahrney and Adrienne Griggs. Finally, we would again like to thank President Jonathan Alger and Provost Heather Colman for their interest and encouragement as we work to promote, publish, and share undergraduate research and scholarship throughout the JMU community.

The Russo-Japanese War

Origins and Implications

Benjamin Mainardi

The 1904-1905 Russo-Japanese War was the first major conflict of the twentieth century and a turning point in the balance of power in East Asia. In the short term, Russia's defeat helped precipitate the 1905 Russian Revolution and the 1917 October Revolution. More broadly, the aftermath of the war informed Japan's imperial ambitions in Manchuria—the early stages of World War II in Asia during the 1930s—and continuing Russo-Japanese enmity over Sakhalin Island and the Kuril Island chain. Studying this historical conflict in terms of international relations provides valuable insights into the nature of the conflict and how the past continues to shape modern geopolitics. As a case study, the war offers important lessons in the difficulties of sustained power projection and the exigencies involved in adaptable war planning. Equally important, Russia and Japan's intractable imperial ambitions coupled with their failures to credibly communicate resolve serve as a cautionary tale on the consequences of inept diplomacy.

Throughout the late nineteenth and early twentieth centuries, European great powers carved out spheres of influence in East Asia. As available territory became limited, empires seeking to expand competed against one another. While contemporaries widely regarded Russia as the dominant force in East Asia, Japanese power was rapidly growing. Both powers preyed on the ailing Qing dynasty of China. Russia steadily eroded Chinese territory in the north while Japan waged war with China for control of Korea. Sustained Russian power projection in the East necessitated access to a warm-water port. This was found at Port Arthur on the strategic Liaodong Peninsula just north of the Korean border. By the late 1890s, Russia and Japan were at odds over territorial ambitions in this region. Russian presence gradually intensified in Manchuria and began encroaching on Korea in spite of Korea's position within Japan's sphere of influence.

The resulting contest for domination of East Asia would become the first major armed conflict of the twentieth century.

As this emerging security dilemma began to jeopardize Japan's foothold on the Asian mainland, tensions between Russia and Japan escalated. Unable to reach an agreeable status quo while neglecting to fully indicate its resolve on the issue of Korea, Japan prepared for conflict. In February 1904, breaching international etiquette established by the Hague Conventions of 1899 and 1907, the Imperial Japanese Navy launched a surprise strike against the Russian Pacific Fleet at Port Arthur prior to officially declaring war (Aldrich 2000). The resulting contest for domination of East Asia would become the first major armed conflict of the twentieth century. Examining this archetypal case study in regional power transition reveals the perils of intractability and sustained power projection.

Historical Background

Understanding the origins of the Russo-Japanese War first necessitates an understanding of contemporary East Asian geopolitics. For nearly three thousand years, various Chinese imperial dynasties had been the regional superpowers of East Asia with few peer competitors. Historians largely agree that this lack of true peer-competition led to military and industrial stagnation in the later Qing dynasty (Naquin 1987, 219-221). From 1644 to at least 1800, the dynasty was the unquestioned hegemon of East Asia. Yet by 1800,

Western powers began encroaching on Chinese client-states and spheres of influence. Portugal had solidified its hold on the once Chinese-held port city of Macau, and the Dutch fostered an ever-growing presence in Taiwan and much of modern Indonesia. Meanwhile, Spain maintained control of the Philippine Islands, the British presence in India was slowly permeating throughout Southeast Asia, and friction along the Chinese northern border with Russia was intensifying (Zhao 1998, 26). However, the Chinese-led international order of East and Southeast Asia established by the Tributary and Guangzhou Systems persisted (Zhao 1998, 25).

Largely dissatisfied with these regional systems in which the Qing dynasty dominated virtually all political and economic affairs, European states gradually began to erode Chinese influence in the region. As such, the power of East Asia's traditional hegemony was supplanted throughout the nineteenth century, rupturing the unipolar order without a sufficiently powerful state to replace China. Russia and Great Britain, in particular, heavily shaped the regional dynamics of East Asia during the late eighteenth century. Frustrated by an inability to expand in the Balkans, Crimea, or Southwest Asia in the first half of the eighteenth century, Russia began to look eastward. It progressively occupied greater portions of eastern Siberia and northern Mongolia, creating tensions with China (Malozemoff 1958, 19-23). Great Britain desired ever-greater trading rights with the Qing dynasty and eventually exacted its economic ambitions through a series of conflicts known as the Opium Wars. By 1898, Great Britain, France, Germany, and Russia all held de facto control over large portions of the Chinese mainland (MacNair and Lach 1950, 53).

At the same time, Japan was emerging from nearly two centuries of self-imposed isolation under the recently overthrown Tokugawa Shogunate. The new Meiji government recognized that nations not poised for offense were likely to be dominated by those that were. After observing the gradual erosion of Chinese territory by the West and being subjected to unequal trade treaties, the Meiji government's chief priority was modernizing Japan's industry and military. Prior to 1850, however, Japan's economy was still primarily based on subsistence agriculture; military technological development had largely stagnated since the founding of the Tokugawa regime in 1603 (Tuan-Hwee and Moriguchi 2014, 464). Extraordinarily, the Meiji government was able to modernize effectively using Japan's existing political infrastructure and posture as a great power. Still, to truly accede to great power status, Japan needed to expand territorially as the others had.

Soon after Western powers began forcing Japan to normalize its foreign relations in 1853, Japanese leaders sought to expand their fledgling empire. The logical first step towards expansion onto the Asian mainland was the takeover of the Korean Peninsula. However, Korea had traditionally been a Chinese vassal-state, and despite the Western powers eroding its influence, the Qing dynasty had been able to maintain effective control. In 1876, Japan forced the Korean kingdom of Joseon into an unequal trade treaty in spite of Chinese objections.

This expanding Russian sphere of influence began to directly conflict with Japanese interests.

Continued Japanese efforts to assert itself into Korean politics heightened tensions in Sino-Japanese relations. Yet after China and Japan signed the peace treaty, the terms were forcibly altered by the Tripartite Intervention of Russia, Germany, and France, ostensibly to maintain the stability of East Asia. Russia was the primary agent behind the intervention; it sought both to assert its own influence in East Asia and to secure its borders along Manchuria against the seemingly powerful China, as evidenced by the construction of the Trans-Siberian Railway (Malozemoff 1958, 27). Russia particularly objected to the Japanese acquisition of the harbor city of Port Arthur since it hoped to establish it as its own warm-water port in the East (Kowner 2006, 375). Japan agreed to altered terms of peace in the face of the three great powers, whose combined naval capabilities outmatched Japan's.¹ The terms imposed by the Tripartite Intervention prevented Japan from acquiring the Liaodong Peninsula and Port Arthur in exchange for an additional 30 million taels of silver to be paid by China. This intervention by the Russian diplomatic coalition humiliated Japan and created a deep sense of suspicion towards the Russians. In turn, Japan began further investing in its machine industry and military while also signing an alliance with Great Britain to counterbalance Russia (Burton 1990, 100).

Japanese suspicions were confirmed when Russian forces occupied Port Arthur and the Liaodong Peninsula in 1898. Following the fortification of Port Arthur, Russia

progressively began encroaching on both China and Korea, gaining a number of economic concessions. This expanding Russian sphere of influence began to directly conflict with Japanese interests. Should Japan not have contested Russia's rising power, the island nation itself would have been cut off from expansion onto the Asian mainland. As such, Japanese leaders became increasingly convinced conflict with Russia was necessary (Zhang 1998, 53). Similarly, Russia was apt to resist Japan's rising power because reducing efforts to supplant China as the hegemon of East Asia was counter to its interests and investment in eastern territories. The breaking point came when, in spite of their assurances they would not do so, Russian forces continued to occupy the Chinese region of Manchuria and initiated the construction of railways connecting the region to its territory after the suppression of the Boxer Rebellion in 1901 (Katō 2007, 101).² Entering negotiations over these actions, Japan sought to establish a status quo whereby Russia acknowledged its control of Korea and Japan acknowledged Russian control of Manchuria. When this proposal was rebuffed, Japan understood that Russian actions indicated an even greater desire for eastern territory. Another attempt at negotiations to demilitarize the area also failed as the lack of trust between the two states and concern over the emerging security dilemma thwarted compromise (Malozemoff 1958, 246). Thus, Japan would need to check Russian expansion by force if it was to expand.

Capabilities and Strategies

On the eve of war in 1904, there was a great disparity in potential capabilities between Russia and Japan. The 1904 total population of Russia was roughly 125,000,000 whereas Japan possessed a population of only 67,273,000 (Keltie 1904, 1022-92; 855-75). This massive population difference was equally present in military personnel. Pre-war Russian military strength was approximately 1,160,000 men while Japanese forces only numbered 218,000 (Sarkees and Wayman 2010). Furthermore, the Russian navy possessed sixty-four warships while the Japanese navy only totaled thirty-four (Sarkees and Wayman 2010). And while Japanese military expenditures in 1904 far outstripped Russia's, US \$89.5 million to US \$66.9 million (Sarkees and Wayman 2010). Russia exceeded Japan in industrial production.

² The Boxer Rebellion was a reactionary uprising in Chinese society in the face of increasing Westernization. Between 1899 and 1901, to expel foreign influence from China, Boxer rebels and Chinese imperial forces engaged the Eight-Nation Alliance that included Austria-Hungary, Britain, France, Germany, Italy, Japan, Russia, and the United States. The conflict resulted in a decisive victory for the colonial powers, but marked a general decline in direct intervention in China save for Japan, Russia, and the United States. For more information on the Boxer Rebellion, see Silbey, *The Boxer Rebellion*; Escherick, *Origins*; or Bickers, *The Scramble for China*.

¹ Kowner's *Historical Dictionary of the Russo-Japanese War*, 375 records the local naval power disparity during the 1895 intervention as being thirty-eight allied Russian, French, and German warships with a displacement of 95,000 tons compared to thirty-one Japanese warships with a displacement of 57,000 tons.

Russia produced 2,766,000 tons of iron and steel annually as of 1904 while Japan produced only 60,000 tons (Sarkees and Wayman 2010). Overall, the Correlates of War Project scored Japan's 1904 composite national capability as 0.0545 and Russia's as 0.1132 (Sarkees and Wayman 2010).³ This scoring represents that in 1904, Japan possessed 5.45 percent of world material capabilities while Russia accounted for 11.32 percent.

While Japan was certainly outmatched by Russian material capabilities, its greatest advantage was geography. At its shortest distance from the home island of Kyushu, Japan was positioned approximately one hundred miles away from the Korean Peninsula (Cooling 1994, 455). In contrast, the distance by rail from Moscow to Port Arthur was almost five thousand miles (Asakawa 1904, 64). Complicating the issue posed by this vast distance was the fact that the Trans-Siberian Railway had only one track and was not yet fully completed. This created an inherent operational disadvantage which was further compounded by the concentration of Russian ground forces in Eastern Europe and Southwest Asia. As such, Japan's army was able to face Russian forces with relative parity in numbers. Similarly, almost two-thirds of Russian warships were located in either the Black Sea or the Baltic Sea. Russia's Pacific Fleet was also divided between the recently acquired Port Arthur and the traditional eastern base of Vladivostok. Any Russian reinforcements would have to travel by ship and sail around the Cape of Good Hope, a voyage of several weeks (Koda 2005, 22). Equally devastating to Russian field capabilities was the lack of an efficient communication network that reached East Asia.

This unstable foundation for military operations represented a failure in Russia's grand strategy.

Military strategist Carl von Clausewitz emphasized the necessity of focusing on the enemy's center of gravity (von Clausewitz [1832] 2004, 687). This was Japan's second greatest advantage, as Russia had virtually no capability to both protect its recent gains in Manchuria and also strike mainland Japan. Its forces were limited in tactical mobility and had to maintain a responsive posture to Japanese movements. Furthermore, since Russia would largely be

unable to resupply or communicate with its eastern forces by land, any concerted campaigns would require substantial planning. Thus, Japanese war planners were able to exercise more freedom in the campaigns. What resulted was a strategy of denial and targeted operations. First, destroying the Russian Pacific Fleet would cripple Russian mobility and constrict supply lines (Westwood 1986, 38). Second, campaigns undertaken with naval superiority in specific zones of operation would give Japanese land forces the tactical edge needed to overcome Russian numbers (Westwood 1986, 52). In contrast, Russia's eastward expansion severely hampered its logistical capabilities, since it lacked proper lines of communication and transportation from the industrial heartland. Such expansion almost completely drained Russia's financial reserves, leaving the country dependent on borrowing large sums from France and Germany (Hunter 1993, 146).

Overall, this unstable foundation for military operations represented a failure in Russia's grand strategy. Conversely, Japan's grand strategy was distinctly more calculated. Japan followed the British example and focused on naval development, constructing the fourth strongest fleet in the world by 1902 (Evans and Peattie 2012, 89). As such, Japan was able to effectively transport forces to the Asian mainland with greater ease than any other contemporary great power. Furthermore, Japanese efforts to gain support from foreign powers in the form of loans would eventually account for almost 40 percent of its wartime expenditure (Hunter 1993, 151).

In contrast, modern observers generally find Russian preparations for conflict in the East against Japan surprisingly lackluster. These plans were predicated on the notion that Japan would never be the instigating power (Jukes 2002, 18). In fact, Russian Viceroy of the Far Eastern Fleet Admiral Alekseev expressed an overwhelming confidence in Russian military dominance declaring in 1903 that "our plan of operations should be based on the assumption that it is impossible for our fleet to be beaten, taking into consideration the present relationship of the two fleets, and that a Japanese landing is impracticable" (Westwood 1986, 37). Yet such a cursory look at Russian strategy in the East neglects the realities of being the world's largest land power. As Nicholas Papastratigakis (2011) observed in *Russian Imperialism and Naval Power: Military Strategy and the Build-Up to the Russo-Japanese War*, the Russian military apparatus faced no less than three major theaters of operations of which the Pacific had been deemed the least precarious. The Baltic Sea and the Black Sea, positioned significantly closer to the capital at St.

³ The Correlates of War Project is an academic effort to analyze and study the facets of conflict since 1816. Correlates of War datasets incorporate a number of variables that factor into national military and industrial capabilities using quantitative data. For more information, see correlatesofwar.org.

Petersburg and Russia's industrial heartland, both presented theaters with greater numbers of rivals that appeared to pose a more significant threat to Russia's national security. As a result, the protection of Russia's holdings in the East would rely primarily on defensive naval positioning to prevent landings close to Port Arthur, forcing the Japanese into a ground war in which vast territories and superior Russian numbers could exhaust the small island nation (Patrikeef and Shukman 2007, 56). Indeed, in his book on the Russian army prior to and during the war with Japan, Commander in Chief Aleksey Nikolaevich Kuropatkin noted that the Japanese navy outnumbered Russian naval strength in the region, relegating the Far Eastern Fleet to a tool of deterrence and his ground forces to defensive operations (Kuropatkin 1909, 27). Kuropatkin therefore argued that his elastic line of defense had allowed troop concentrations to retire when pressed and nearby garrisons to flank and attack Japanese forces (Kuropatkin 1909, 28).

Resolution and Aftermath

Successive Japanese victories throughout 1904 shocked the Russian regime, but Russia was ultimately unwilling to sue for peace. This unwillingness to accede to proposed Japanese terms for peace was in large part due to the influence of Tsar Nicholas II's concern for prestige, but also because the vast majority of Russian land forces remained intact (Westwood 1986, 157). Regardless, the war progressively evolved into a stalemate following the Japanese capture of the Liaodong Peninsula. Declining offers for an early armistice, Tsar Nicholas II sent the majority of Russia's Baltic Fleet eastward in late 1904 via the Cape of Good Hope. This relief force was decisively defeated in the 1905 Battle of Tsushima. In the battle, Russia lost eleven battleships, four cruisers, six destroyers, and twenty-seven auxiliary ships while Japan lost only three torpedo boats (Regan 1992, 178). Again, in spite of severe losses, Tsar Nicholas II wanted to escalate the conflict, but rising domestic tensions coupled with Russian revolutionary gains forced him to enter into negotiations in August of 1905 (Connaughton 1992, 342).⁴ Concurrently, Japanese losses on land had been mounting, and leaders contacted President Theodore Roosevelt to help mediate a peace agreement (Connaughton 1992, 272). In its entirety, the Russo-Japanese War lasted from February 8, 1904 to September 5, 1905. Over the course of nineteen months, roughly 2.5 million men had been mobilized and upwards

of two hundred thousand were killed or wounded in action (Dumas and Vedel-Peterson 1923, 57-9).

The zero-sum nature of the Treaty of Portsmouth would perpetuate strained relations between the two states.

Even after agreeing to enter into negotiations to end the conflict, Russia and Japan hotly contested the negotiation planning in an effort to save some level of prestige (Trani 1969, 62). Delegates on both sides took stark positional approaches centered around territorial changes. Ultimately, the Treaty of Portsmouth was signed on September 5, 1905. It stipulated that Russia must recognize Korea as part of Japan's sphere of influence and establish exclusive Japanese control over Korea ("Text of the Treaty of Portsmouth," 1905). Further, Russia was required to withdraw from Manchuria, cede the southern portion of Sakhalin Island, and transfer the leasing rights of Port Arthur and the Liaodong Peninsula to Japan ("Text of the Treaty of Portsmouth," 1905). Yet this resolution failed to address the underlying issues of conflicting Japanese and Russian interests in the region. Russia had been denied access to a significant warm-water port and lost control of part of its homeland, the southern half of Sakhalin Island, which ultimately curtailed eastward expansion. The zero-sum nature of the Treaty of Portsmouth would perpetuate strained relations between the two states that continued through the decline of the Russian Empire in 1917 and into the Soviet period.

Japan's decisive victory crippled Russian international prestige and power projection capability. Additionally, the substantial loss of face by the Russian regime contributed to the rise of the 1905 Russian Revolution and the 1917 October Revolution. In crippling Russia, whether intentionally or not, Japan had effectively removed its sole rival in East Asia while also gaining large portions of territory. Yet victory came at a cost of a forty-fold increase in the national debt with an annual interest accounting for roughly a quarter of the Japanese budget (Oyama and Ogawa 1932, 252). In turn, East Asia's new hegemon began developing a regional system of direct political and economic imperialism that would come to be known as the Greater East Asia Co-Prosperity Sphere.

Theoretical Explanation

Due to the decline of Chinese power, the East Asian region lost its hegemony that had guaranteed international stability

⁴ Beginning in January of 1905, massed socio-political protests emerged in much of Russia largely due to severe social and economic inequality as well as a growing discontent with the Russo-Japanese War. Much of the unrest was suppressed using military force as typified by "Bloody Sunday," but the disruptions caused by the revolution were severe. For more information about the 1905 revolution see Salisbury, *Black Night, White Snow*; Ascher, *Revolution of 1905*; or Surh, *1905 in St. Petersburg*.

for centuries. The ensuing power vacuum evolved into a semi-multipolar system whereby major European states effectively divided East Asia among themselves. It should be noted that Britain and Russia were distinctly more able to project power to the region. However, Britain primarily sought to further economic ties while Russia sought actual territorial gains and the assertion of its own rule. By the end of the nineteenth century, the only two states that possessed significant forces in the region were Japan and Russia. Despite both actors cooperating in the suppression of the 1900 Boxer Rebellion and engaging in some trading enterprises, this dyad was ultimately unable to establish a status quo suitable to both parties.

This inability to compromise on delineating spheres of influence was largely due to the overwhelming expansionary ambitions of both states. Progressively, Russia attempted to fill the power vacuum left by China's decline through a series of territorial expansions and treaties with the ailing Qing dynasty. Japan, however, was dissatisfied with the emerging Russian supremacy in East Asia (Zhao 1998, 52). Yet when accounting for certain variables, both states had relative parity in military capabilities. In turn, as Lemke and Werner (1996) argued in *Power Parity, Commitment to Change, and War*, conflict was highly likely as both actors possessed similar capabilities and competed for the same position in the regional hierarchy. As such, Japan engaged in conflict with Russia to challenge Russia's rise to power in East Asia. Likewise, Russia was unwilling to yield to Japan's demands, as doing so would hamper the ability to impose a system favorable to its own ambitions.

This inability to compromise on delineating spheres of influence was largely due to the overwhelming expansionary ambitions of both states.

The outbreak of the Russo-Japanese War can be attributed to the contiguity of competing expansionary ambitions. The zero-sum game of territorial acquisition was a driving factor in the outbreak of war. For Russia, expansion in the East, especially in Manchuria and Korea, offered an unparalleled economic opportunity (Katō 2007, 101). Russia had largely been contained in the West by European interventions and could not allow itself to be closed off in the East as well (Geyer 1987, 192). Similarly, Japan lacked the prestige and

power of the other great powers due to its recent entrance onto the world stage and small territorial holdings. As an island nation, Japan needed to establish a foothold on the Asian mainland. Yet any expansion or military buildup by one of these powers inherently required a reciprocal response.

Incomplete information and lack of compromise prevented the peaceful resolution of conflict, making war the rational choice.

The intractability of Russian and Japanese expansionary ambitions is evidenced by their inability to negotiate. Japanese leaders sought Russian assurances that they would not interfere in their de facto control of Korea. Likewise, Russian leaders wanted Japanese recognition of their exclusive economic control of Manchuria. What doomed negotiations was the linkage of Manchuria to Korea. Indeed, for either state, Manchuria represented potentially massive economic gains as a populous, resource-rich region (Katō 2007, 101). However, Russia needed to maintain a warm-water harbor at Port Arthur to effectively reap the benefits of controlling Manchuria. For Japan, Port Arthur represented a historical grievance against Russia and presented a direct threat to its control of Korea. Furthermore, the potential loss of trade with a region as large as Manchuria would be severely detrimental to the Japanese economy that relied heavily on trade. Bargaining over these issues was strained by Russia's severe underestimation of Japanese capabilities and overestimation of its own. Indeed, Russian Viceroy of the Far Eastern Fleet Admiral Alekseev publicly expressed such ideas (Westwood 1986, 37). Most importantly, Tsar Nicholas II genuinely believed that Japan would yield in the face of Russia's perceived superiority (Jukes 2002, 18). This misconception regarding Japanese intentions was, in part, the fault of the Japanese government as it failed to indicate its resolve to go to war over the question of Korea (Katō 2007, 102). As such, incomplete information and lack of compromise prevented the peaceful resolution of conflict, making war the rational choice.

Conclusion

With the effective subversion of its traditional hegemony throughout the nineteenth century, the East Asian region quickly devolved into systemic anarchy. Hoping to fill the void left by China's weakness, Russia and Japan sought to expand territorial control in the region. The Russian need for a warm-water port in the Far East was crucial to establishing a

strategic base in the region. Likewise, Japan lacked a foothold on the Asian mainland and needed to secure its sphere of influence in Korea. Thus, limited options for expansion placed both actors in opposition to one another's interests. Japan's defeat of Russian forces shocked contemporary observers and effectively marked its ascension to regional hegemony over East Asia. This drastic shift in the balance of power would be a major contributing factor to Japanese expansion into China and the South Pacific throughout the next several decades. As a case study in competing ambitions of great powers, the Russo-Japanese War offers an exemplary instance of an external security dilemma and regional power transition.

Author's Note



Benjamin E. Mainardi ('20) double-majored in International Affairs and Public Policy and Administration and double-minored in Political Science and History. His areas of study include great-power competition and military history. Mr. Mainardi will continue his education with a master's in

Security Studies starting this fall. He hopes to pursue a career in the defense and intelligence communities.

This paper builds on research from the disciplines of International Affairs and History. Mr. Mainardi would like to thank Dr. Keith Grant from the Department of Political Science for his guidance in developing research approaches and skills to addressing conflict.

References

Aldrich, George H. 2000. "The Laws of War on Land." *The American Journal of International Law* 94, no. 1 (January): 42-63. JSTOR.

Asakawa, Kan'ichi. 1904. *The Russo-Japanese Conflict: Its Causes and Issues*. London: Archibald, Constable.

Ascher, Abraham. 1988-1992. *The Revolution of 1905*. Vol. 2. Stanford: Stanford University Press.

Bickers, Robert. 2016. *The Scramble for China: Foreign Devils in the Qing Empire, 1832-1914*. London: Penguin

Burton, David H. 1990. *Cecil Spring Rice: A Diplomat's Life*. Madison: Fairleigh Dickinson University Press.

Clausewitz, Carl von. (1832) 2004. *On War*. Translated by J. J. Graham. New York: Barnes & Noble Publishing.

Connaughton, Richard. 1992. *The War of the Rising Sun and the Tumbling Bear: A Military History of the Russo-Japanese War 1904-5*. Abingdon: Routledge.

Cooling, Benjamin Franklin. 1994. *Case Studies in the Achievement of Air Superiority*. Washington, D.C.: Air Force History & Museums Program. <https://media.defense.gov/2010/Oct/12/2001330116/-1/-1/0/AFD-101012-038.pdf>

- Dumas, Samuel, and Knud Vedel-Petersen. 1923. *Losses of Life Caused by War*. Edited by Harald Westergaard. Oxford: Oxford Clarendon Press.
- Esherick, Joseph W. 1988. *The Origins of the Boxer Uprising*. Berkeley: University of California Press.
- Evans, David C., and Mark R. Peattie. (1997) 2012. *Kaigun: Strategy, Tactics, and Technology in the Imperial Japanese Navy, 1887-1941*. Annapolis: Naval Institute Press.
- Geyer, Dietrich. 1987. *Russian Imperialism: The Interaction of Domestic and Foreign Policy, 1860-1914*. Translated by Bruce Little. New Haven: Yale University Press.
- Hunter, Janet. 1993. "The Limits of Financial Power: Japanese Foreign Borrowing and the Russo-Japanese War." In *Great Powers and Little Wars: The Limits of Power*, edited by Hamish Ion and Elizabeth Errington. 145-165. Westport: Praeger.
- Jukes, Geoffrey. 2002. *The Russo-Japanese War: 1904-1905*. London: Bloomsbury Publishing.
- Katō, Yōko. 2007. "What Caused the Russo-Japanese War: Korea or Manchuria?" *Social Science Japan Journal* 10, no. 1 (April): 95-103. JSTOR.
- Kearsey, Alexander. 1935. *A Study of the Strategy and Tactics of the Russo-Japanese War, 1904, Up to 24th August: Illustrating the Principles of War and the Field Service Regulations*. Aldershot: Gale & Polden.
- Keltie, J. Scott, ed. 1904. *The Statesman's Year-Book*. London: Palgrave Macmillan.
- Koda, Yoji. 2005. "The Russo-Japanese War—Primary Causes of Japanese Success," *Naval War College Review* 58, no. 2, Article 3. w
- Kowner, Rotem. 2006. *Historical Dictionary of the Russo-Japanese War*. Lanham: Scarecrow Press.
- Kuropatkin, Aleksey N. 1909. *The Russian Army and the Japanese War: Being Historical and Critical Comments on the Military Policy and Power of Russia and on the Campaign in the Far East*. Translated by Alexander Bertram Lindsay. Berkeley: E.P. Dutton. Project Gutenberg.
- Laws and Customs of War on Land*, (Hague, IV). Oct. 18, 1907 T.S. 539. Treaty. Library of Congress.
- Lemke, Douglas, and Suzanne Werner. 1996. "Power Parity, Commitment to Change, and War." *International Studies Quarterly* 40, no. 2: 235-60. JSTOR.
- MacNair, Harley F., and Donald F. Lach. 1950. *Modern Far Eastern International Relations*. New York: D. Van Nostrand Company.
- Malozemoff, Andrew. 1958. *Russian Far Eastern Policy 1881-1904*. Berkeley: University of California Press.
- Naquin, Susan, and Evelyn S. Rawski. 1987. "The Eighteenth-Century Legacy." In *Chinese Society in the Eighteenth Century*, 217-36. New Haven: Yale University Press.
- Nish, Ian. 2016. "Sino-Japanese War and After, 1894-1900." In *The History of Manchuria, 1840-1948, Vol. I & II: A Sino-Russo-Japanese Triangle*, 21-38. Folkestone, Kent: Renaissance Books.
- Oyama, Hisashi, and Gōtarō Ogawa. 1923. *Expenditures of the Russo-Japanese War*. New York: Oxford University Press. University of Michigan Digital General Collection.
- Paine, S. C. M. 2009. *The Sino-Japanese War of 1894-1895 Perceptions, Power, and Primacy*. New York: Cambridge University Press.
- Papastratigakis, Nicholas. 2011. *Russian Imperialism and Naval Power: Military Strategy and the Build-Up to the Russo-Japanese War*. London: I.B. Tauris.
- Patrikeeff, Felix, and Harry Shukman. 2007. *Railways and the Russo-Japanese War: Transporting War*. London: Routledge.
- Regan, Geoffrey. 1992. *The Guinness Book of Decisive Battles*. New York: Abbeville Press Group.
- Rhee, Syngman. 2001. "[Foreign] Relations after the Sino-Japanese War." In *The Spirit of Independence: A Primer of Korean Modernization and Reform*, translated by Han-Kyo Kim, 182-84. University of Hawai'i Press. Project MUSE.
- Salisbury, Harrison E. 1981. *Black Night, White Snow; Russia's Revolutions, 1905-1917*. New York: Da Capo.
- Sarkees, Meredith Reid, and Frank Wayman. 2010. *Resort to War, 1816 - 2007: A Data Guide to Inter-state, Extra-state, Intra-state, and Non-state Wars*. Washington D.C.: CQ Press. The Correlates of War Project.
- Silbey, David. 2013. *The Boxer Rebellion and the Great Game in China*. New York: Hill & Wang.
- Sng, Tuan-Hwee, and Chiaki Moriguchi. 2014. "Asia's Little Divergence: State Capacity in China and Japan before 1850." *Journal of Economic Growth* 19, no. 4 (September): 439-70. JSTOR.

Surh, Gerald Dennis. 1989. *1905 in St. Petersburg: Labor, Society, and Revolution*. Stanford: Stanford University Press.

“Text of the Treaty of Portsmouth.” 1905. *The Advocate of Peace (1894-1920)* 67, no. 9 (October): 208-09. JSTOR.

Trani, Eugene P. 1969. “Details.” In *The Treaty of Portsmouth: An Adventure in American Diplomacy*, 62-78. Lexington: University of Kentucky Press. JSTOR.

Westwood, J. N. 1986. *Russia Against Japan: A New Look at the Russo-Japanese War*. Albany: State University of New York Press.

Yamamoto, Takahiro. 2015. “Balance of Favour: The emergence of territorial boundaries around Japan, 1861-1875,” PhD diss., London School of Economics and Political Science. Research Gate.

Zhao, Suisheng. 1998. *Power Competition in East Asia: from the Old Chinese World Order to Post - Cold War Regional Multipolarity*. London: Palgrave Macmillan.

Variation in Women's Political Representation Across Countries



women's march Chicago 2018" by Candid Characters is licensed under CC BY-NC-ND 2.0

Julianna Heck

This cross-national study examines the ongoing gender imbalance in positions of power in local and national governments. While some countries have gone to great lengths to combat disproportion and inequality, others have taken steps backwards and have made it almost impossible to achieve equal opportunities for women. Despite the fact that women make up almost half of the world's population, men still far outnumber women in government in the majority of countries worldwide. This quantitative study analyzes variation in women's political representation in four categories: domestic roles, wage parity, political systems, and gender quotas. The results suggest that although the number of women pursuing and achieving positions of political office is increasing, challenges and historical tendencies still persist.

Few elements of the global body politic engage as much consideration as women's representation, or lack of representation, does during elections. Women, who comprise nearly half of the world's population, continue to suffer imbalance and stagnant progress. The scarcity of women in local, state, and national government positions is a pertinent issue for countries around the world. This enduring gender imbalance in politics must be a concern as the world works to address a host of old and emerging challenges.

Limited female representation continues to have effects on a global scale, such as elevated corruption, increased cynicism and disengagement, and curtailment of policies concentrated on health, education, civil rights, and inclusion of minority groups (Ashenafi, 2004; Raza, 2007). In order to more accurately understand this breakdown, political scientists must first grasp the mechanisms, motivations, implications, and justifications that cause imbalance in political gender representation. Detecting the causes of female political underrepresentation will help actors develop effective, enforceable policies to eliminate all forms of exclusion. Proportionate participation and representation of women in politics would not only contribute to justice and democracy, but establish a necessary "pre-condition" for valuing women's priorities (Beauregard, 2016, p. 99; Kassa, 2015, p. 1).

A number of case studies have analyzed the scope of women's political underrepresentation and its causes in individual countries, but few have investigated inclusive measures that apply to a cross-national study (Rule, 1994). Literature has also "draw[n] a distinction between quantitative statistical analyses and qualitative case studies," but few researchers have utilized a combination of both measurement tactics (Krook, 2010, p. 233). Many sources have examined strategies to deliver parity in the aftermath of decades of monopolized male elections, but "limits to prediction and prescription when it comes to implementation" have made it difficult to calculate causal variables across distinct countries (Crocker, 2010, p. 686).

Literature Review

Beyond individual country studies, non-governmental organizations such as the United Nations Commission on the Status of Women (CSW), Emily's List, the National Women's Political Caucus, the Sisters of Purity, and She Should Run have allowed research on women's political representation on a cross-national level using data from sources like the Organization for Economic Cooperation and Development, the Inter-Parliamentary Union (IPU), scholarly journals, and historical events. The data on women's

political representation have been evaluated on multiple scales using various measures of analysis such as the "Women in Politics: 2017" infographic presented at the IPU-UN Press Conference for the CSW. The map and its accompanying tables critically examine all causes and effects of incongruity and reiterate the fact that, in UN Women Executive Director Phumzile Mlambo-Ngcuka's words, "persistent missing voices of women" and an "overall stagnation and specific reversals are warning bells of erosion of equality that we must heed and act on rapidly" (IPU, 2017a).

Domestic Roles

During the Rosie the Riveter era of World War II, a Stokely's tomato advertisement urged women to "perform a service without which this war cannot be won," while a Chef Boy-ar-dee commercial emphasized "not just in overalls or a uniform—but even more in an apron—the American woman is serving her country today as never before" (Inness, 2001, p. 124). Although the early 20th-century marketing technique placed the value of working women on a similar pedestal to those serving in war, they still played to the concept of a "good-looking ... good-cooking girl" (Inness, 2001, p. 37). Suzanne O'Malley reiterated a similar theme in a 1992 *Cosmopolitan* article: "as far as I'm concerned, Men and Cooking is an oxymoron. Lots of guys cook *something*. But if your life depended on someone to cook for you, who you gonna call? A man? I doubt it" (as cited in Inness, 2001, p. 17). While domestic tasks such as cooking and caring for children are associated with being feminine, they do not reflect the individuality and image of *real* women, but only affirm norms fabricated by society. Even in more modern days when a woman is allowed to replace her sewing kit or saucepan with a stethoscope, gavel, or briefcase, some still find the idea of a man cooking anything besides burgers and steaks incredible.

In *British Social Attitudes 30*, Park et al. (2013) concluded that "in the mid-1980s close to half of the public agreed that 'a man's job is to earn money; a woman's job is to look after the home and family'" (p. 115). The same statement was only applicable to thirteen percent of the population in 2012 (Park et al., 2013, p. 115). The decline of the generational "male breadwinner" family system has not only altered the traditional patriarchal views that the woman's place is strictly in the household, but has allowed more women to join the conventional workforce.

Vigil (2019) noted that "Many of the contemporary difficulties women face as political actors are grounded in deeply entrenched perspectives that interpret women in

exceptionally narrow terms” (p. 189). The macho culture of politics classifies women as unequipped to play on a level playing field with men. Carlin and Winfrey (2009) explained that “In general, describing women in sexist terms reduces their credibility or may cause them to be seen as less human” (p. 328). The media’s portrayal of the appearance of female candidates using metaphors that illustrate women with animal characteristics, children’s vocabulary, and food terminology such as “foxy,” “saucy,” “old bat,” or “shrew” minimizes their status and hinders their political success (Carlin & Winfrey, 2009, p. 328).

Similarly, being depicted as more caring, compassionate, understandable, and likely to be honest can bolster female candidates, but can also minimize their ability to perform in leadership roles, as women are “identified with emotional matters” and questioned because of “maternal responsibilities” (Carlin & Winfrey, 2009, p. 328). Bohn (2017) noted that the concept of motherhood also works in two dimensions, as it hinders their option of running for elected positions due to perceived responsibilities to their children, but also allows them to “[hone] their expertise regarding particular political domains” such as reproductive rights, child care services, and human trafficking (p. 14). The modern atmosphere of later marriages, delayed childbearing, and declining fertility rates has shifted the former label of motherhood and femininity as a weakness, positing “that motherhood imbues women with values that voters deem highly desirable in current politics” (Bohn, 2017, p. 14).

In other countries, progress has remained less evident. The election of Saudi Arabia to the United Nations Commission on the Status of Women, which is dedicated to the promotion of gender equality and empowerment of women, was highly criticized due to the existence of a “male guardianship system” which enables men to “remain in control over female relatives’ lives” (Coogle, 2017). This patriarchal system has been at the heart of unequal treatment of women in a country which “forbids women from obtaining a passport, marrying, or travelling abroad without the approval of a male guardian” (Coogle, 2017). Victims of the hegemonic system have been arrested or detained for questioning the one-sided government regime or challenging statutes on the claims of abuse by male counterparts (Coogle, 2017).

H1: Countries that are more accepting of traditional gender and domestic roles as norms are less likely to have women’s political representation.

Wage Parity

Variation in wage parity can aid in predicting the distribution of women’s representation in government. Countries such as Spain, Austria, and Denmark require that companies evaluate the effectiveness of their gender equality programs and Australian law mandates equal pay for comparable work. Despite this progress, the World Economic Forum (2018) projected that it will take 202 years to close the “economic opportunity gender gap” (p. 15).

Despite the conclusive research surrounding women’s lack of participation in politics, there is little research on the role that money plays in keeping women from entering into the arena of politics. Burns et al. (2001) demonstrated that women are less disposed to run for political office if it means that they have to go through added expenses. These costs may include primary elections or challenging an incumbent. This correlates with the perception that men are more risk-seeking in the realm of politics, whereas women are seen as more risk-averse. The source also takes into account the contrasting views of feasibility and the lower levels of encouragement that women receive from political actors. Scholarly consensus suggests that limited access to campaign financing and a perceived lack of ambition are viewed as lack of qualifications for positions ranging from local governments to high levels of parliament (Bangs, 2017).

A study conducted by the Pew Research Center noted that “seven-in-ten women—vs. about half of men—say a major reason why women are underrepresented in top positions in politics and business is that they have to do more to prove themselves” (Horowitz et al., 2018). The study also emphasized that women are more likely than men to see structural barriers and uneven expectations holding them back from earning positions of high leadership. As U.S. Bureau of the Budget official Rufus Miles observed in the late 1940s, “Where you stand depends on where you sit”: women typically begin their careers at lower entry positions and earn less than men with comparable qualifications (Wolford, 2005, p. 85).

The issue is not exclusive to North America and Europe. Women in South Korea earn one third less than their male counterparts, the highest gender wage gap among the countries in the Organization for Economic Cooperation and Development. Additionally, a case study on Chile points out that financing elections is one of the key indicators keeping women out of political office. Chilean politician Maria Antonieta Saa observed that “[m]en will take risks, they will sell their family house ... but a woman is not going

to put her family at risk” (as cited in Franceschet, 2005, 89). Similarly, China does not allow women to enter the securities industry because it is more important for them to marry well than find a good job. As a result of societal and familial pressures, promotions and leadership opportunities are extremely limited (“What Are the Obstacles,” 2017).

H2: Countries with higher levels of wage parity between men and women will have greater political representation of women.

Political Systems

The UN-IPU “Women in Politics: 2017” infographic indicates there are only eleven women heads of state in 157 countries which elect their leaders. Analyses from the 1980s and early 1990s emphasized the “importance of political factors, such as the structure of the electoral system and the partisan composition of parliament, as determinants of the proportion of legislative seats held by women” (Kenworthy & Malami, 1999, p. 236). According to USAid (2016), “Countries with increased women’s participation and leadership in civil society and political parties tend to be more inclusive, responsive, egalitarian, and democratic.” This has shown true in Bolivia with the establishment of Law 243 against harassment and political violence, which enabled women to use their roles as legislators on an unprecedented level (“Bolivia Approves,” 2012).

In contrast, in Saudi Arabia and other countries, there are “legislative, social, educational, and occupational constraints that prevent women from fully participating in the development process of their country” (Rajkhan, 2014, pp. iv-2). Although women make up the majority of voters in Brazil, the massive country “ranks 32nd among the 33 Latin American and Caribbean countries according to the proportion of women in the National Congress” (Cristaldo, 2018). Brazilians live in a society that is “highly oppressive towards minorities” and women, and requires a “deconstruct[ion] of ideologies that dehumanize women” in order to expand societal cultivation and cooperation (Conway, 2017). Brazilian feminist scholars have concluded that the introduction of a female approach to foreign policy and domestic initiatives could play a considerable role in policy decision-making impacting their country (Conway, 2017). For instance, although Australia’s first female Minister for Foreign Affairs rejected the label of “feminist,” “she paved the way for another woman to follow, in what has otherwise been a male-dominated portfolio” (Conway, 2018).

In the United States, the single member district system makes it hard for women to break the structural and systemic barriers that hinder their political participation. The manipulation of the electoral system to disproportionately benefit men limits women’s ability to discuss and restructure the systems and barriers that block their progress. Studies have indicated that “political scientists have known for a long time that more women are elected in proportional representation systems than in plurality ones,” but “have usually focused on limitations of women themselves (their lack of aggressiveness and interest in politics), or on prejudice by voters or party leaders” (Welch & Studlar, 1990, pp. 391-392). Only in recent years have investigations suggested that prejudice is embedded in the structure of many political and electoral systems.

Political system type is a crucial characteristic that can determine the outcome of a country’s efforts to value women’s representation and participation in politics. Evidence from studies of the wealthiest democratic nations “strongly suggests that the structure of the electoral system matters. ... [I]t is one of the most important factors, if not the most important, in accounting for variation in the female share of legislators” (Kenworthy & Malami, 1999, p. 237). For example, Wilber (2011) noted that the Rwandan government “prioritized women, introducing structures and processes designed to advance them at all levels of leadership.” In contrast, in Kuwait, “women have failed in politics so far partly due to the ‘stalling’ nature of political life” (as cited in Shalaby & Obeid, 2017). The limitations to the constitution and structure of the monarchy prevent female newcomers from mobilizing voters, establishing electoral bases, and winning supporters. Although no single policy will advance Kuwaiti women’s access to political power, previous research has confirmed that affirmative action policies are some of the most effective mechanisms to facilitate women’s representation (“Kuwait: Tackling Persistent Barriers,” 2016).

H3: Countries that are more democratic will have higher levels of women’s political representation.

Gender Quotas

Crocker (2010) observes that “Research on gender quotas has become one of the fastest growing areas of scholarship within the subfield of women and politics,” and has received attention and application from both developing and developed countries (p. 686). Gender quotas have been found to have a positive association with the number of women holding political positions, and these structural changes to redress the underrepresentation of women

are easier than reconstructing political culture or shifting economic development (Caul, 2001; Gray, 2003, p. 55). For example, the consistent increasing rates of women with political representation in Scandinavian countries are congruent with findings supporting gender quota policies (Gray, 2003, p. 54). In countries such as Rwanda, where women outnumber men in government, “post-conflict peace operations” in the aftermath of the genocide helped foster gender quotas and a consolidated society (Bush, 2011, p. 103; Wilber, 2011). Paired with institutional reform, the “institutional configurational change” that quotas offer can promote progress (Crocker, 2010, p. 687).

Despite the increasing use of gender quotas, some scholars argue that quotas distort the meaning of representation and give the erroneous idea that only women can represent women. Scholars who do not support gender quotas also argue that reserved seats foster a competitive environment where women compete against each other rather than work together to collectively achieve more influence in politics (Dhanda, 2000, p. 2969). Critics have also argued that gender quotas “[address] only one dimension of inequality at a time” (Hughes, 2011, p. 604). Nonetheless, gender quotas have the potential to transform other dimensions in the domain of politics, such as reducing voter bias and inaugurating a norm that heterogeneous representation of women in politics.

H4: Countries that have implemented gender quotas will have higher levels of women’s political representation.

Methods and Data

Dependent Variable

To measure the dependent variable, I assessed women’s political representation using the “percentage of women in the lower or single House” of national parliaments compiled in the IPU’s (2017b) March 2017 “Women in National Parliaments” resource. This ratio data allowed variations between countries to be easily calculated. Higher percentage values corresponded with a higher number of women holding political office, allowing me to compare female political representation across countries using the following independent variables: domestic roles, wage parity, political apparatus, electoral system, and the existence of a gender quota. These variables were tested using a linear regression model to account for the persistent dependent variable.

The method used to calculate the proportion of seats occupied by women in parliament does not present any significant threats to the validity or reliability of my data.

The percentage of seats occupied by women in each single or lower chamber of parliament was calculated by dividing the total number of seats occupied by women by the total number of seats in parliament. The data compiled by the IPU (2017b) uses official statistics provided by national parliaments and is updated on a monthly basis. The only threat to validity is that the measure does not address the sometimes dramatically different percentages of women in countries’ upper houses. However, calculating the mean percentage of women in two houses for some countries would distort the data and lead to inaccurate comparisons. Using only the IPU’s “%W” column in the “Lower or single House” category guaranteed consistency since there was no weighting or normalizing of statistics.

Independent Variables

DOMESTIC ROLES. Domestic roles is one of the most prominent variables discussed in the literature. Similar to the culture variable, defining acceptance of traditional gender and domestic roles as societal norms is a troublesome task. I used the Gender Inequality Index (GII) from the United Nations Development Programme’s (2018) *Human Development Indices and Indicators: 2018 Statistical Update* to test this variable. The GII represents inequalities using a zero to one scale, with higher values indicating increased inequalities. As a whole, the GII “shows the loss in potential human development due to disparity between female and male achievements in three dimensions: reproductive health, empowerment and the labour market” (United Nations Development Programme, 2019). The GII “relies on data from major publicly available international databases,” which in turn draw on reputable organizations like the World Health Organization, the World Bank, the IPU, UNESCO, and UNICEF (United Nations Development Programme, 2019). While the index does not capture important concerns like gender-based violence and asset ownership due to limited data availability, it offers a clear understanding of the achievement gaps between men and women.

WAGE PARITY. While wage disparity is closely related to educational attainment and social class, this variable provided distinctions that outside factors did not take into consideration. Wage disparity gives insight into psychological questions of motivation that limit women from gaining political office. It is important to note that these factors are often outside of their control. I used the Global Gender Gap Index (GGGI), from the World Economic Forum’s (2017) *Global Gender Gap Report*, which examines the gap between men and women in four subindexes, but I only applied the data from the “Economic Participation and

Opportunity” category. This subindex reflects differences between women and men in workforce participation, earned income, and advancement in technical and professional positions (p. 5). By removing the three other subindexes, I eliminated the possibility of tautology in the areas of health and empowerment, which are fundamental components of the GII. Additionally, while education has helped women to begin catching up to men in holding seats in national parliaments, the literature indicates that advances in women’s education pale in comparison to the existence of unequal pay for equal work. Achieving the same advanced degrees as men can aid in women’s political representation, but if women cannot afford the added expenses, then it is a lost cause.

The GGGI’s zero to one scale from imparity to parity is calculated for each country. These benchmarks—0 for complete inequality and 1 for complete equality—are kept fixed over time, which increases the consistency of the measure (World Economic Forum, 2017, p. 7). This also allows scholars to follow the progression of individual countries in relation to a perceived standard of ideal equality levels. There are no anticipated threats to reliability because a “country must have data available for a minimum of 12 indicators out of the 14 that make up the index” to be included in the report (World Economic Forum, 2017, p. 7). Additionally, 106 of the 144 countries in the 2017 GGGI have been consistently included in the report every year since the first edition was published in 2006, and any “missing data is clearly marked” (World Economic Forum, 2017, p. 7).

POLITICAL SYSTEMS. To measure operationalization of political structure and stability, I utilized the Polity IV Project, a constantly updated dataset supported by the Political Instability Task Force (Marshall et al., 2017; *Polity Project*, 2017). In order to assess democracy and autocracy, the Polity IV Project utilizes factors such as competitiveness of political participation, openness of executive recruitment, and constraints on the chief executive (Marshall et al., 2017). I focused on whether a particular structure of government favors female prominence in its legislature in comparison to others. The -10 to +10 scale of individual country regime change does not limit countries by a selective number of categories and allows for discernible differences in scores.

Some validity concerns may exist as scarce or missing data could alter the score positively or negatively in one direction. However, few reliability concerns threaten the measurement techniques of the Polity IV Project since “multiple historical sources were used for each country” and ambiguity was

reviewed with special attention to questions of consistency (Marshall et al., 2017, p. 5). Intercoder reliability was maintained because the coding guidelines were applied in an undeviating manner by four individuals, even though the components were scored and weighed by hand. The data series “regularly examine[s] and often challenge[s] codings” by analysts and experts in academia, policy, and intelligence (*Polity Project*, 2017). These approaches increase confidence that the judgments do not reflect the views of one individual and if they do, the idiosyncrasies are explicit in the coding guidelines.

GENDER QUOTAS. Legislated gender quotas are one of the fastest growing subfields of political science scholarship, as they are viewed as a solution to battling the primitive and oldest forms of inequality. To test this variable, I utilized the Gender Quotas Database maintained by the International Institute for Democracy and Electoral Assistance (2019). The variable places countries on a scale ranging from “1-No Quotas, 2-Legislated Candidate Quotas, 3-Reserved Seats, and 4-Political Party Quotas” (International, 2019). I recoded this variable to combine the three classifications of gender quotas. Grouping one was recoded to represent a value of zero and groupings two, three, and four all received a score of one. This recoding was designed to clearly distinguish the countries with an established gender quota from those who have an absence of quotas. I hypothesized that countries with mandated gender quotas are likely to have more female representation in politics, so the alteration of my independent variable helps to make my prediction more striking.

There were no obvious threats to validity or reliability since I eliminated the possibility of flawed or inaccurate methodology by recoding the variable. Even though there are three distinct types of gender quotas, they all have an identical objective of ensuring that women hold a critical minority of 30-40% in political representation. Grouping each classification of gender quotas into one system eliminates any threat to changes in the quota type from constitutional or legislative to voluntary overtime by centralizing on the existence of a quota in contrast to the specific nature of each quota type.

As a whole, my research study has strong external validity. I selected data sources that have at least 120 cases out of 195 and that reflect all geographic regions, government types, and systematic electoral decisions. I also used data from 2014-2019, which allowed access to the most accurate percentages, legislation, and constitutional changes. I was not able to calculate every variable that factors into female representation in government, but I chose the variables with

the largest pools of literature and combined some aspects of other variables, such as health and education, into existing independent variables.

I believe that my study has moderately strong internal validity, but lacks a substantial measure for wage parity and domestic roles. It may be difficult to prove that my independent variables came before my dependent variables, and some relationships may prove to be spurious. For example, it may be challenging to determine if fewer women are represented in politics due to disparities in wages and lack of ambition, or if wage disparities exist because there are no women in politics to change legislation and mandate that both genders be paid the same for equal work.

Control Variable

Due to the nature of my empirical research, a control variable would have no major effect on the relationships between my dependent variable and the four independent variables, and would not be the cause of a spurious relationship. It would also be impossible for a country to possess a value of zero for each variable. While a country could have a value of zero for the variable of gender quotas (signifying the absence of a quota), no country exists that has a value of zero for the variable of wage parity. For example, Burundi has the highest level of parity, with a value of .911, and Syria holds the highest level of imparity, with a value of .274 (World Economic Forum, 2017, pp. 10-11). Palazzolo (n.d.) suggests that “if there are fewer than 1,000 cases, it will be very difficult to test a control variable,” and my study only has 120 cases.

Results and Discussion

Domestic Roles

My regression analysis showed that domestic roles, as defined using the GII, have an extremely significant relationship (.000 significance level) to the percentage of occupied seats held by women in parliaments (see Table 1). Due to the extensive literature on domestic roles in relation to gender stereotypes, sexism, and relation of emotion to lack of ability, it makes sense that this relationship proved significant, although I did not predict that it would be as significant as it was. The unstandardized regression coefficient for the GII (-20.522) supports my hypothesis that there is a negative relationship between the variables. In a general sense, unstandardized B is used to determine the direction of the relationship between the independent and dependent variables. As the value of the independent variable increases, the dependent variable either increases or decreases. In my analysis, as the numerical value of the GII increases, the percentage of women represented in national Parliaments decreases.

Standardized B helps determine the strength of the relationship. Higher values indicate a stronger relationship and lower values indicate a weaker relationship. The standardized regression coefficient for Domestic Roles (-.337) is the largest coefficient in my analysis, which validates that Domestic Roles has the strongest influence on the amount of women gaining access to seats in parliaments in relation to my other independent variables. Despite having the most prominence on my dependent variable, the standardized coefficient value of -.337 establishes that the strength of the relationship is moderately strong and may not have as great of an influence in determining prediction of women's representation in politics as I predicted.

Table 1: *Regression Analysis of Relationships Between Independent Variables and the Percentage of Seats Held by Women in Single or Lower House Parliaments.*

Variable	Unstandardized B	Standard error	Standardized B	Significance*
Constant	10.028	6.178		.107
Domestic roles	-20.522	5.625	-.337	.000
Wage parity	23.446	8.182	.259	.005
Political systems	.007	.171	.004	.969
Gender quotas	6.124	1.851	.273	.001

Note. Dependent variable: percentage of occupied seats held by women in parliaments. N=120; 120 of 195 possible counties were utilized in this study. $R^2=.267$

*Significant at .05

Wage Parity

My regression analysis also showed that Wage Parity was very significant (.005 significance level). Additionally, the unstandardized regression coefficient of 23.446 supports my hypothesis that countries with higher levels of wage parity will have a greater representation of women in the legislature. However, the standardized regression coefficient of .259 highlights that the relationship between wage parity and women's political representation is weak, which could be a result of a poor measurement. Although the GGGI captures the idea of wage equality for similar work, it also emphasizes the value of work, which could distort statistical analyses of wage inequality. The weak standardized regression coefficient

could also be the result of a non-causal relationship where fewer women are represented in parliaments not because of wage disparities and indifference, but because of the lack of a female presence in policy-making mandating higher wage parity. Moreover, the Pearson correlation value of $-.375$ suggests that, despite uncertainty in the literature, the methods used for Domestic Roles and Wage Parity do not result in multicollinearity. In other words, the low strength of the association for Domestic Roles and Wage Parity suggests that there are few intercorrelations or inter-associations between the two variables.

Political Systems

My results revealed that the relationship between women's political representation and political systems was extremely insignificant ($.969$ significance level), which does not support my hypothesis. The unstandardized coefficient of $.007$ shows that when there is a 20 unit increase in the polity scale (difference between -10 and $+10$), the percent of women occupying seats in Parliament only increases by $.14\%$. This mathematical computation explains that a one unit increase in polity (going from the most autocratic regime to the most democratic regime) improves the percentage of women in politics, but by an extremely small and unimpactful amount. This idea correlates with the standardized regression coefficient of $.004$, which is exceedingly weak.

Since my literature review did not reveal a consensus that political systems that are more democratic will have a higher percentage of women represented in politics, it is not surprising that the independent variable is very weak and not significant. Reynolds (1999) highlighted that “democracy in itself is not necessarily a precursor to the presence of substantial numbers of women in political life,” but is instead a familiarity with more women in positions of power and acceptance of women as leaders (p. 572). Similarly, Rule (1994) drew upon the work of Haavio-Mannila, articulating that variation in “women's parliamentary representation in long-established but ‘unfinished democracies’” are caused “primarily [by] the electoral arrangements by which legislators are chosen” (p. 689). Rule explained that these electoral “arrangements are amenable to change faster than social biases and other barriers to women's election opportunity and fair representation” (p. 689). On the other hand, case studies and qualitative evidence support the idea that the “effect of ideology is substantially stronger than the effects of political variables” (Paxton, 2003, p. 88).

Gender Quotas

The regression analysis showed that the relationship between gender quotas and women's representation in politics is extremely significant ($.001$ significance level). These findings support my hypothesis that countries with implemented gender quotas have a higher percentage of women in politics, which implies a growth in support and opportunities for female candidates and a decline in political institutions with high levels of male dominance and power.

Although my standardized regression coefficient of $.273$ for Gender Quotas is not very strong, some scholars have highlighted that of the top 20 countries in terms of female representation in government, 17 of them utilize some sort of a gender quota (International, 2019; IPU, 2017a). These findings suggest that the results of implemented gender quotas go far beyond statistical analysis. Comparatively, the implementation of gender quotas increases women's representation in politics by 6.124% on a zero to one scale, where a value of zero is representative of the absence of a quota and a value of one is representative of the existence of a gender quota.

Conclusion

The greatest obstacle when trying to accurately determine the causes of the current state of women's political (under) representation was the time restriction and limited availability of resources. Increased time and resources would allow me to find better measures for variables, particularly domestic roles and wage parity, which could in turn produce more accurate and significant results. More specifically, a more valid measurement for distinguishing economic participation and opportunity and whether a country has mandated wage parity legislation could be created. Additional research would allow me to include additional variables or gather my own data. This could possibly produce more substantial results that would assist future researchers and scholars looking to solve the causes of this socio-structural and cultural issue.

My main empirical findings were the significant correlations between three of my independent variables and the percentage of single or lower chamber parliamentary seats occupied by women. More explicitly, I found that Domestic Roles—which measures the dimensions of reproductive health, empowerment, and economic status—had the greatest impact on a country's number of women represented in the national parliament. Gender inequality was also the most significant variable as a determinant of the prevalence of traditionalistic attitudes and domestic roles. An additional finding was the R-squared value of $.267$. R-squared—

the coefficient of determination—is the proportion of variance in the dependent variable that is predicted from the independent variable. In my study, the R-squared value of .267 signifies that 26.7% of the causes of female representation in politics were explained by the four variables in my regression. Although this number only explains roughly a quarter of the research question I am trying to solve, it shows that the carefully selected variables and forms of measurement do in fact help explain variation in women's political representation.

My careful selection of variables allowed 120 cases using countries as the unit of analysis to truly encompass the diversity and complexity of the global spectrum. It is important to acknowledge that the Political Systems variable did not prove to be significant and that I omitted variables such as educational attainment, media influence, and militarism due to a “lack of data” and consensus in the literature on a cross-national scale (Matland, 1998, p. 110). Matland (1998) in “Women's Representation in National Legislatures: Developed and Developing Countries” suggested that “considerable work remains to be done” across nations. While “evidence of systems for women's electoral success [are] consistent and striking,” a “minimum development level is needed to create a foundation for other variables to have an effect” (Kenworthy & Malami, 1999, pp. 261-262; Matland, 1998, p. 120). As the level of development increases, “more women start to acquire the resources needed to become politically relevant, resources such as education, salaried labor force experience, and training in the professions that dominate politics (such as law)” (Matland, 1998, p. 120).

While the regression analysis revealed significant relationships between certain independent variables and women's representation in politics, the results are in no way absolute. The addition of new independent variables may cause a variable that was once significant to become unsubstantial and vice versa. Measurements used for Domestic Roles and Wage Parity were not ideal, and the moderately strong and weak relationships were established by the lack of validity in the measures. Moreover, the results for Political Systems using the Polity IV Project demonstrate that while the measure may not have lacked reliability or validity, perhaps there really is no relationship between political systems and the amount of women represented in respective parliaments. My R-squared value of .267 emphasizes that there is still much to learn and discover about this subject matter and that more in-depth research and analysis is necessary.

With more time and resources, I would calculate which countries mandate equal pay and which countries do not in order to create a binary response with no flexibility. I would also study the characteristics of country leaders to determine whether there is diversity in the women represented or if they all advocate for the same issues, members of similar parties, from similar backgrounds, etc. It would be interesting to see how the portrayal of women in the media influences willingness to select female candidates, especially with respect to recent literature about female politicians regarding their appearance and other physical characteristics.

This research paper could foreshadow case study analysis of countries with implemented gender quotas compared to those with an absence of quotas or could facilitate discussion on the effectiveness of a quota within a single country. Some of these debates could examine whether quotas generate cultural, attitudinal, or behavioral shifts among citizens. In *The Impact of Gender Quotas*, Franceschet et al. (2012) reflected on the idea that quotas may “reinforce a gendered division of labor in parliament whereby women work on less prestigious social issues, while men focus on policy areas traditionally deemed more important” (p. 230). My findings can illuminate the complexity of the quota question and can contribute to a second generation of quota research.

Author's Note



Julianna Heck ('19) graduated with a bachelor's degree in International Affairs and Spanish, with minors in Business Spanish, Latin American and Caribbean Studies, and Spanish-English Translation and Interpretation. She is pursuing a career in state and local politics. She is currently the Director of Community Outreach for Roy Freiman,

a member of the New Jersey General Assembly for the 16th Legislative District. She hopes to continue her passion for public service and contribute to the development of legislation focused on gender equality and women's rights.

Julianna is grateful to Dr. Jonathan Keller for his guidance and advice, Professor Veronica Haun for her words of positivity and encouragement, and Juan Mansilla for inspiring her to go above and beyond. She would like to thank the *JMURJ* Editorial Board for their dedication, optimism, and support throughout the publication process.

References

Ashenafi, M. (2004). Advocacy for legal reform for safe abortion. *African Journal of Reproductive Health / La Revue Africaine De La Santé Reproductive*, 8(1), 79-84. <https://doi.org/10.2307/3583310>

Bangs, M. (2017). Women's underrepresentation in politics: No, it's not just an ambition gap. *The Century Foundation*. <https://tcf.org/content/commentary/womens-underrepresentation-politics-no-not-just-ambition-gap/?agreed=1>

Beauregard, K. (2018). Gender, voting, and women's representation in the 2016 Australian election. In S. Wilson & M. Hadler (Eds.), *Australian social attitudes IV: The age of insecurity* (pp. 99-116). Sydney University Press. www.jstor.org/stable/j.ctv175r5.10.

Bohn, S. (2017). Mothers and electoral politics: A research agenda. In S. Bohn and P. M. Y. Parmaksiz (Eds.), *Mothers in public and political life* (pp. 13-29). Demeter Press. www.jstor.org/stable/j.ctt1t6p6gz.5.

Bolivia approves a landmark law against harassment of women political leaders. (2012). *UN Women*. <https://www.unwomen.org/en/news/stories/2012/6/bolivia-approves-a-landmark-law-against-harassment-of-women-political-leaders>

Burns, N., Schlozman, K. L., & Verba, S. (2001). *The private roots of public actions: Gender, equality, and political participation*. Harvard University Press.

Bush, S. S. (2011). International politics and the spread of quotas for women in legislatures. *International Organization*, 65(1), 103-137. <https://doi.org/10.1017/S0020818310000287>

Carlin, D. B., & Winfrey, K. L. (2009). Have you come a long way, baby? Hillary Clinton, Sarah Palin, and sexism in 2008 campaign coverage. *Communication Studies*, 60(4), 326-343. <https://doi.org/10.1080/10510970903109904>

Caul, M. (2001). Political parties and the adoption of candidate gender quotas: A cross-national analysis. *The Journal of Politics*, 63(4), 1214-1229. <https://www.jstor.org/stable/2691813>

Chen, L. (2010). Do gender quotas influence women's representation and policies? *The European Journal of Comparative Economics*, 7(1), 13-60. <http://ejce.liuc.it/18242979201001/182429792010070102.pdf>

Conway, M. (2017). Brazil's gender trouble: Sources of inequality in Brazilian institutions and political representation. *Center for Feminist Foreign Policy*. <https://centreforfeministforeignpolicy.org/journal/2017/12/8/brazils-gender-trouble-sources-of-inequality-in-brazilian-institutions-and-political-representation>

Conway, M. (2018). Women leaders in a man's world: Does a feminist foreign policy require a woman leader at the top?—Part II. *Center for Feminist Foreign Policy*. <https://centreforfeministforeignpolicy.org/journal/2018/9/12/women-leaders-in-a-mans-world>

Coogle, A. (2017). How was Saudi Arabia voted onto a UN women's panel? Male guardianship system remains at heart of unequal treatment of women. *Human Rights Watch*. <https://www.hrw.org/news/2017/04/28/how-was-saudi-arabia-voted-un-womens-pane>

Cristaldo, H. (2018). Gender gap in politics likely to continue in Brazil. *Agencia Brazil*. <http://agenciabrasil.ebc.com.br/en/politica/noticia/2018-08/gender-gap-politics-likely-continue-brazil>

Crocker, A. P. (2010). Jumping on the bandwagon: Origins and effects of gender quotas worldwide. *International Studies Review*, 12(4), 686-689. <https://doi.org/10.1111/j.1468-2486.2010.00988.x>

Dhanda, M. (2000). Representation for women: Should feminists support quotas? *Economic and Political Weekly*, 35(33), 2969-2976. <http://www.jstor.org/stable/4409625>

- Franceschet, S. (2005). *Women and politics in Chile*. Lynne Rienner Publishers.
- Franceschet, S., Krook, M. L., & Piscopo, J. M. (2012). *The impact of gender quotas*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199830091.001.0001>
- Gray, T. (2003). Electoral gender quotas: Lessons from Argentina and Chile. *Bulletin of Latin American Research*, 22(1), 52-78. <https://doi.org/10.1111/1470-9856.00064>
- Horowitz, J. M., Igielnik, R., & Parker, K. (2018). Women and leadership 2018. *Pew Research Center*. <https://www.pewsocialtrends.org/2018/09/20/women-and-leadership-2018/>
- Hughes, M. M. (2011). Intersectionality, quotas, and minority women's political representation worldwide. *The American Political Science Review*, 105(3), 604-620. <https://doi.org/10.1017/S0003055411000293>
- Inness, S. A. (2001). Dinner roles: American women and culinary culture. *University of Iowa Press*. <https://doi.org/10.2307/j.ctt20q219b>
- International Institute for Democracy and Electoral Assistance. (2019). *Gender Quotas Database*. <http://www.idea.int/data-tools/data/gender-quotas/about>
- Inter-Parliamentary Union (2017a). New IPU and UN women map shows women's representation in politics stagnates. <https://www.ipu.org/news/press-releases/2017-03/new-ipu-and-un-women-map-shows-womens-representation-in-politics-stagnates>
- Inter-Parliamentary Union (2017b, March 1). Women in national parliaments [Data set]. <http://archive.ipu.org/wmn-e/arc/classif010317.htm>
- Kassa, S. (2015). Challenges and opportunities of women political participation in Ethiopia. *Journal of Global Economics*. <https://doi.org/10.4172/2375-4389.1000162>
- Kenworthy, L., & Malami, M. (1999). Gender inequality in political representation: A worldwide comparative analysis. *Social Forces*, 78(1), 235-268. <https://doi.org/10.2307/3005796>
- Krook, M. L. (2010). Studying political representation: A comparative-gendered approach. *Perspectives on Politics*, 8(1), 233-240. <https://doi.org/10.1017/S1537592709992817>
- Kuwait: tackling persistent barriers for women to sustain progress. (2016). *United Nations Human Rights Office of the High Commissioner*. <https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=21040&LangID=E>
- Marshall, M. G., Gurr, T. R., & Jagers, K. (2017). *Polity IV project: Political regime characteristics and transitions, 1800-2017: Dataset users' manual*. <http://www.systemicpeace.org/inscr/p4manualv2017.pdf>
- Matland, R. E. (1998). Women's representation in national legislatures: Developed and developing countries. *Legislative Studies Quarterly*, 23(1), 109-125. <https://www.jstor.org/stable/440217>
- Misra, J., & Strader, E. (2013). Gender pay equity in advanced countries: The role of parenthood and policies. *Journal of International Affairs*, 67(1), 27-41. <https://www.jstor.org/stable/24461670>
- Park, A., Bryson, C., Clery, E., Curtice, J., & Phillips, M. (2013). British social attitudes: The 30th report. *NatCen Social Research*. https://www.bsa.natcen.ac.uk/media/38723/bsa30_full_report_final.pdf
- Paxton, P., & Kunovich, S. (2003). Women's political representation: The importance of ideology. *Social Forces*, 82(1), 87-113. <https://doi.org/10.1353/sof.2003.0105>
- Palazzolo, D. (n.d.). *Evaluating a control variable*. University of Richmond Writing Center. <http://writing2.richmond.edu/writing/wweb/polisci/controlv.html>
- Polity Project. (2017). Center for Systemic Peace. <https://www.systemicpeace.org/polityproject.html>
- Rajkhan, S. F. (2014). *Women in Saudi Arabia: Status, rights, and limitations* (master's thesis). <https://digital.lib.washington.edu/researchworks/bitstream/handle/1773/25576/Rajkhan%20-%20Capstone.pdf?sequence=1&isAllowed=y>
- Raza, F. A. (2007). Reasons for the lack of women's participation in Pakistan's workforce. *Journal of Middle East Women's Studies*, 3(3), 99-102. <https://doi.org/10.2979/mew.2007.3.3.99>
- Reynolds, A. (1999). Women in the legislatures and executives of the world: Knocking at the highest glass ceiling. *World Politics*, 51(4), 547-572. <https://www.jstor.org/stable/25054094>
- Rule, W. (1994). Women's underrepresentation and electoral systems. *PS: Political Science and Politics*, 27(4), 689-692. <https://doi.org/10.2307/420369>
- Shalaby, M., & Obeid, A. (2017). Women's representation under authoritarian regimes: The case of Kuwait. *Georgetown Journal of International Affairs*. <https://www.georgetownjournalofinternationalaffairs.org/online-edition/womens-representation-under-authoritarian-regimes-the-case-of-kuwait>

United Nations Development Programme. (2019). Frequently asked questions - Gender inequality index. <http://hdr.undp.org/en/faq-page/gender-inequality-index-gii#t294n2916>

United Nations Development Programme. (2018). *Human development indices and indicators: 2018 statistical update*. http://hdr.undp.org/sites/default/files/2018_human_development_statistical_update.pdf

USAid. (2016). *Strengthening women's rights and political participation*. <https://www.usaid.gov/what-we-do/gender-equality-and-womens-empowerment/addressing-gender-programming/strengthening-womens>

Vigil, T. (2019). *Moms in chief: The rhetoric of republican motherhood and the spouses of presidential nominees, 1992-2016*. University Press of Kansas, 189-210. <https://www.jstor.org/stable/j.ctvbcd0xv.13>

Welch, S., & Studlar, D. T. (1990). Multi-member districts and the representation of women: Evidence from Britain and the United States. *The Journal of Politics*, 52(2), 391-412. <https://www.jstor.org/stable/2131899>

Wilber, R. (2011). Lessons from Rwanda: How women transform governance. *The Solutions Journal*, 2(2), 63-70. <https://www.thesolutionsjournal.com/article/lessons-from-rwanda-how-women-transform-governance/>

Wills, M. (2015). Celebrating feminist pioneer Elizabeth Cady Stanton. *JSTOR Daily*. <https://daily.jstor.org/elizabeth-cady-stanton/>

What are the obstacles to women in the global workforce? (2017). *Global Network Perspectives*. <https://globalnetwork.io/perspectives/2017/03/what-are-obstacles-women-global-workforce>

Wolford, M. K. (2005). Gender discrimination in employment: Wage inequity for professional and doctoral degree holders in the United States and possible remedies. *Journal of Education Finance*, 31(1), 82-100. <https://www.jstor.org/stable/40704251>

World Economic Forum. (2018). *The global gender gap report 2018*. http://www3.weforum.org/docs/WEF_GGGR_2018.pdf

World Economic Forum. (2017). *The global gender gap report 2017*. http://www3.weforum.org/docs/WEF_GGGR_2017.pdf

MOVE: Philadelphia's Forgotten Bombing



"Philadelphia Free the MOVE 9 Forum" by Joe Piette is licensed under [CC BY-NC-SA 2.0](#)

On May 13, 1985, the city of Philadelphia erupted into flames. Under the orders of Mayor Wilson Goode, the Philadelphia Police Department dropped a bomb onto the row house containing MOVE, a cult-like organization, on Osage Avenue in West Philadelphia. The resulting fire killed eleven people, including five children, and burned down sixty-one houses. By examining newspaper articles on MOVE, the bombing by the Philadelphia Police, and the public's response, this paper investigates how Mayor Goode was able to continue his political career and how this bombing has faded into obscurity outside of the city. The media's attitude and reporting on MOVE, the city's lack of connection with MOVE's beliefs, and the efforts of the city government to move on from the bombing have caused this tragedy to become largely forgotten.

In a fortified row house in West Philadelphia, a bomb dropped by Philadelphia Police killed eleven MOVE members, including five children, and burned down sixty-one her houses after a lengthy standoff between the two groups. MOVE is a cult-like organization which eschewed technology, medicine and western clothing, where members lived communally, ate raw food, left garbage on their yards, and proselytized with a loudspeaker, frustrating the residents of Osage Avenue. The MOVE bombing, remembered as “May 13, 1985” in West Philadelphia, was the first time a U.S. city bombed itself, and it could have been a pivotal moment in the mayoral reign of Wilson Goode and for the city of brotherly love. Instead, the bombing has faded into obscurity, with only minimal consequences for the city government and for the city. Public antipathy and the efforts of the city government to move on from the bombing, revealed and even enabled by media reporting, have caused this tragedy to become largely forgotten.¹

MOVE: The Organization

Vincent Leaphart founded the American Christian Movement for Life, later shortened to MOVE, in 1972 in West Philadelphia and changed his name to John Africa. MOVE was primarily a black organization, although white people could join as well. As an anti-establishment and anti-technology group, its members ate a diet of only raw fruits, vege-

tables, nuts, and eggs; used no medicine or western clothing; disposed of their garbage in the yard; and used outhouses instead of conventional toilets. The children of MOVE were not allowed to attend school and had never eaten cooked food or watched television. These were the first “pure” members of MOVE: they were raised to never be exposed to the corrupting influences of social and political institutions. Members protested outside of zoos and pet stores, which often led to arrests though the police did not believe MOVE was even potentially violent during the early 1970s.²

The MOVE bombing, remembered as “May 13, 1985” in West Philadelphia, was the first time a U.S. city bombed itself.

The other residents of Powelton Village did not hold a great opinion of MOVE, which lived communally in three townhouses in the neighborhood. Powelton Village, located near Drexel University and the University of Pennsylvania, was a diverse and tolerant community and a haven for political activists. In 1976, neighbors began complaining about children playing in the yard without diapers and in unsanitary conditions. The complaints of Powelton residents’ and MOVE’s campaign against police brutality caused the Philadelphia Police Department to set up 24-hour surveillance on the MOVE townhouses, fueling their belief that they were being targeted by the police. The next year, MOVE members began to sit out on the porch holding rifles, wearing berets, and using loudspeakers to lecture their neighbors. MOVE already held a reputation as a radical black organization, much like the Black Panthers, because of MOVE’s emergence during the “Black Power” era. Many people in Philadelphia believed the public display of weapons to be the start of the organization becoming more militant.³

Tensions between the city and MOVE began to rise as neighbors in Powelton continued complaining about MOVE’s actions and as the police department’s surveillance began to infuriate the organization. Between 1977 and 1978, MOVE placed bomb-timing devices, though no explosives, in several hotels across the nation as well as in

1 For further reading on cults in America, see Willa Appel, *Cults in America: Programmed for Paradise* (New York: Holt, Rinehart, and Winston, 1983), which discusses the phenomenon of cults and how one is indoctrinated or breaks out of a cult. For further reading on African Americans in mid-20th century America see Dorothy K. Newman et al., *Protest, Politics and Prosperity: Black Americans and White Institutions, 1940-1975* (New York: Pantheon, 1978) or Annette Gordon-Reed, ed., *Race on Trial: Law and Justice in American History* (New York: Oxford University Press, 2002), which discuss how African Americans were treated by the police and in the court as well as other white-dominated institutions during this period. For more on MOVE, see J.M. Floyd-Thomas, “The Burning of Rebellious Thoughts: MOVE as Revolutionary Black Humanism,” *The Black Scholar* 32, no.1 (Spring 2002): 11-21, <https://www.jstor.org/stable/41068961>, which argues MOVE was a radical and religious group that exemplified revolutionary black humanist thinking. For more on the effect of the media on the perception of MOVE, see Kimberly Sanders and Judson Jeffries, “Framing MOVE: A Press’ Complicity in the Murder of Women and Children in the City of (Un) Brotherly Love,” *Journal of African American Studies* 17, no. 4 (December 2013): 566-586, <https://doi.org/10.1007/s12111-013-9252-7>, which discusses how press coverage led to antipathy towards the MOVE organization. For more on the MOVE bombing and its aftermath, see Robin Wagner-Pacifici, *Discourse and Destruction: The City of Philadelphia versus MOVE* (Chicago: University of Chicago Press, 1994); Hizkias Assefa, *Extremist Groups and Conflict Resolution: The MOVE Crisis in Philadelphia* (New York: Praeger, 1988); Margot Harry, “Attention MOVE—This is America!” *Sage Journals* 28, no. 4 (April 1987): 5-28, <https://doi.org/10.1177/030639688702800402>; Georgia A. Persons, “The Philadelphia MOVE Incident as an Anomaly in Models of Mayoral Leadership,” *Phylon* 48, no. 4 (December 1987): 249-260, <https://doi.org/10.2307/274482>; or John Anderson and Hilary Hevenor, *Burning Down the House: MOVE and the Tragedy of Philadelphia* (New York: Norton, 1987), which all discuss the bombing and how it affected Philadelphia and the city government. The *Philadelphia Inquirer* reported on MOVE and the bombing from 1985-1987. Temple University Library Special Collections houses the records of the Philadelphia Special Investigation Commission regarding the MOVE bombing and its antecedents.

2 Wagner-Pacifici, *Discourse and Destruction*, 27-29; Sanders and Jeffries, “Framing MOVE,” 568; Floyd-Thomas, “The Burning of Rebellious Thoughts,” 13; Jack N. Nagel, “Psychological Obstacles to Administrative Responsibility: Lessons of the MOVE Disaster,” *Journal of Policy Analysis and Management* 10, no. 1 (Winter 1991): 2-3, <https://doi.org/10.2307/3325510>; Assefa, *Extremist Groups*, 14-15.

3 Wagner-Pacifici, *Discourse and Destruction*, 29-31; Nagel, “Psychological Obstacles,” 3-4; Floyd-Thomas, “The Burning of Rebellious Thoughts,” 11-21.

London.⁴ These devices were left with threatening letters stating that MOVE would strike for real unless Philadelphia stopped its harassment. The organization had begun a feud with then-Mayor Frank Rizzo, who had previously served as Philadelphia's Police Commissioner and run for mayor on a law-and-order campaign. MOVE's residency in Powelton Village came to a head in 1978 after an agreement between the organization and the city made on May 5 disintegrated. The city and MOVE had agreed that the city would end the blockade and within 90 days MOVE members would relocate to a residence outside the city. MOVE saw the city as the center of the societal corruption they sought to end and stayed past the 90-day limit. While several organizations active in Powelton Village at the time were either pro-MOVE or supported negotiation with MOVE to allow them to stay in the neighborhood, MOVE and the police engaged in a protracted firefight resulting in the death of one policeman, Officer James Ramp, and the sentencing of nine MOVE members to jail for the officer's death.⁵

The policy of non-confrontation and avoidance proved ineffective, and in 1984 the Philadelphia Police began to plan a course of action against MOVE.

After being forced out of Powelton Village, MOVE took up residence in a row house on Osage Avenue in Cobbs Creek, West Philadelphia. At first, the organization and the residents of Osage Avenue coexisted peacefully. In time, however, tensions began to as lifestyle differences emerged and the neighbors began complaining. MOVE removed the flea collars off of their neighbors' pets, collected and fed wild animals, built pigeon coops, and left their refuse outside in their yard. Most distressing to Osage Avenue residents was that the MOVE children appeared to be malnourished and rummaged through their trash looking for food. The neighbors were told Wilson Goode would help them after he had become mayor, but in late 1983 after the mayoral election, MOVE began to use bullhorns and loudspeakers to harass their neighbors.⁶

⁴ While MOVE left these letters and devices across the nation and internationally, they were still only an organization local to Philadelphia and were not expanding nationally.

⁵ Wagner-Pacifi, *Discourse and Destruction*, 30-32; Nagel, "Psychological Obstacles," 16; Assefa, *Extremist Groups*, 20-37. Nine members of MOVE were convicted in the shooting of Officer James Ramp during the 1978 shootout with the police and were sentenced with thirty to one hundred years in prison. These members are known collectively as "The MOVE 9."

⁶ Assefa, *Extremist Groups*, 102-108; Nagel, "Psychological Obstacles" 5.

MOVE believed Mayor Goode had the ability to release the jailed MOVE 9 members, and they knew if they began to harass residents of Osage Avenue—a middle-class neighborhood and the bedrock of Goode's political support—the city would have to pay attention to them. Despite MOVE holding the block hostage, Goode used a policy of "appeasement, non-confrontation and avoidance," attempting to avoid conflict in any way possible.⁷ City Operating Departments—Health, Water, Human Services, Streets, and Licences and Inspections—were barred by city policy from carrying out their responsibilities at the MOVE row house. City officials believed that once MOVE members realized the city was ignoring them, they would either change their belligerent behavior or leave the city. The policy of non-confrontation and avoidance proved ineffective, and in 1984 the Philadelphia Police began to plan a course of action against MOVE, one of the first signs of what was to come.⁸

May 13, 1985

Mayor Goode told the police he needed a plan of action against MOVE in the spring of 1985. He wanted to explore the possibilities of arresting some MOVE members and obtaining a court order to hold the children. MOVE began fortifying their row house in earnest in the fall of 1984 and the winter of 1985, building a bunker made of railroad ties, logs, and steel plates on the top of their house; they used similar material to fortify the walls. In April 1985, they announced with bullhorns their intentions to kill the mayor or any police officer who approached the fortified house. Neighbors threatened to take matters into their own hands after claiming to have seen men with rifles on the roof and in the bunker of the house. On the morning of May 13, 1985, the police attempted to serve warrants for the arrests of four MOVE members. These warrants were for misdemeanor charges and primarily intended to get them out of the neighborhood. Mayor Goode required that any officers involved in the 1978 shooting not be involved in the operation on Osage Avenue, but several of those officers were present in the assault force. At 5:30 a.m. outside the MOVE row house, police used a bullhorn to announce the names of the members to be arrested for illegal possession of explosives and terroristic threats and gave the members fifteen minutes to surrender. MOVE refused. Police insertion teams then entered the houses on either side. In response, MOVE shot at the police force from inside. Over the next hour and a half, the Philadelphia police fired over 10,000

⁷ "Excerpts from Commission's Report on Bombing," New York Times, March 7, 1986.

⁸ Wagner-Pacifi, *Discourse and Destruction*, 32, 82-85; Nagel, "Psychological Obstacles," 7; Assefa, *Extremist Groups*, 110-111; Persons, "The Philadelphia MOVE Incident," 255.

rounds of ammunition on the row house and used explosives to blow holes in the walls. By 10:40 a.m., the front of the house was destroyed, but the fortifications MOVE installed in the winter had held, preventing the police from seizing the house. When it became clear their tactics had failed, Mayor Goode announced during a televised press conference he would take the house by any means necessary.⁹

After the press conference, the police sought another way to force the eleven people out of the house that included the use of explosives. They began assembling an explosive entry device around 4:30 p.m., and around thirty minutes later, Mayor Goode approved the use of the entry device. At 5:27 p.m., the police dropped an explosive package from a helicopter onto the bunker of the house. When the bomb exploded, it did not remove the bunker; rather, it ignited a gasoline tank. Instead of trying to contain the resulting blaze, the police and fire commissioners let the bunker burn. It was not until 6:32 p.m. that the fire department turned on its hoses, and it was not until 9:30 p.m. that they took more active steps to contain the fire. The fire raged on until 11:41 p.m., engulfing 61 homes, damaging 110 additional houses, killing John Africa and the ten other occupants of the MOVE house, five of them children, and leaving 250 men, women, and children homeless.¹⁰

Response to the MOVE Bombing

The bombing of the MOVE row house should have been a pivotal event in the history of Philadelphia, showing the incompetence of city officials in an explosive finale. Yet, after the bombing, Mayor Goode and the Philadelphia Police Department received support from around the country. The Los Angeles Police Chief at the time, Daryl Gates, defended the use of an explosive device, declaring it “a sound tactic.” Gates also stated that Mayor Goode had “provided some of the finest leadership [he had] ever seen from any politician” and that he hoped Mayor Goode “ran for national office.” Michael Nutter, then an assistant to a city councilman, said “[MOVE] is a group of people whose philosophy is based on conflict and confrontation.” Roy Innis, who was the chairman of the Congress of Racial Equality (CORE), called Mayor Goode’s handling of the crisis “heroic.” Tom Cremans, the former director of Accuracy Systems Inc., which sells munitions to police departments, said “the police exercised remarkable restraint in not using the device earlier.” However, the bomb squads of many cities were reluctant to

comment on the incident, not wishing to criticize their fellow officers.¹¹

Despite those speaking in favor of the mayor and the Philadelphia Police Department, not all law enforcement officers were complimentary of Philadelphia’s handling of the MOVE crisis. The director of the American Federation of Police, Gerald Arenberg, believed “They broke every rule in the book” when it came to their handling of the incident. James Fife, a police lieutenant in New York City, described it by saying, “They burned down the village to save the village” before adding that the actions taken by the Philadelphia Police Department were “really unheard of.” Arenberg stated the Philadelphia police “just weren’t using all the equipment available to any modern police department.” The MOVE bombing captured the attention of the world, and as many law enforcement agencies weighed in on the actions of the Philadelphia police, so too did the media, both national and international.¹²

Front pages of many newspapers showed pictures of smoldering row houses in West Philadelphia.

The media took a largely critical view of the incident and Mayor Goode. Many newspapers around the world were unsympathetic to the siege of the MOVE house and called Philadelphia a “war zone.” Front pages of many newspapers showed pictures of smoldering row houses in West Philadelphia. The *Washington Post* referred to the pictures as resembling “war-torn Beirut” and the *New York Daily News* called the bombing “a terrible, unnecessary, and costly blunder.” The bombing attracted international attention with newspapers in France paying considerable attention to the incident. The *France-Soir* had an aerial photo of the devastation, and *Liberation*, a French tabloid, called it “one of the most unbelievable urban guerrilla operations that America has ever known.” In Moscow, a newscaster reported “six dead, 60 houses destroyed, hundreds homeless—such is the sinister result of a bloody slaughter which was launched by police.” The *San Francisco Chronicle* was extremely

⁹ Wagner-Pacifi, *Discourse and Destruction*, 87-94; Assefa, *Extremist Groups*, 111-113; Nagel, “Psychological Obstacles,” 6-8.

¹⁰ Wagner-Pacifi, *Discourse and Destruction*, 95-96; Assefa, *Extremist Groups*, 113; Nagel, “Psychological Obstacles,” 9.

¹¹ Ron Wolf, William K. Marimow, Steve Lopez, and John Woestendiek, “How the Bomb Decision Was Made,” *Philadelphia Inquirer*, May 17, 1985; Tom Infield, Doreen Carvajal, and Robert J. Terry, “MOVE Letter Threatened Fire: Sent Two Days Prior to Assault,” *Philadelphia Inquirer*, May 20, 1985; William K. Stevens, “Police Drop Bomb on Radicals’ Home in Philadelphia,” *New York Times*, May 14, 1985.

¹² Tim Weiner, “Experts on Police Procedure Criticize Bombing of House,” *Philadelphia Inquirer*, May 15, 1985.

harsh in its criticism, writing there was “no excuse” for the bombing and it was “an astonishing example of overkill.” The *Atlanta Journal-Constitution* was also critical, calling the bombing reckless and including comments from people such as Burton Caine, the president of the Philadelphia chapter of the American Civil Liberties Union, who called the bombing “totally unjustified,” and New York City mayor Edward Koch, who stated that “if [he] had a police commissioner so stupid to allow a bomb to be thrown into a house, [he] would remove him.” The *Dallas Morning News* focused on the residents of the 6200 block of Osage Avenue. Kevin Young called the bombing “unjustifiable” and said Osage Avenue “is not a battle zone.” Another resident said that he was “totally disgusted” with the city and how it had handled the crisis. These harsh comments about the administration and its actions were widespread after May 13, 1985 but only for a short period of time. The national news moved on after a few weeks of reporting on MOVE, and eventually only the *Philadelphia Inquirer* was doing any meaningful reporting on the aftermath of the bombing.¹³

Despite all these critical reports, some newspapers were more supportive of Philadelphia and the mayor. The *New York Times* referred to MOVE as a radical group, focused more on the complaints from the neighbors against MOVE, and framed the incident as a city reacting against behavior that was well out of the norm for a working-class African American neighborhood. In the *Times* article, Dee Peoples, the owner of a store two blocks away from the MOVE house, said that “all you hear is aggression. You sleep with it, you wake up with it, you live with it.” The *San Francisco Chronicle* wrote about the group’s strange philosophy and how while it was, in theory, a “philosophy of anti-materialism, pacifism and concern for the environment,” in practice “its history was replete with violence, obscenity and filth.” The *Chronicle* article stated that former MOVE member Donald Glassey had testified John Africa “had planned an armed confrontation with police and had MOVE members make bombs and buy firearms.” The *Lexington Herald-Leader*, like the *Times*, described MOVE as a radical organization and defined the cause of the siege as MOVE refusing “to leave the house under an eviction order from police.” The *Herald* article also discussed neighbors’ complaints of “assaults, robberies, and a stench at the house.” The positive media surrounding the administration shielded it from dealing with the harsh realities of their actions and

allowed it a reprieve from the negative media of the bombing. The Philadelphia administration’s actions during this crisis were highly criticized and opinion was divided among news sources in the city and around the globe, but it was a much different story among the Philadelphia public.¹⁴

The national news moved on after a few weeks of reporting on MOVE.

Many believed they were receiving biased news reports. One woman from Valley Forge stated she “believed the mayor did a commendable job,” and “[the press was] questioning the mayor too much.” Tourists visiting Philadelphia in the aftermath of the bombing had a similar reaction: “MOVE? It could have happened anywhere.” One resident of Northeast Philadelphia, Eli Teper, complained the police “used too little force” and “criminals should be treated as such.” Steward Beatty, also of Northeast Philadelphia, thought the bombing was justified and it was “nice to see that somebody can still make decisions instead of doing nothing.” Steve Harmon, a resident of West Philadelphia, said the bombing was “like Vietnam.” While the media and the police around the country were divided on the incident, most people in Philadelphia appeared to see it as a tragedy but remained supportive of the mayor and the city overall.¹⁵

The media’s discussion about the incident shifted closer to the view of the public. While it was a tragedy, most blame rested on the shoulders of MOVE. Two days before the bombing, MOVE sent a letter threatening to set fire to their row house and the neighboring house should the police attack. This letter began, “If MOVE go down, not only will everyone in this block go down, the knee joints of America will break and the body of America will soon fall.” Then the letter threatened, “Before we let you mutha f-s [*sic*] make an example of us we will burn this mutha f-in [*sic*] house down and burn you all up with us.” The city administration began using the letter to blame MOVE for setting the fire that burned down sixty-one houses and killed eleven people. Police Commissioner Gregore Sambor stated it was his “personal opinion” that MOVE “started or assisted” the fire, and was “convinced that MOVE people saturated those roofs with gasoline.” Mayor Goode said the letter showed MOVE was “a group that was bent on absolute destruction, a group

13 Jane Eisner, “Media Blitz: West Philadelphia Disaster Makes Front-Page Headlines Around the World,” *Philadelphia Inquirer*, May 16, 1985; “Police Overkill,” *San Francisco Chronicle*, May 15, 1985; “Police Tactics Questioned – Experts Call Use of Explosives in Siege Situations ‘Reckless,’” *Atlanta Journal-Constitution*, May 15, 1985; “225 Left Homeless by Philadelphia Fire – Uprooted Residents Sorrowful, Angry; Mayor Defends MOVE Incident,” *Dallas Morning News*, May 15, 1985.

14 Eisner, “Media Blitz”; Stevens, “Police Drop Bomb”; “MOVE’s Strange Philosophy of Militancy and Escapism,” *San Francisco Chronicle*, May 15, 1985; “Radical Group Holds Police at Bay,” *Lexington Herald-Leader*, May 14, 1985.

15 Joyce Gemperlein, “Visitors Say the City’s Image Will Survive,” *Philadelphia Inquirer*, May 19, 1985; Stevens, “Police Drop Bomb.”

that was, in fact, a guerilla group inside an urban area.” The mayor also stated that the release of the letter was not meant as evidence that MOVE started the fire but that the letter “says what it says, in [his] opinion.”¹⁶

The city attempted to paint MOVE as the aggressor, framing the actions they had undertaken as merely providing law and order.

In lockstep with the theory of MOVE burning down the street, the city began to discuss how the entry device used was extremely safe and could not have caused the fire. The explosive used in the bombing was known as Tovex TR-2, manufactured by the DuPont Company, which described Tovex TR-2 as “one of the safest explosives on the market.” Before the decision to use Tovex on the house, the Philadelphia Police Department secretly tested different explosives on lumber structures; however, Tovex TR-2 was not meant for above-ground buildings but was instead developed primarily for underground mining. The media began to use the DuPont Company’s label of Tovex as an extremely safe explosive to push the idea that the fire was not the fault of the city. Mayor Goode took issue with the word “bomb” as well, explaining that “what [he] approved to be used was an entry device, which was to take and somehow remove the bunker from the top of the house. There was no intent to destroy the house.” The city attempted to paint MOVE as the aggressor, thereby framing the actions they had undertaken as merely providing law and order, despite it being clear that the aggression towards MOVE was excessive.¹⁷

Shortly after the bombing, and amid calls for an official investigation into the administration’s actions, Mayor Goode announced his intentions to create a special commission to examine the incident. William J. Green, Mayor Goode’s predecessor, said the MOVE Special Commission “has serious, tough questions to ask [the] administration about how it conducted itself,” and “there are many, many unanswered questions and in some cases contradictions that cannot and should not and must not, if faith is to be restored, be swept under the rug.” The former mayor also said the city should release the police intelligence files on MOVE so “everyone in Philadelphia would know what the premise of [the] decisions were.” Despite Green’s harsh words on the city’s actions, Robert S. Hurst, then-president of Lodge 5 of the

Fraternal Order of Police, said “the ultimate responsibility of the widespread property destruction remains squarely on the members of this terrorist organization known as MOVE,” and public opinion in Philadelphia supported this idea. In a poll conducted by Teichner Associates of Philadelphia, 71 percent of respondents believed the mayor did a good or excellent job dealing with MOVE.¹⁸

The MOVE Special Commission hired several people to conduct the investigation. James R. Phelan, one of the FBI’s explosive and counterespionage experts before he left the bureau two years earlier, and Charles King, an expert in the cause and spread of fires, were brought in to investigate the explosives used in the bombing. The original report on the explosive device indicated the only explosive used was Tovex TR-2. However, three months after the incident, Officer William C. Klein testified he had included a second explosive, C-4, in the device when he had assembled it. The commission also hired six other investigators to work under the lead investigator, Neil P. Shanahan. These investigators came from Connecticut, Chicago, Virginia, and Maryland, as well as the Philadelphia area. William H. Brown III, chairman of the commission, said the “search for the highest-quality, professional investigators [was] long and wide-ranging.” Brown added these investigators brought “the skills and expertise essential for the investigation to fulfill its mandate.” The investigators specialized in anti-terrorist programs, major violent crime, and homicide. As the inquiry continued, it became very critical of how the city managed the MOVE incident.¹⁹

As the MOVE Commission’s hearings occurred, the testimonies began to paint Mayor Goode in an unflattering light. In his testimony, the mayor portrayed himself as misinformed and misled by his subordinates, claiming he was as much a victim as a leader. He depicted himself as a leader who confirmed the decisions others made. This was odd, as Goode’s managing style as both city manager and mayor was very detail oriented. An assistant to the District Attorney, Bernard L. Siegel, testified before the grand jury that he had heard “the mayor [say] to the police commissioner, ‘You are the professional and you need not keep me advised of all the details.’” When the District Attorney, Ed Rendell, was asked about this statement, he thought it was “somewhat unusual for Wilson [Goode]” before adding that the mayor’s “management style has always been to get involved in all the significant details.” The hearing revealed the mayor’s

¹⁸ Larry Eichel and Robin Clark, “MOVE Death Toll Reaches 11; Goode to Pick Panel for Probe,” *Philadelphia Inquirer*, May 16, 1985.

¹⁹ Larry Eichel, “MOVE Commission Hires Former FBI Explosives Expert,” *Philadelphia Inquirer*, September 6, 1985; Larry Eichel, “Commission Hires 6 Investigators,” *Philadelphia Inquirer*, July 19, 1985.

¹⁶ Infield, Carvajal, and Terry, “MOVE Letter Threatened Fire.”

¹⁷ Wolf, Marimow, Lopez, and Woestendiek, “How the Bomb Decision Was Made”; Infield, Carvajal, and Terry, “MOVE Letter Threatened.”

attempts to distance himself from the MOVE incident as it was occurring by purposefully asking to not get all the details. This opened Goode up to considerable criticism, the most significant from former mayor William Green, who said Goode was pushing a theory of “reverse Nuremberg” responsibility: he could not be responsible for the incident because he had only accepted the recommendations from his subordinates. Charles Bowser, a member of the commission, criticized Goode in a less direct way, stating “the only person who had the foggiest notion of what was going to happen when the bomb dropped was a police lieutenant.” While these hearings demonstrated there was a major issue between MOVE and the other residents of the 6200 block of Osage Avenue, they also showed there had been poor communication, inaccurate or incomplete intelligence on the organization, and incompetent leadership.²⁰

When the MOVE Special Commission reached a decision on the actions of the administration and the police, its report stated Mayor Goode and his administration displayed “reckless disregard for life and property.” The report stated, “dropping a bomb on an occupied row house was unconscionable and should have been rejected out of hand,” and “the plan to drop the bomb was reckless, ill-conceived, and hastily approved.” Commissioner Gregore Sambor and Managing Director Leo A. Brooks were declared “grossly negligent” for not calling off the siege. The report also called the mayor “grossly negligent” and said he “clearly risked the lives” of the children who had been killed in the house and this was “unjustified homicide.” The commission found that the mayor “failed to perform his responsibility as the city’s chief executive by not actively participating in the preparation, review, and oversight of the plan.” Goode “abdicated his responsibilities as a leader when, after midday, he permitted a clearly failed operation to continue [at] great risk to life and property.” Despite believing MOVE to be an “authoritarian, violence-threatening cult,” the report declared the 10,000 rounds of ammunition fired into the row house had been “excessive and unreasonable,” and “the failure of those responsible for the firing to control or stop such an excessive amount of force was unconscionable,” especially with children inside the building.²¹

Mayor Goode After MOVE

The MOVE Special Commission’s harsh criticisms of Mayor Goode were labeled as devastating by allies of the mayor, but the newspaper coverage of the report was largely supportive.

²⁰ Larry Eichel, “D.A.: Goode Wanted No Details; Rendell Testifies on MOVE,” *Philadelphia Inquirer*, October 23, 1985.

²¹ Thomas Ferrick Jr., “Report on MOVE Finds Goode ‘Grossly Negligent’ in Decisions: Children’s ‘Homicide’ Is Alleged,” *Philadelphia Inquirer*, March 2, 1986.

An editorial in the *Philadelphia Inquirer*, written shortly after the report was released, stated the author “[disagreed] with those who think Wilson Goode should resign” and noted Philadelphians should not just judge the mayor on the MOVE incident, but should instead “judge him on his entire first term.” Mayor Goode also received support from his church followers after the report. The *Inquirer* reported “more than 250 people [...] gathered to pray for Mayor Goode,” and the Reverend U. O. Ifill Sr. described the prayer services as “a demonstration of the endemic support the mayor has in the black community.” Despite the findings of the MOVE Special Commission, Mayor Goode’s support in the city stayed strong and grew thanks to these efforts by local organizations and newspapers. This outcry of support for the mayor hid the actions he had taken and lessened the loss of life in the most important event of his career.²²

Despite the findings of the MOVE Special Commission, Mayor Goode’s support in the city stayed strong.

In the years after the MOVE disaster, Wilson Goode’s reputation began to recover. Over a year after the MOVE incident, Goode said that “[he] had some difficult days and difficult times in [his] administration, but [he had] done a lot of good, constructive things.” John F. White Jr., a city councilman, said “the administration has demonstrated far more experience over [the] year.” The incident faded from public memory, overshadowed by Goode’s more successful endeavors, such as ending a strike involving 14,000 city employees, which created more confidence in him and his administration. When the city experienced a major trash and sanitation issue, Mayor Goode proposed a trash-to-steam plant to be built in the Philadelphia Navy Yard. When several police officers were arrested on bribery and corruption charges, Mayor Goode helped restore the department by implementing a reform package. In the initial aftermath of the MOVE disaster, it seemed that Goode’s political career was over, but over the following two years he worked tirelessly to repair his image.²³

²² Acel Moore, “Bringing on the Problems: Wilson Goode Sometimes Is His Own Worst Enemy,” *Philadelphia Inquirer*, March 20, 1986; Russell Cooke, “Praying for Goode: The Faithful Rise Up,” *Philadelphia Inquirer*, April 13, 1986.

²³ Russell Cooke, “For Goode, A Year of Recovery,” *Philadelphia Inquirer*, January 4, 1987; Robin Clark, “Police Reforms Unveiled: Goode Begins Search for Chief,” *Philadelphia Inquirer*, November 20, 1985; Ferrick Jr., “Report on MOVE.”

In 1988, Goode ran for reelection against former mayor and police commissioner Frank Rizzo. It was a highly contested election, with only a slim margin of 17,176 votes out of 652,307 total votes. In Rizzo's concession, he warned Goode that he would "have to deliver or [he is] going to be right on him." Despite the bad publicity that his actions against MOVE had brought him, the good publicity he had received since allowed Goode to rehabilitate his image and beat Rizzo to become mayor for his second term. Goode's reelection shows how successfully MOVE and the MOVE bombing had been removed from the public eye; even though nothing truly changed after the bombing, people had moved on.²⁴

Thirty Years Later

Thirty years after the MOVE bombing, National Public Radio looked back at MOVE and learned that many young Philadelphians never even knew it had occurred. Tasneema Raja, an editor on an NPR show who grew up only twenty minutes north of Philadelphia, never learned about MOVE in class but instead learned about it from her father. NPR's Gene Demby, who grew up in South Philadelphia in the 1980s, also never discussed MOVE in class. Robin Wagner-Pacifici, who studies fringe radical groups at New York City's New School, believes that other radical groups never identified with MOVE's anti-technology, pro-animal rights, and quasi-Rastafarian beliefs, leading the group to be forgotten in discussions of radical groups. Groups similar to the Branch Davidians in Waco, Texas, and the Weaver family in Ruby Ridge, Idaho, held overlapping beliefs and would mention each other in their manifestos, but "none of them mentioned MOVE." Unlike the Branch Davidians who faced off against the Department of Alcohol, Tobacco, and Firearms, or the Weaver Family who were besieged by the FBI, the Philadelphia police department bombed MOVE. This was not a showdown between a fringe radical group and the federal government, but with the local government. A lack of connection between the general public and MOVE's core beliefs, as well as the city's general ambivalence toward the group, caused the MOVE bombing to fade into obscurity. MOVE generally has only one article written on it each year, usually on the anniversary of the bombing or about the MOVE 9, and only receives minor mention in articles about events the group attends. This relative obscurity compared to the other extremist groups has caused the fallout of the bombing to be forgotten.²⁵

²⁴ Christopher Hepp and H. G. Bissinger, "Rizzo Concedes Defeat: Says He'll Remain Active in Politics," *Philadelphia Inquirer*, November 24, 1987.

²⁵ Gene Demby, "I'm From Philly. 30 Years Later, I'm Still Trying to Make Sense of the MOVE Bombing," *National Public Radio*, May 13, 2015, <https://www.npr.org/sections/codeswitch/2015/05/13/406243272/im-from-philly-30-years-later-im-still-trying-to-make-sense-of-the-move-bombing>. Gene Demby, "Why Have So Many People Never Heard of the MOVE Bombing?" *National Public Radio*, May 18, 2015, <https://www.npr.org/sections/codeswitch/2015/05/18/407665820/why-did-we-forget-the-move-bombing>.

Conclusion

Goode's victory over Rizzo for a second term as mayor was the first sign that the MOVE incident held minimal lasting significance to the city outside of Osage Avenue. The second sign was that schools in Philadelphia do not teach about MOVE; children living in Philadelphia do not learn about an event where the mayor bombs his own city. The MOVE bombing should have ended Wilson Goode's political career, as well as the careers of the others involved in the decision-making that led to the siege of the MOVE row house and subsequent bombing of its bunker. This should have been an event woven into the very fabric of the city; instead, it was forgotten—the perpetrators remained in office and repaired their image, and their victims faded into obscurity. Nothing significant changed after the MOVE bombing: there were no major changes to policy or regulations in response to MOVE or police actions, and for the residents of Osage Avenue all they received was a city bombing their homes.²⁶

This should have been an event woven into the very fabric of the city; instead, it was forgotten.

The MOVE bombing is an enormous black spot in the history of Philadelphia, and yet its occurrence is rarely, if ever, mentioned. That the bombing held no lasting impact in the psyche of Philadelphia is an affront to the deaths of those eleven MOVE members. Despite two grand juries on the bombing, no one from the city administration ever faced any consequences resulting from their part in burning down sixty-one houses and killing eleven people, five of them children. The city administration did their best to rehabilitate their image and move past the bombing without suffering any consequences, aside from a lawsuit paid to the surviving MOVE members. Reports of the MOVE bombing began as highly critical but over time became supportive, enabling the administration to shift the blame for the bomb and subsequent fire onto MOVE, eventually leading to the reelection of Wilson Goode and allowing the MOVE bombing to become largely forgotten. That the MOVE bombing left no major lasting effect on the city of Philadelphia is a disgrace and a disservice to those whose homes burned in the blaze and those who perished as a result of the city's actions.

²⁶ The homeowners on Osage Avenue had their homes rebuilt, but now most are abandoned due to shoddy reconstruction.

Author's Note



Charles Abraham ('20) graduated with a major in History and minors in Anthropology and Classical Studies. From Warrington, Pennsylvania, he enjoys being outside, whether that means relaxing, hiking with friends, or working in the garden.

Charles says that seeing "MOVE" finally published is "incredible": "It means that all of my hard work paid off. I want to thank Dr. Hyser for putting up with my absent-mindedness and for pushing me to do my best."

Sanders, Kimberly, and Judson Jeffries. "Framing MOVE: A Press' Complicity in the Murder of Women and Children in the City of (Un) Brotherly Love." *Journal of African American Studies* 17, no. 4 (December 2013): 566-586. <https://doi.org/10.1007/s12111-013-9252-7>.

Wagner-Pacifici, Robin. *Discourse and Destruction: The City of Philadelphia versus MOVE*. Chicago: University of Chicago Press, 1994.

Bibliography

Anderson, John and Hilary Hevenor. *Burning Down the House: MOVE and the Tragedy of Philadelphia*. New York: Norton, 1987.

Assefa, Hizkias. *Extremist Groups and Conflict Resolution: The MOVE Crisis in Philadelphia*. New York: Praeger, 1988.

Floyd-Thomas, J. M. "The Burning of Rebellious Thoughts: MOVE as Revolutionary Black Humanism." *The Black Scholar* 32, no. 1 (Spring 2002): 11-21. <https://www.jstor.org/stable/41068961>.

Gordon-Reed, Annette, ed. *Race on Trial: Law and Justice in American History*. New York: Oxford University Press, 2002.
Harry, Margot. "Attention MOVE—This is America!" *Sage Journals* 28, no. 4 (April 1987): 5-28. <https://doi.org/10.1177/030639688702800402>

Nagel, Jack N., "Psychological Obstacles to Administrative Responsibility: Lessons of the MOVE Disaster," *Journal of Policy Analysis and Management* 10, no. 1 (Winter 1991): 1-23. <https://doi.org/10.2307/3325510>

Newman, Dorothy K., Nancy J. Amidei, Barbara L. Carter, Dawn Day, William J. Kruvant, and Jack S. Russell. *Protest, Politics and Prosperity: Black Americans and White Institutions, 1940-1975*. New York: Pantheon, 1978.

Persons, Georgia A. "The Philadelphia MOVE Incident as an Anomaly in Models of Mayoral Leadership." *Phylon* 48, no. 4 (December 1987): 249-260. <https://doi.org/10.2307/274482>.

Collective Identity in Germany

An Assessment of National Theories

Sean Starkweather



"Köln stellt sich quer - Tänz die AfD" by Elke Witzig is licensed under [CC BY-SA-4.0](https://creativecommons.org/licenses/by-sa/4.0/)

Beginning in the 18th century, the question of what makes a nation has occupied a prominent place in German politics. From the national theories of the 18th-century German Romantics, who identified cultural and ethnic factors as being the key determinants, to modern civic nationalists and postnationalists, who point to liberal civic values and institutions, the importance of collective identity and how it is oriented has remained an important topic for German scholars and policymakers. Using survey research, I assess the accuracy and relevance of these theories in contemporary German society. I find that, contrary to the optimism of modern thinkers, German collective identity remains aligned with the national theories of the Romantics, resulting in ethnic discrimination and heightened fears over the loss of culture through external ideological and ethnic sources.

The potent force of nationalism has deep roots in German history. From the first conceptualizations of a singular nation by the German Romantics to unification and the 1871 constitution to the post-reunification era, the manner in which Germans have perceived themselves as a nation has played a vital role in both domestic and international politics. But while nationalism in the eras of Johann Gottfried Herder and Johann Gottlieb Fichte, Otto von Bismarck, and Adolf Hitler are generally well understood, the character of contemporary German nationalism remains a topic of much debate. While there have always been fringe nationalist parties like the National Democratic Party (NDP), they remained just that: parties on the fringes of public thought. Indeed, the NDP has never succeeded in passing the voting threshold of 5% needed to enter the Bundestag parliament in federal elections (“September 24,” 2017). However, a surge in nationalist sentiments since 2013 threatens the multicultural society Germany has nurtured for 75 years.

This surge has been most associated with the rapid rise of the Alternative für Deutschland (AfD) party following the European debt crisis that began in late 2009. During the eurozone crisis, five European Union member states—Spain, Portugal, Ireland, Cyprus, and most notably, Greece—experienced extremely high budget deficits and public debt, triggering a sovereign debt crisis that threatened financial institutions and the economic stability of the eurozone in its entirety, including Germany (“The Eurozone in Crisis,” 2015). The AfD received just under 5% of the vote in the 2013 federal elections, which led many to speculate that the party would implode soon after its conception (“Will Germany’s,” 2013). Yet, despite initial failure, the AfD shocked both policymakers and opponents in the 2017 federal elections by receiving almost 12.6% of the vote to become one of the largest parties in Germany (Clarke, 2017).

This new phase in German politics begs the following questions: does the AfD’s rise to prominence reflect a deeper trend in how Germans perceive themselves as a national community? Or is the AfD’s recent electoral success simply a notable but ultimately temporary setback to regionalist and internationalist ends? After all, 12.6% of the vote is still not close at all to the combined 53.4% that the Christian Democratic Union of Germany (CDU) and Social Democratic Party of Germany (SPD) received, and is nowhere near a majority (Clarke, 2017). These questions have become especially pertinent in the wake of the February 19, 2020, terrorist attack in Hanau, Germany. The attack was carried out by a right-wing extremist whose xenophobia led him to target two shisha bars that the Turkish community

frequented before killing his mother and himself (Kaschel, 2020). The shootings that saw the tragic deaths of ten people—nine had an immigrant background, and the tenth was the perpetrator’s mother—have brought these questions regarding German collective identity to the forefront of public discourse (Kaschel, 2020).

A surge in nationalist sentiments since 2013 threatens the multicultural society Germany has nurtured for 75 years.

In recent scholarship, Allen (2010) argued that Germans have shifted away from an ethnocentric view of national identity towards a cultural and civic one, and Bassey (2012) expanded on that argument in noting the formative role that the German state has played in constructing this more cultural and civic conception of the nation. More famously, both Dolf Sternberger and Jürgen Habermas have presented theories of constitutional patriotism, which grounds collective identity in the shared norms, values, and procedures constructed through a liberal-democratic constitution. They have rejected the relevance of a national identity, arguing that it will be or has been replaced by a postnational one following World War II. Their optimism towards a shift in collective German identity has been shared by previous administrations and, hesitantly, by the current government headed by Chancellor Angela Merkel.

In contrast to these perceptions, Connor (1994) asserted that traditional German nationalism will inevitably show increasing signs of recovery and that the “obituaries for ethnonationalism have proved immature” (p. 181). To clarify, Connor did not believe that German ethnonationalism would be akin to the racially driven chauvinism that defined the Nazi epoch, but acknowledged parallels. Other scholars have gone further, suggesting that German nationalism has adopted a more ethnocentric form that has become increasingly prominent; the Brookings Institution even published a policy brief on the new threat posed by the AfD’s apparent ethnonationalism (Stelzenmüller, 2019).

These approaches cannot adequately account for the resurgence of nationalism in Germany. In this paper, I examine arguments that the form of nationalism in contemporary Germany is of a strictly cultural, civic, or ethnic nature, and I work to understand the state’s role in inducing such beliefs. I begin by describing the philosophical

frameworks of the Romantics and modern theorists. Later, I present my argument that German neo-nationalism has taken on an ethnocultural form that harkens back to the German Romantics and the theories relating to postnational identities are mistaken. To support these claims, I utilize quantitative and qualitative sources, including voting statistics, opinion polls, statements and speeches by various government officials, and insights provided by scholars. These approaches position me to assess the nature of Germany's neo-nationalism and the validity of its narrower conceptions.

A History of German Nationalism Theoretical Roots

The study of nationalism can very well be nebulous, so defining a “nation” at its base is important in approaching the question of German nationalism with some clarity. Plano and Olton (1969) defined a nation as “a social group which shares a common ideology, common institutions and customs, and a sense of homogeneity. . . . [T]here is also present a strong group sense of belonging associated with a particular territory considered to be peculiarly its own” (as cited in Connor, 1994, p. 92). In his seminal *Imagined Communities*, Anderson (1983) helped shape how scholars frame questions on nationalism by offering a good starting point. He defined the nation as “an imagined political community—and imagined as both inherently limited and sovereign” (p. 6). This imagined community is limited on the basis that “even the largest of them . . . has finite, if elastic, boundaries” and sovereign because “nations dream of being free. . . . [T]he gage and emblem of this freedom is the sovereign state” (p. 7). With these insights, we can synthesize a definition: a nation is a porous, *perceived* community whose members believe they share a sense of commonness intimately tied to a certain territory. Whether this perception accurately describes contemporary nationalism and the birth of the new international order will be assessed.

Johann Gottfried Herder and Johann Gottlieb Fichte were among the first to create theories of German nationalism. Herder's transfiguration of the concept of a *Volk* [people] in his 1784 *Ideen zur Philosophie der Geschichte der Menschheit* [*Ideas for the Philosophy of Human History*] was compelling and acted as a “radiation-point” around which the “new gospel of nationalism” revolved (Hayes, 1927, p. 722). For Herder, the *Volk* derived not through race or ethnicity, but through the culture that one inherits as a result of being within a particular environment (Hayes, 1927). His idea of an environment can be broken down to three fundamental

factors: physical geography, historical development, and folk-character. Although Herder failed to provide a precise definition of folk-character, it can best be described as the overarching, generalized personality of a particular national group. He argued that the natural state of humanity entails that a single nation should maintain a single national culture and, as Charles Taylor (1994) pointed out, that “a *Volk* should be true to itself” (p. 31). In other words, a nation ought to preserve the integrity of its culture.

With regards to the ideal of authenticity, Herder asserted that the Church, in advocating for the continued use of specialized Latin, inhibited forms of expression through local vernaculars. This, in turn, inhibited the nation from realizing its true self (Schmidt, 1957). On a side note, the popularity of Herder's thought lends merit to Anderson's suggestion that the specialization of Latin played a role in bringing about national consciousnesses that diametrically opposed encompassing religious communities.

Although Fichte defined the nation in terms of language and general culture at a superficial level, his theory ultimately rested on ethnicity.

While Herder stated explicitly that he spoke of culture in a broad sense, there is some disagreement regarding Fichte's arguments as to what made the nation. It is commonly believed that Fichte's 1808 *Reden an die deutsche Nation* [*Addresses to the German Nation*] merely narrowed the scope of Herder's theory in that Fichte saw the purity of the native language, a cultural artifact, determined a national identity (Martyn, 1997). Although Fichte defined the nation in terms of language and general culture at a superficial level, his theory ultimately rested on ethnicity. His appeals to *Abstammung and Abkunft* [descent and origin] occupied a prominent place in his thought, especially in his *Reden*. And though he officially rejected shared language as the principal component of a national identity, Fichte's consistent references to descent and origin betrayed his explicit denunciations of shared blood (Abizadeh, 2005). Indeed, according to Abizadeh (2005), Fichte's call for *die ursprüngliche Sprache des Stammvolkes* [the original language of one's ancestral people] when speaking on the expressive freedom of a nation was inseparable from genealogical purity. As Abizadeh noted, “Language must indeed coincide with descent” (p. 354). The twin ideas of a history and ancestry common to all Germans

are therefore components of Fichte's theory of nationalism, regardless of whether he acknowledged it or even desired it. Language only constituted a component of the theory, not its entirety. Although Fichte did not offer an ethnonational historiography for the German people, the idea of an ancestral bond between all Germans was compelling, and his work would be invoked by future German nationalists, particularly the traditional conservatives and the Nazis during the Weimar Republic. Hence, many historians have attributed the fervor with which the Nazis pursued their ambitions to theorists like Fichte (e.g., Kaufmann, 1942).

The German Romantics' concept of the nation rested on an ethnocultural foundation. Though Herder's approach rested on a broad culture, Fichte provided a more precise argument as to what gave life to the nation and what differentiates it from other nations by emphasizing people's ancestral history. However, whether the Romantics were accurate in describing the essence of nations can only be determined when contrasted with modern conceptions.

Modern Theories of Nationalism

While ethnocultural theories of nationalism found favor among academic circles prior to the conclusion of World War II, the end of the war in 1945 and the beginning of the Cold War brought forth a number of theories positing that nations are defined in civic terms. To modern theorists, nations derive from the idea that "political attachment ought to centre on the norms, the values and, more indirectly, the procedures of a liberal democratic constitution" rather than less tangible notions of culture, ethnicity, and language (Müller & Scheppele, 2008, p. 67). The division of the German state into the Federal Republic of Germany (FRG) on the west and the German Democratic Republic on the east spawned two distinct theories of constitutional patriotism: the "protective" patriotism of Dolf Sternberger, which emphasized the physical structure of a nation, and the "purifying" patriotism of Jürgen Habermas, which emphasized its ethical structure (Müller, 2006). These theories stemmed from a series of lectures given by Karl Jaspers in 1946 wherein he argued that German solidarity could be found only in reflecting on their involvement in World War II and the Holocaust.

It was from the insights offered by Jaspers that Sternberger constructed his theory of *Verfassungspatriotismus* [constitutional patriotism] (Bagchi, 2016). Sternberger argued that collective identity should derive from the institutions of the democratic state and the general concept of the rule of law. As Müller (2006) pointed out, this argument depended on a "militant democracy" capable of defending itself against its

internal and external enemies" (p. 284). Having witnessed the Weimar Republic's collapse and the fragmentation of German society into rigidly defined factions, he saw this political attachment to the state as necessary for social cohesion and stability (Müller, 2006). The idea that there are enemies that the state must be defended against suggests that he was not idealistic enough so as to embrace cosmopolitan notions of identity. Rather, Sternberger's theory danced between the ethnocentric chauvinism of nationalism on the one hand and the idealistic internationalism of cosmopolitanism (Kobyliński, 2017). He saw the primary role of politics as the eternal push towards peace and his constitutional patriotism as the vehicle by which it could be achieved in a democratic state. To emphasize the plausibility of his theory, he offered an interpretation of history positing that traditional European states had been characterized by the presence of constitutional patriotism, particularly Germany under Chancellor Otto von Bismarck.

For Sternberger, the Holocaust brought about the collective emotional conditions that would push society towards constitutional patriotism.

Sternberger employed arguments that made use of the Jaspersian concept of "metaphysical guilt," which referred to the fracturing of solidarity that Jaspers saw across human beings and the collective responsibility Germans felt after the Holocaust (Müller, 2006, p. 280). For Sternberger, the Holocaust brought about the collective emotional conditions that would push society towards constitutional patriotism. Considering the historical precedent and the situation of German society, the shift back to constitutional patriotism following the divergent path that the state took in the 1930s and 1940s was, in Sternberger's eyes, likely and perhaps inevitable after 1945 (Kobyliński, 2017, p. 47).

Jürgen Habermas's theory of constitutional patriotism was inspired by but diverged from Sternberger's at a fundamental level. Unsurprisingly, Habermas's theory reflected the new optimism that had swept Europe's intelligentsia in the late stages of the Cold War: instead of grounding collective identity with the state and the physical institutions associated with it, Habermas pinned his theory on the liberal political principles and values embedded within a constitution (Kobyliński, 2017). He believed that a return to the pre-national patriotism espoused by Sternberger was not

even possible given recent history. Rather, using Lawrence Kohlberg's theory of moral development, he conceived that individuals would develop "post-conventional identities" in which they would construct reasoned moral philosophies and abide by them honestly (Müller, 2006). It is here that Habermas's theory maintains a rationalist line of thought: the restructuring of the traditional German state to adhere to the *Rechtsstaat* [rule of law] and the *Sozialstaat* [welfare state] would enable people to engage in the public sphere so they can reason with one another as free individuals (Müller, 2006). The rule of law would push a substantive view of what constituted universal norms and protect democratic processes, and the welfare state would provide the material conditions necessary for individuals to engage in such democratic processes as equals. Habermas then focused on the question of German guilt, and it is in the controversy surrounding how best to handle this guilt that the question of the nature of German nationalism takes root; this controversy came to be known as the *Historikerstreit* [historian's dispute].

For Habermas, the Holocaust was a lesson for humanity as a whole, and German guilt could lead to an identity based on a common sense of humanity.

In contrast to more conservative thinkers, Habermas regarded arguments that the only way to establish a stronger collective German identity was to embrace a "moderate or accepting view of the Holocaust" as simply old-nationalistic (Menent, 2018). For Habermas, the Holocaust was a lesson for humanity as a whole, and German guilt could lead to an identity based on a common sense of humanity that transcended the forms of identity seen earlier in the century. Thus, the German nation would hardly be a nation at all, but rather a social group of people unified by shared liberal values and a public sphere where they could engage in politics. The factors once believed to help establish a nation—like common language, history, and ancestry—were thus nonfactors in Habermas's view, at least in the post-war era. To him, the diminishing importance of traditional national identities would lend itself to European integration, for there would be a particular good common to different communities in the form of a shared legal system (Menent, 2018).

Though Habermas's later attempts to extend his theory to all of Europe and incorporate the possibility of a European identity has faced much more criticism among scholars, it continues to find support in the post-war era and has been

adopted by a number of eager, idealistic European politicians committed to the idea of a regional community bound together by liberal democratic values.

To recapitulate, the 20th century has seen the emergence of theories of constitutional patriotism that reject conventional, traditional conceptions of national identity associated with the German Romantics and Nazi ethnonationalists. Instead, these modern theories of collective identities are grounded in either concrete ideas pertaining to the state or abstract ones pertaining to liberal democratic values. These theories gained traction in the late 20th century, and while many have since been disillusioned, they remain prominent as a consequence of recent German policy and the perceived potential in the EU's ability to nurture a transcendent European identity. In 2016, Minister of Foreign Affairs Heiko Maas even stated that "[Germany] has a murky past, but our parents' generation has created a modern Germany: cosmopolitan and liberal domestically, good neighbors and peaceful partners abroad" (Brady, 2016). It is apparent that a civic postnational view remains influential, at least within the state. For these modern theories to be determinedly accurate, there must be evidence demonstrating that German guilt has maintained its resilience as a social phenomenon and cultural or ethnic differences are marginal factors that have little to no effect in interactions between individuals.

Although the idea that the end of history had been reached is not nearly as promising as it once had been, and political theorists like Habermas and government officials concede that there remain a number of challenges that regional institutions like the EU must face, they are firm in their belief that the advent of postnational societies or civic-based nations is imminent. Many western European countries have pursued a form of regionalism wherein national identities are superseded by a broader European identity, but no country has pursued this ideal with more fervor than Germany. From the outset, the new FRG under Chancellor Konrad Adenauer has adopted a foreign policy of *Westbindung* [binding of the West], sowing the seeds for a long-term project of incorporating the people into a greater European collective. Currently, many believe that this project has begun seeing success or at least managed to nurture a national identity predicated on civic elements. This is seen most clearly in a statement by Hans-Dietrich Genscher, Germany's longest-serving foreign minister: "the more European our foreign policy is, the more national it is" (as cited in Kirchick, 2018). While I disagree with Genscher's assessment, the arguments presented in its defense speak to the complexity of the questions being addressed.

Questioning German Guilt

Modern theorists have pointed to German guilt as the catalyst for a new constitutional patriotism that would replace the traditional form of nationalism. This position is reasonable considering that Germany experienced a period of nearly complete suppression of nationalist sentiments by both the government and the general public in the years immediately following World War II (Berlin, 2003). The tragedies brought about by Hitler's regime—a regime many supported or were sympathetic to—diminished all traces of nationalism in German society (Breuilly, 1992). However, the initial absence of national sentiments may not preclude a later rise of nationalism and nationalistic behavior. If this is the case, does German guilt ensure that nationalism will permanently remain at the fringes of political life?

Allen (2010) pointed to the failure of the “New Right” in procuring significant support among the general population as one indication of the German people's shift away from an ethnocentric view of the Volk. While believing in overtly positive responses to these questions may have been reasonable, Connor (1994) provides an argument that tempers the implications of Allen's (2010) claim:

Germans [had] held their ethnonational proclivities in tight rein. But as memories recede, as the realization grows that Nazism and German nationalism are not inevitably synonymous, as pride of postwar material and cultural achievements takes on the hue of pride in German achievements, as older Germans come to believe that Germany's period of atonement and parole has lasted long enough, and as a postwar generation that believes it cannot be held in any way culpable for the mistakes of its parents comes into power, German nationalism manifests commensurate signs of recovery. (p. 181)

Because the initial disappearance of German nationalism was the product of German guilt, there is a finitude that characterizes the suppression of nationalism. Specifically, the temporal aspect of this suppression, which has involved the voluntary participation of the people under the state, is such that time nullifies the effects of German guilt. Thus, when Alexander Gauland, then an AfD candidate for the Bundestag, stated that Germans “have the right to be proud of the achievements of the German soldiers in two world wars” and when AfD's chief in Thuringia Björn Höcke declared the Holocaust memorial in Berlin a “monument of shame” and called for a “180-degree turnaround” with regards to German

guilt, the responses were not a unified outcry against such sentiments being clearly nationalistic, but a mixed batter of utter outrage, sympathy, and agreement (as cited in Dearden 2017; as cited in Huggler, 2017). Höcke later clarified that the Holocaust “is part of our history. But it is only part of our history” and that “guilt consciousness alone cannot create a healthy identity, but only a broken one” (as cited in “Fury as AfD,” 2017). Yet even his clarification directs attention to the problem of German national identity as it relates to the feelings of guilt, and more importantly, it hints towards the temporal aspect of guilt. As time passes, events fade into the backdrop of history, and the tragedies once believed to be embedded within the German character become dulled within the memories of the German people.

While the New Right may have been at the fringe earlier, it is presently a powerful force to be reckoned with.

Consequently, the state's attempts at forcing public conscious reflection have been met with increasing confusion and resentment. A divide exists between the state's perception of how the German nation ought to be defined and the perception held by many of its people. Although Allen (2010) was correct in asserting that Germans have shifted away from a strictly ethnocentric understanding of the nation, his implicit conclusion that shared history plays no role does not account for the time factor, which cannot be ignored considering the emotive nature of guilt. The rapid rise in popularity of the AfD lends merit to this idea, for the relative weakness of right-wing parties in the early 21st century has, over the course of a decade, shifted into relative strength. The AfD is seen as an ever-increasing threat by the left-wing and moderate parties, especially after the 2017 federal election. While the New Right may have been at the fringe earlier, it is presently a powerful force to be reckoned with.

A Popular Nationalism

What are the reasons for the feelings of disenfranchisement and concern that led to the rise of popular nationalist parties like the AfD? To what extent do they speak to the nature of Germans' view of the *Volk*? Some scholars point to economic factors, such as low income and unemployment, as being responsible for increases in nationalist sentiments (Hill, 2017; Staudenmeier, 2017). Unfortunately, these factors do not adequately explain the increase in support for the AfD

and certainly not the revival of nationalism. To determine the underlying factors, it is necessary to analyze public opinion in a broader sense, and polling and survey data offer good windows of opportunity for determining the content of German collective identity. In analyzing this data, notions of a German nation predicated on civic values and institutions begin to fall apart, and the reality of an ethnocultural conception of the nation becomes more evident.

Surveying “Germanness”

Language and religion are typically seen as the cornerstones of German culture, although the arts occupy a clear place as well. It may be pointed out that Catholic-Protestant divisions contradict the notion that religious affiliation is a primary binding factor; however, this superficial divide is superseded by a general sense of shared faith in Christianity in the face of the perceived threat of Islam. One of the most significant concerns held by Germans is the “loss of culture, values, and the way of life we grew up with”: in 2017, 19% believed that it was the greatest threat to the future of their children, and 95% of those who voted for the AfD believed that Germany would experience a real loss of culture (Center for Insights in Survey Research, 2017; “Umfragen zur AfD,” 2017).

The issues that Germans value reveal how the AfD grew its voter base so rapidly in just four years.

This perceived danger can, to an extent, be seen as stemming from the influx of Muslim refugees since 2015. Notably, 16% of respondents in a Center for Insights in Survey Research (2017) poll saw the refugee crisis as the biggest problem facing Germany and 20% believed it was the biggest issue facing Europe as a whole. Another survey found that 71% of all respondents were in favor of limiting the number of refugees in the long run, and 79% felt more needed to be done to integrate refugees (“Umfragen zur Flüchtlingspolitik,” 2017). It should be noted that 54% of respondents believed that the refugees were an enrichment for the country (“Umfragen zur Flüchtlingspolitik,” 2017). Still, 57% of all survey respondents and 92% of AfD supporters were worried that the influence of Islam was too strong (“Umfragen zur AfD,” 2017; “Umfragen zur Flüchtlingspolitik,” 2017). Perhaps due in part to this perception, 52% of Germans either entertained the idea or were in favor of a “dominant culture” (“Over 50% of Germans,” 2017). Given that a significant portion of those who voted for a left-wing or center party

in the 2013 elections switched affiliations and voted for the AfD in 2017—of the nearly 6 million votes that the AfD received in 2017, over 1 million of those votes came from those who voted for the CDU in 2013—the issues that Germans value reveal how the AfD grew its voter base so rapidly in just four years (Burn-Murdoch et al., 2017). Considering that the AfD desires cultural preservation and calls for the government to actively protect German culture as the “predominant culture” in its “Manifesto for Germany,” it is reasonable to presume that those concerned with the loss of German culture may feel the pull-factor of the AfD and the push-factor of what they perceive as the negligence of the parties they voted for in earlier elections (Alternative für Deutschland, 2017; Center for Insights in Survey Research, 2017; Holscher et al., 2017).

The array of survey data suggests that the sentiments and policy prescriptions typically attributed to the AfD and other far right-wing groups are much more prevalent than believed. Cultural artifacts remain vital components of German collective identity. Germany’s neo-nationalism, therefore, cannot be condemned out of hand as simply a radical ideology maintained by fringe movements. Rather, it must be recognized as a genuine reaction to a perceived sudden shift in the normative social dynamics that characterize German life.

It is important to note that Germans seem not in favor of rejecting or deporting all incoming refugees, but of expediting the process of deporting asylum seekers who have already been rejected. Additionally, Germans are willing to accommodate refugees insofar as the refugees are willing to integrate into society. This willingness is marked by a general acceptance of institutional methods for integrating and potentially assimilating refugees among other immigrants. In a recent survey, 76% of Germans without a migrant background agreed that immigrants ought to “adapt their behavior to German culture,” and 83% with a migrant background responded the same way (Chase, 2016). Though the disparity is not too great, it suggests, as Federal Minister Peter Altmaier stated, that the desire to assimilate on the part of immigrants in a broad sense is “abundantly and distinctly present” (as cited in Chase, 2016). Even though this data demonstrably undermines the postnationalist vision, it also shows the cultural aspects that underlie “Germanness.”

Immigration

While the proposition that German neo-nationalism has assumed the ethnocultural trappings of Herder and Fichte as it did in the late 18th and early 19th centuries can be argued

simply on grounds of general public opinion, it is in studying the real dynamics between ethnic Germans and those with migrant backgrounds on a more intimate level that the nature of neo-nationalism in Germany becomes more apparent. Both steady flows and sudden influxes of immigrants are nothing new to Germany. As Bade (1995) observed, “since the late nineteenth century, transatlantic emigration from Germany has decreased while continental labor immigration has increased” (p. 515). More relevantly, Goodman (2007) asserts that “the postwar story of German economic and social change has been very much informed, possibly dominated, by *de facto* immigration” (p. 100). Indeed, the *Wirtschaftswunder* [economic miracle] of the 1950s led to labor shortages that required the FRG to pursue policies that encouraged immigration of Turkish *Gastarbeiter* [guest workers]. But there is a major difference between immigration into Germany in the late 19th century and in the postwar era: in the former period, the government reacted in a hostile manner to the influx of early immigrants, especially in Prussia (Bade, 1995). It was during this time that Germany was led from ethnocultural to ethnonational conceptions of the nation as the government of the late 19th century “bound civil rights to the principle of ethnic descent,” thereby reaffirming *jus sanguinis* [the principle of ethnic heritage] (Bade, 1995, p. 522). By extension, the emphasis on ethnic background in relation to questions of citizenship laid the groundwork for the ethnic nationalist fervor that took Germany by storm in the 1930s through the outspoken rhetoric of politicians like Heinrich von Treitschke and, of course, Hitler.

In contrast, immigration in the postwar era was encouraged by the FRG, even after reunification in 1990. Yet, despite the state’s genuine and commendable attempts to bring about a new age of multiculturalism and define the German nation in terms of civic values and democratic institutions, the public has nonetheless been much more reserved. The case of the Turkish population provides a rich instance in this regard.

Integration

The FRG does not track race in its census. However, independent analyses have been conducted that involve a number of different variables, like intermarriage, naming habits, and name-based discrimination. The rate of ethnic intermarriage is a powerful indicator of a minority’s assimilation into their new society; it is certainly one of the most easily observable signs of assimilation as well (Gerhards & Hans, 2009). It reflects the amount of interaction between members of different ethnic groups and their willingness to accept and accommodate one another (Janßen & Schroedter, 2007). According to the Migration Policy Institute (MPI), the intermarriage rate among first-generation Turkish men

in 2008 was 7.1% and 12.1% for second-generation Turkish men; first-generation Turkish women had an intermarriage rate of 2.6% (Nottmeyer, 2009). The MPI even asserted that the increase in intermarriage between first- and second-generation Turks in Germany indicated “the second generation’s greater commitment to and integration into German society” (Nottmeyer, 2009). Intermarriage rates between Turks and Germans have, in fact, risen since 2008. As of 2017, the rate among Turkish women was 14% while the rate among Turkish men was 19% (“Love in Germany,” 2018). This increase in intermarriages suggests not only a willingness among the Turkish population in Germany to integrate, but that there are increasingly more ethnic Germans willing to accept and accommodate Turks into German society. This seems to vindicate, to a small degree, the cosmopolitan claim that Europeans are moving beyond traditional nationalisms.

Some have wrongly used these findings to push an anti-immigrant, anti-Muslim rhetoric.

It must also be considered that the ethnic component of collective identity can potentially detract with regards to Turkish integration. A 2018 study by the Center for Turkish Studies at the University of Duisburg-Essen found that 89% of Turks feel they belong either “strongly” or “very strongly” in Turkey, greater than the 81% that answered in the same manner regarding Germany (Sauer, 2018). This dual identity leads to Ross’s (2009) assertion that “the strong ethnic ties and identification with the homeland that characterize German-Turks provide meaning and comfort in daily life, but appear to impede assimilation” (p. 710). Some have wrongly used these findings to push an anti-immigrant, anti-Muslim rhetoric. Kern (2016), for example, emphasized that ethnic Turks are, on average, “economically and educationally less successful than other immigrant groups.” Taken alone, this statement appears to be simply factual. However, when grouped with survey data that highlight only the negative elements of the Turkish population in Germany, the result is a view slanted to enhance a preconceived political ideology, which neglects the real progress made by German Turks towards assimilating and integrating. Although it may appear ethnic Turks are “resisting” assimilation and less inclined to assimilate compared to other minorities, the Turkish population’s relative acculturation is roughly equal to other immigrant populations that originate from countries that are culturally closer (Gerhards & Hans, 2009). In simpler terms, as Pokorny (2017) noted,

Hans (2010) shows that the majority of immigrants do in fact assimilate into German society. The first generation generally does not assimilate completely, but some members of the second generation become totally assimilated. When it comes to the consumption of high culture, Hans (2015) notes that third-generation immigrants are no different from young Germans. (p. 11)

Despite this reality, many Germans have tended to distinguish themselves from German-Turks, as evidenced by the famous departure of Mesut Özil from the German national football team; Özil was quoted as saying, “I am German when we win, but I am an immigrant when we lose” (as cited in “German Turks still rooted,” 2018). Inter-ethnocultural relations may have improved, but there is clearly much progress to be made.

Hyphenation

Although there are a number of modes by which to demonstrate ethnic socialization between ethnic Turks and Germans, ethnic acculturation is most simply demonstrated via naming habits. Gerhards and Hans (2009) found that while Turks were less likely to give their children German names, having close interethnic relationships of any kind with ethnic Germans greatly increased the likelihood that a Turk would opt for a German name for their child, and “a high share of Turks married to German partners adopt naming habits completely in line with ethnic Germans.” Moreover, given that names are associated with particular ethnic groups, this also reinforces the idea that there is in fact a strong ethnic component to collective identities and how they are developed.

The existence of name-based discrimination is a powerful indicator of the importance of ethnicity as it relates to identity. Names have long been an identifier of ethnic background. In Bosnia, for example, last names specifically were used to identify friend and foe as the new country collapsed into civil conflict in the early- to mid-90s (Nye & Welch, 2017). While name-based exclusionary behavior in Germany is not nearly as dramatic as in Bosnia, there is strong evidence that ethnic discrimination against individuals with identifiably Turkish names still exists in German society, particularly in schools and the workplace. In schools, Bonefeld and Dickhäuser (2018) found that “when a student was assumed to have a migrant background [through names], the dictation was graded less favorably compared to a student without a migrant background, namely by 0.3 grade steps” (p. 7). Bonefeld and Dickhäuser (2018) noted that this disparity is more likely a result of a positive bias toward students without

a migrant background than a negative bias towards students with a migrant background. This bias may play a role in students with migrant backgrounds attending lower-track schools compared to native ethnic Germans.

The ethnic component of collective identities is still important in how people interact in German society.

Ethnic discrimination also exists in the workplace. Kaas and Manger (2012) found that applications marked by an identifiably German name were 14% more likely to receive callbacks from larger firms and 24% more likely to receive a callback from smaller firms than similar applications marked by an identifiably Turkish name. Again, the name-based discrimination found in the study was less severe than in other countries, like Greece against Albanians, Sweden against Arabs, and the United States against African Americans. These disparities in how students and applicants are treated based on their names indicate that the ethnic component of collective identities is still important in how people interact in German society (Bonefeld & Dickhäuser, 2018).

Conclusion

German neo-nationalism, which has revealed itself gradually since 2013, has taken on an ethnocultural form that reflects 19th century theories on what constitutes a nation according to the German Romantics. This is the case despite the FRG’s attempts to develop a multicultural society in which German identity is grounded in democratic institutions. Many politicians, theorists, and laymen alike argue that ethnocultural conceptions of the nation are anachronistic in the contemporary era and only the radical segments of the German population retain such conceptions. By and large, however, Germans have exhibited great concern as to the preservation of cultural artifacts, like language, arts, and religion, which they perceive may be under threat, especially following the influx of Muslim refugees in recent years.

Ethnicity remains an important part of Germany’s social dynamics, and judgments about the character of an individual are still made on the basis of ethnic/migrant background, even though the practice is not as prevalent as in other countries. It can therefore be said that German collective identity is not as firmly grounded in a constitutional patriotism or a form of postnationalism as many would like to believe. Instead, German collective identity involves strong cultural and

ethnic elements that define how Germans view the *Volk*. This is reminiscent of the theories of Herder and Fichte that played important roles in how the 1871 German Constitution was framed with regards to the national question. The FRG's failure to construct a more civic-based definition of the nation speaks to the people's unwillingness to detach themselves from their cultural and ethnic heritage—the lasting outrage against Merkel and Altmaier's handling of the refugee crisis is evidence of this intractability.

To the dismay of those hoping for a civically-defined national community, traditional collective identity in Germany has proven remarkably resilient after decades of state-led efforts at nurturing a more civic-oriented society; the perceived importance of one's cultural history and ancestral origins will remain at the heart of the German nation, much to the detriment of Germany's ethnic minority populations. However, the real shift in perception should not be neglected. Germans do not take as kindly to the AfD as 1930s Germans did with the NSDAP and often object to the party's rhetoric. Equally importantly, many of the socioeconomic issues that have fermented nationalist sentiment are resolvable by the state, and an increasing number of Germans intermarry with those of differing ethnicities. Thus, there is still yet hope for a postnational constellation, even if recent history suggests otherwise.

Author's Note



Sean Starkweather ('23) is a double major in International Affairs and Philosophy and a double minor in Asian Studies and Honors. His research interests include international security, political theory and psychology, ethics, and nationalism studies. He hopes to pursue a PhD

in International Relations and a career as a researcher at a university or think tank. This research paper represents one of the first steps to these ends, and was accepted for presentation at the National Undergraduate Humanities Research Symposium at Johns Hopkins University and the MadRush Undergraduate Research Conference at James Madison University.

Sean would like to thank Mr. Jameson Johnson of the US Africa Command and Mr. Jason Moses of the Office of the Director of National Intelligence for their direction and invaluable insights on contemporary German society and politics. He would also like to thank Dr. Hak-Seon Lee from the Department of Political Science for his encouragement, as well as the *JMURJ* Editorial Board for their understanding, advice, and commitment to perfection. This publication would not have been possible without their continued support.

References

- Abizadeh, A. (2005). Was Fichte an ethnic nationalist? On cultural nationalism and its double. *History of Political Thought*, 26(2), 334-359. https://www.jstor.org/stable/26221698?seq=1#metadata_info_tab_contents
- Alessi, C., & McBride, J. (2015, February 11). *The Eurozone in crisis*. Council on Foreign Relations. <https://www.cfr.org/background/eurozone-crisis>
- Allen, R. (2010). *Nationalism and contemporary German politics: Inclusion versus exclusion* [Master's thesis, University of Leeds]. Semantic Scholar. <https://pdfs.semanticscholar.org/d1f1/9d80cfa637795f4f50dd1b0c77ef932f13ab.pdf>
- Alternative für Deutschland. (2017). *Manifesto for Germany: The political programme of the Alternative for Germany*. https://www.afd.de/wp-content/uploads/sites/111/2017/04/2017-04-12_afd-grundsatzprogramm-englisch_web.pdf

- Anderson, B. (1983). *Imagined communities: Reflections on the origin and spread of nationalism*. Verso Books.
- Bade, K. J. (1995). From emigration to immigration: The German experience in the nineteenth and twentieth centuries. *Central European History*, 28(4), 507-535. <http://www.jstor.org/stable/4546551>
- Bagchi, K. (2016, December 13). The Supreme Court is perpetuating the myth of constitutional patriotism. *The Wire*. <https://thewire.in/law/constitutional-patriotism-national-anthem-sc>
- Bassey, C. (2012). *Understanding nation branding: A "new nationalism" in Germany* [Master's thesis, Brandeis University]. Brandeis Institutional Repository. https://bir.brandeis.edu/bitstream/handle/10192/86/CBassey_MastersThesis_August2012.pdf?sequence=1
- Berlin, J. R. (2003). *The continuing suppression of nationalism in the Federal Republic of Germany* [Honors thesis, Washington State University]. Research Exchange. <https://research.wsulibs.wsu.edu:8443/xmlui/bitstream/handle/2376/2406/Berlin,%20Julie%20R.%20%20The%20Continuing%20Suppression%20of%20Nationalism%20in%20the.pdf?sequence=1>
- Bonefeld, M., & Dickhäuser, O. (2018). (Biased) grading of students' performance: Students' names, performance level, and implicit attitudes. *Frontiers in Psychology*, 9, 1-13. <https://doi.org/10.3389/fpsyg.2018.00481>
- Brady, K. (2016, May 17). *German right-wing AfD "nationalistic, authoritarian, misogynist," says justice minister*. DW News. <https://www.dw.com/en/german-right-wing-afd-nationalistic-authoritarian-misogynist-says-justice-minister/a-19261920>
- Breuilly, J. (Ed.). (1992). *The state of Germany: The national idea in the making, unmaking, and remaking of a modern nation-state*. Longman Group.
- Burn-Murdoch, J., Ehrenberg-Shannon, B., Bernard, B., Maier-Borst, H., & Stabe, M. (2017, September 27). Germany's election results in charts and maps. *Financial Times*. <https://www.ft.com/content/e7c7d918-a17e-11e7-b797-b61809486fe2>
- Center for Insights in Survey Research. (2017). *Public opinion in Germany: August 10-28, 2017*. International Republican Institute. https://www.iri.org/sites/default/files/2017-9-14_germany_poll_presentation.pdf
- Chase, J. (2016, December 16). *Immigrants lead the way in demanding assimilation, study finds*. DW News. <https://www.dw.com/en/immigrants-lead-the-way-in-demanding-assimilation-study-finds/a-36798260>
- Clarke, S. (2017, September 25). German elections 2017: Full results. *The Guardian*. <https://www.theguardian.com/world/ng-interactive/2017/sep/24/german-elections-2017-latest-results-live-merkel-bundestag-afd>
- Connor, W. (1994). *Ethnonationalism: The quest for understanding*. Princeton University Press.
- Dearden, L. (2017, January 19). German AfD politician "attacks Holocaust memorial" and says Germans should be more positive about Nazi past. *Independent*. <https://www.independent.co.uk/news/world/europe/germany-afd-bjoern-hoecke-berlin-holocaust-memorial-shame-history-positive-nazi-180-turnaround-a7535306.html>
- Fury as AfD politician urges Germany to "end culture of remembering Nazi crimes."* (2017, January 18). The Local. <https://www.thelocal.de/20170118/far-right-afd-politician-urges-germany-to-stop-remembering-nazi-crimes>
- Gerhards, J., & Hans, S. (2009). From Hasan to Herbert: Name-giving patterns of immigrant parents between acculturation and ethnic maintenance. *American Journal of Sociology*, 114(4), 1102-1128. <https://doi.org/10.1086/595944>
- German Turks still rooted in the east: Study*. (2018, July 24). DW News. <https://www.dw.com/en/german-turks-still-rooted-in-the-east-study/a-44799929>
- Goodman, S. W. (2007). The politics and policies of immigration in Germany: A rearview look at the makings of a "country of immigration." *German Politics & Society*, 85 (25.4), 99-110. <https://doi.org/10.3167/gps.2007.250406>
- Hansen, R. (2009). The poverty of post-nationalism: Citizenship, immigration and the new Europe. *Theory and Society*, 38(1), 1-24. <https://doi.org/10.1007/s11186-008-9074-0>
- Hayes, C. J. H. (1927). Contributions of Herder to the doctrine of nationalism. *The American Historical Review*, 32(4), 719-736. <http://dx.doi.org/10.2307/1837852>
- Herder, J. G. (1903). *Outlines of a philosophy of the history of man*. (T. Churchill, Trans.). Colorado University Press. (Original work published 1784).
- Hill, J. (2017, September 26). *German election: Why so many voters in the east chose AfD*. BBC News. <https://www.bbc.com/news/world-europe-41398628>

- Holscher, M., Segger, M., & Stotz, P. (2017, September 26). Hardly any foreigners in AfD strongholds: Union particularly popular in the country. *Spiegel Politics*. <https://www.spiegel.de/politik/deutschland/bundestagswahl-2017-kaum-auslaender-in-afd-hochburgen-a-1169727.html>
- Huggler, J. (2017, September 15). Co-founder of far-right AfD says Germany should be proud of its Second World War soldiers. *The Telegraph*. <https://www.telegraph.co.uk/news/2017/09/15/co-founder-far-right-afd-says-germany-should-proud-second-world/>
- Janßen, A., & Schroedter, J. H. (2007, December 6-8). *Migration and naturalization in German federal statistics: Experiences with the German microcensus* [Paper presentation]. International Conference on Social Statistics and Ethnic Diversity: Should We Count, How Should We Count, and Why? Montréal, Quebec, Canada. https://www.researchgate.net/publication/264999214_Migration_and_Naturalization_in_German_Federal_Statistics_Experiences_with_the_German_Microcensus
- Kaas, L., & Manger, C. (2012). Ethnic discrimination in Germany's labour market: A field experiment. *German Economic Review*, 13(1): 1-20. <https://www.iza.org/publications/dp/4741/ethnic-discrimination-in-germanys-labour-market-a-field-experiment>
- Kaschel, H. (2020, February 21). *Shootings in Hanau: "We aren't safe anywhere."* DW News. <https://www.dw.com/en/shootings-in-hanau-we-arent-safe-anywhere/a-52454259>
- Kaufmann, F. W. (1942). Fichte and national socialism. *American Political Science Review*, 36(3), 460-470. <https://doi.org/10.2307/1949624>
- Kern, S. (2016, June 24). *Germany's Turkish-Muslim Integration Problem*. Gatestone Institute. <https://www.gatestoneinstitute.org/8321/germany-turks-integration>
- Kirchick, J. (2018, January 10). Germany puts Germany first. *Politico*. <https://www.politico.eu/article/germany-puts-germany-first-defense-politics-foreign-policy/>
- Kobyliński, A. (2017). Seeking a virtuous patriotism: Considerations on love for one's country. *Rocznik Teologii Katolickiej*, 16(1), 41-52. <https://doi.org/10.15290/rtk.2017.16.1.03>
- Love in Germany: 1.5 million relationships are between a German and foreigner.* (2018, September 4). The Local. <https://www.thelocal.de/20180904/number-of-german-foreign-coupl>
- Martyn, D. (1997) Borrowed fatherland: Nationalism and language purism in Fichte's Addresses to the German nation. *The Germanic Review: Literature, Culture, Theory*, 72(4), 303-315. <https://doi.org/10.1080/00168899709597352>
- Mearsheimer, J. J. (2010). Why is Europe peaceful today? *European Political Science*, 9, 387-397. <https://doi.org/10.1057/eps.2010.24>
- Menent, M. (2018). *Constitutional patriotism in Jürgen Habermas's political thought*. [Doctoral thesis, University of Sussex]. Sussex Research Online. <http://sro.sussex.ac.uk/id/eprint/79083/>
- Müller, J.-W. (2006). On the origins of constitutional patriotism. *Contemporary Political Theory* 5, 278-296. <https://doi.org/10.1057/palgrave.cpt.9300235>
- Müller, J.-W., & Scheppele, K. L (2008). Constitutional patriotism: An introduction. *International Journal of Constitutional Law*, 6(1), 67-71. <https://doi.org/10.1093/icon/mom039>
- Nottmeyer, O. (2009, October 1). *Wedding bells are ringing: increasing rates of intermarriage in Germany*. Migration Policy Institute. <https://www.migrationpolicy.org/article/wedding-bells-are-ringing-increasing-rates-intermarriage-germany>
- Nye, J. S., & Welch, D. A. (2017). *Understanding global conflict and cooperation: An introduction to theory and history* (10th ed.). Pearson.
- Over 50% of Germans believe their country needs "dominant culture" – survey. (2017, May 5). *RT International*. <https://www.rt.com/news/387302-germans-dominant-culture-poll/>
- Pokorny, S. (2017). *What defines us. What unites us: Integration and the voting behavior of Germans with and without a migrant background and foreigners living in Germany*. Konrad-Adenauer-Stiftung e.V. https://www.kas.de/documents/252038/253252/7_dokument_dok_pdf_47457_2.pdf/342fd9fa-2f33-8501-f09c-1450f6d2f30a?version=1.0&t=1539649789920
- Ross, C. J. (2009). Perennial outsiders: The educational experience of Turkish youth in Germany. *American University International Law Review*, 24(4), 685-710. <https://digitalcommons.wcl.american.edu/cgi/viewcontent.cgi?article=1101&context=auilr>
- Sauer, M. (2018). Identifikation und politische partizipation Türkeistämmiger zugewanderter in Nordrhein-Westfalen und in Deutschland: Ergebnisse der erweiterten mehrthemenbefragung 2017 [Identification and political participation of immigrants from Turkey in North Rhine-Westphalia

and in Germany: Results of the extended multi-topic survey 2017]. Stiftung Zentrum für Türkeistudien und Integrationsforschung. <https://cdn.website-editor.net/09fe2713f5da44ff99ead273b339f17d/files/uploaded/2017.pdf>

Schmidt, R. J. (1956). Cultural nationalism in Herder. *Journal of the History of Ideas*, 17(3), 407-417. <https://doi.org/10.2307/2707552>

September 24, 2017 Bundestag election final results - Federal Republic of Germany totals [Data set]. (2017). Election Resources on the Internet. <http://www.electionresources.org/de/bundestag.php?election=2017&land=DE>

Staudenmeier, R. (2017, September 25). "Forgotten" Duisburg voters turn to Germany's far-right AfD. DW News. <https://p.dw.com/p/2kghQ>

Stelzenmüller, C. (2019). *Germany: Baffled hegemon*. The Brookings Institution. https://www.brookings.edu/wp-content/uploads/2019/02/FP_20190226_germany_stelzenmuller.pdf

Taylor, C., Gutmann, A., Appiah, K. A., Habermas, J., Rockefeller, S. C., Walzer, M., & Wolf, S. (1994). *Multiculturalism: Examining the politics of recognition* (A. Gutmann, Ed., 2nd Ed.). Princeton University Press.

Umfragen zur AfD [AfD surveys]. (2017). Tagesschau. <http://wahl.tagesschau.de/wahlen/2017-09-24-BT-DE/umfrage-afd.shtml>

Umfragen zur Flüchtlingspolitik [Refugee policy surveys]. (2017). Tagesschau. <http://wahl.tagesschau.de/wahlen/2017-09-24-BT-DE/umfrage-fluechtlingspolitik.shtml>

Will Germany's anti-euro AfD party implode? (2013, September 25; E. Ornstein, Trans.). *Spiegel International*. <https://www.spiegel.de/international/germany/german-euroskeptic-party-afd-could-unravel-after-election-a-924498.html>



Christmas Criminals

A Routine Activity Approach to Crime on U.S. Holidays

Wyatt Lam

Based on Cohen and Felson's 1979 routine activity theory, this study examines crime rates on prominent U.S. holidays. Little research exists that analyzes crime patterns on holidays, despite the mass disruption of routine activities. Using data from the National Incident-Based Reporting System (NIBRS), this study compares the average daily number of offenses per state on 15 holidays with the average daily number of offenses per state on non-holiday weekdays for the 2016 calendar year. The crimes under investigation are economically motivated crimes: burglary, larceny, motor vehicle theft, and robbery. Holidays are divided into groups for analysis based on where activities are generally pursued by the public on each day: private space, public space, and mixed space. The results reveal a distinct pattern in crime rates on holidays: economically motivated crimes tend to occur less frequently on holidays, regardless of space classification. Despite an increased potential for contact between suitable targets and motivated offenders on mixed and public space holidays, an increase in guardianship may be a primary cause of lower economic crime rates on holidays. It is also possible that the increase in residence-based activities on private and mixed space holidays reduces the number of suitable targets.

Despite limited budgets, law enforcement officials are expected to prevent crime, apprehend criminals, maintain public order and safety, investigate criminal activity, and provide services, such as education to the public. One way that police have been able to more effectively utilize their resources is by carrying out predictive policing. Predictive policing is the practice of analyzing crime data to predict and prevent future crimes (Perry et al. 2013). Crime analysts use crime reporting databases such as the National Crime Victimization Survey (NCVS) and the National Incident-Based Reporting System (NIBRS) to illustrate crime tendencies. Often, local police departments utilize these resources to generate crime patterns for their region, including spatial hotspots mapping and temporal trends: hourly, weekly, monthly, seasonal, and annual crime rates.

One promising perspective from criminological theory is routine activity theory. Initially developed by Cohen and Felson (1979), the theory has received broad support in the field of criminology and may be helpful in improving predictive policing. The theory states that crime occurs when three key elements converge spatially and temporally: a motivated offender, a suitable target, and the absence of capable guardians. Cohen and Felson (1979) argue that deviations from routine activities change the probability of the three elements co-occurring.

Holidays, given their potential widespread disruption of daily activities, are a promising cultural arena in which to study Cohen and Felson's theory (1979). For example, holidays may cause many workplaces to close for the day, which affects the daily activities of both their employees and customers/clients. Holidays are especially important because they represent a macro-causal factor for routine activity changes. However, routine activity theory research has tended to focus on small-scale interactions and has left out population-scale ones. While there has been some research on holiday crime patterns, the findings are scarce and need further development. To improve predictive policing practices, a thorough understanding of how holidays affect crime rates is necessary.

Literature Review

Routine Activity Theory

Cohen and Felson (1979) developed routine activity theory as an approach to crime analysis focused on the circumstances of an offense as opposed to offender characteristics. The theory focuses primarily on explaining victimization and treats criminals as rational actors who weigh the potential risks and benefits of committing crimes. According to

routine activity theory, crime occurs when three key elements converge spatially and temporally: a motivated offender, a suitable target, and the absence of capable guardians (Cohen and Felson 1979). Motivated offenders include anyone who is capable and willing to commit crime. Suitable targets include people and objects, such as cars, homes, stores, etc. Capable guardians include formal guardians, such as police or security personnel, and informal guardians, such as bystanders, friends, bartenders, etc. Cohen and Felson (1979) argued that the structure of daily activities influences opportunities for victimization. Additionally, they suggested that deviations from routine activities change the likelihood of a motivated offender, a suitable target, and the absence of capable guardians coming together in time and space.

Lynch (1987) provided early evidence in support of the theory finding that victims' workplace activities affect their risk of workplace victimization to a much greater extent than sociodemographic factors. Lynch (1987) found that activities such as handling money and coming into contact with numerous others on a given workday increase the likelihood of workplace victimization. Groff (2007) performed a rigorous multi-model test of routine activity theory in her study of street robbery. She found that increased time spent away from home increased the probability of victimization, providing strong support for the theory.

Since its inception, routine activity theory has been used to test a myriad of criminological phenomena including victimization of teachers (O and Wilcox 2017), stalking (Mustaine and Tewksbury 1999; Reyns et al. 2016; Wood and Stichman 2018), sexual assault (Franklin et al. 2012; Franklin and Menaker 2018), and motor vehicle theft (Badiora 2017) to name a few. This body of research, which examines violent and property crime alike, provides mounting evidence that the types of activities pursued on a regular basis influence individuals' likelihood of victimization. In recent years, research has also found that individuals' activities can predict the likelihood of cyber-crime victimization, including consumer fraud (Pratt, Holtfreter, and Reisig 2010), cyberbullying (Navarro and Jasinski 2011), and identity theft (Williams 2016; Reyns and Henson 2016).

Holiday Crime Literature

Studies utilizing routine activity theory tend to focus on identifying activities that increase the likelihood of victimization. This study applies a macro-level analysis to the disruption of daily patterned behavior. To identify the general disruption of routine activities, this study examines

events that tend to affect activities on a widespread basis: holidays. Few studies have examined the effect of holidays on crime patterns; however, holidays can have a dramatic impact on daily activities. The mass interruption of activities on holidays such as Christmas Day or New Year's Eve presents an important opportunity to examine how crime rates are affected by the disruption of routine activities.

Early research by Lester (1979) examined homicides in the United States in 1973 and found that their incidence tended to increase on major holidays and weekends, coinciding with increased contact with family, friends, and acquaintances. More recently, de Melo, Pereira, Andresen, and Matias (2018) studied the occurrence of homicide, rape, robbery, burglary, and theft on prominent holidays in Campinas, Brazil, between 2010 and 2013. They found homicides significantly increased during the day, burglaries significantly increased at night, and all other crimes significantly decreased during these holidays. The researchers explained these results in terms of guardianship; people tend to gather in groups on holidays, deterring crime, but empty houses are typically easily detected on holiday nights, leading to an increase in burglaries. They also suggested that alcohol consumption may contribute to the increase in these crimes.

Cohn and Rotton (2003) examined crime on holidays during the years 1985 and 1988 in Minneapolis, Minnesota. They analyzed differences in the following offenses between major (federal) and minor holidays: assault, disorderly conduct, domestic violence, burglary, theft, and robbery. They found that thefts, burglaries, and robberies tended to occur less frequently on major holidays while cases of assault, disorderly conduct, and domestic violence tended to increase on major holidays. In addition, minor holidays had no significant effects on crime frequency. The results of Cohn and Rotton's study (2003) suggest that minor holidays may not dramatically influence routine activities. In addition, the decrease in economically motivated crimes is consistent with the findings of de Melo et al. (2018) and may reflect heightened guardianship on holidays.

Hypothesis, Data, and Methods

Offense and Holiday Choices

This study examines economically motivated crimes, which are the crimes most often committed as rational decisions, rather than impulsive actions. Specifically, this includes burglary, larceny, motor vehicle theft, and robbery. Each of these crimes involves the intentional theft of another's property. This study utilizes the official Federal Bureau of Investigation (FBI) definitions for these crimes (Federal

Bureau of Investigation 2010). Burglary is "the unlawful entry of a structure to commit a felony or a theft." Larceny is "the unlawful taking, carrying, leading, or riding away of property from the possession or constructive possession of another." Motor vehicle theft is "the theft or attempted theft of a motor vehicle." Robbery is "the taking or attempting to take anything of value from the care, custody, or control of a person or persons by force or threat of force or violence and/or by putting the victim in fear." By examining only economically motivated crimes, this study aims to capture the crimes for which routine activity theory is most applicable.

Fifteen holidays that elicit widespread business closings for the day and/or widespread celebration were chosen for analysis. These holidays are New Year's Day, Super Bowl Sunday, Martin Luther King Jr. Day, President's Day, St. Patrick's Day, Easter Sunday, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving, Black Friday, Christmas Eve, Christmas Day, and New Year's Eve. Although they are not recognized as holidays by the federal government, Black Friday and Super Bowl Sunday are celebrated as unofficial holidays in popular culture.

Holiday Operationalization

Unlike Cohn and Rotton (2003), who organized their analysis of holidays around whether the days were major or minor holidays, this study organizes holidays based on where activities are generally pursued by the public on each day. I organize holidays into three categories: private space, public space, and mixed space. I chose to categorize holidays by space typically occupied because where people gather directly influences the number of motivated offenders, suitable targets, and guardians. Each category reflects space occupation tendencies as compared to the typical workday.

The private space category consists of holidays on which people tend to stay inside their homes more often than a typical workday. The holidays in the private space category include Martin Luther King Jr. Day, President's Day, Memorial Day, Labor Day, Veteran's Day, and Christmas Day. For most of the holidays in this category, work schedules are interrupted but few are celebrating. There may be variation in activities on Memorial Day, on which many people stay indoors as compared to a typical workday, but others may participate in outdoor activities such as going to parks, having picnics, going to lunch, etc. Christmas Day differs from other holidays in the private space category because most people do celebrate throughout the day; however, they tend to do so from the comfort of their own homes or the homes of family.

The public space category consists of holidays on which people typically celebrate in places outside of where their routine activities typically take them. This includes bars, clubs, restaurants, and parties. Holidays in the public space category include St. Patrick's Day, Independence Day, and New Year's Eve. Independence Day and New Year's Eve are federal holidays, so schools, businesses, and organizations are closed, but people still tend to spend large parts of these days in public spaces. Because Independence Day is in the summer, many people spend all day outside, especially at parks, barbecues and parties. On the night of New Year's Eve, many people attend celebrations, which I predict draw a substantial portion of Americans into public spaces for considerable lengths of time. Because St. Patrick's Day fell on a weekday in 2016, I infer that activities on this day followed routines until the late afternoon when many chose to celebrate, often at bars.

The mixed space category consists of days in which many people may be out in public spaces for large parts of the day, but others may spend the majority of the day at home or the home of family. These are days on which most people do not have typical responsibilities like work or school. The holidays in the mixed space category are New Year's Day, Super Bowl Sunday, Easter Sunday, Thanksgiving, Black Friday, and Christmas Eve. On New Year's Day, some people choose to celebrate away from home, some are recovering from the previous night's celebration, and some spend the day at home getting ready for work or school to resume. On Super Bowl Sunday, many people stay home to watch the game, while others watch the game at bars and celebrate afterwards. Easter Sunday traditions may include spending time at home with family, attending church, and participating in Easter-related activities such as egg hunts in outdoor spaces. Similarly, Thanksgiving is often a day spent at home with family or traveling. Many people spend Thanksgiving night shopping, as many stores offer special deals at or before midnight. Black Friday is a day of shopping for many people, but the rise in popularity of online retailers has the potential to keep many shoppers at home. On Christmas Eve, people celebrate at parties, and many go to church, but it is also common for people to spend large portions of the day at home, typically with family.

Hypothesis

I analyze separate hypotheses for burglary, larceny, motor vehicle theft, and robbery to ascertain whether there is consistency in holiday crime rates across economically motivated crimes. Based on the three holiday categories, and the premise that changes in routine activities have an effect

on how much crime tends to occur, I predict the following for economically motivated crimes on holidays:

H1: Compared to the daily average, the number of reported burglaries will be lower on private space holidays and higher on public space holidays.

On private space days, I presume that the number of suitable targets for burglaries (empty homes) decreases, while the amount of guardianship increases because most people are gathered at home on these days. I predict that fewer suitable targets and increased guardianship results in fewer burglaries on private space holidays.

On public space days, I presume that the number of suitable targets increases and the amount of guardianship decreases because more people gather in public on these days than the average day. I presume that a rational offender would anticipate people leaving homes unattended, increasing the number of motivated offenders. I predict that the increase in suitable targets, decrease in guardianship, and increase in motivated offenders results in more burglaries on public space holidays.

H2: Compared to the daily average, the number of reported larcenies will be lower on private space holidays and higher on public space holidays.

H3: Compared to the daily average, the number of reported motor vehicle thefts will be lower on private space holidays and higher on public space holidays.

H4: Compared to the daily average, the number of reported robberies will be lower on private space holidays and higher on public space holidays.

On private space days, I presume that the number of suitable targets for larcenies, motor vehicle thefts, and robberies decreases because all three crimes rely on contact between motivated offenders and targets. I presume that this contact occurs less frequently on private space holidays because many people tend to stay inside residences for most of the day. I presume that the amount of guardianship increases because, compared to the daily average, more people are clustered together at home on these days. I predict that fewer suitable targets and increased guardianship results in fewer larcenies, motor vehicle thefts, and robberies on private space holidays. On public space days, I presume that the number of suitable targets increases because many people are congregating in public places where motivated offenders are likely to be found.

This increases the potential for contact between motivated offenders and suitable targets. I presume that an increased consumption of alcohol creates more suitable targets, more motivated offenders, and less-capable guardians. Intoxication lowers awareness, which may make individuals more suitable targets and less-capable guardians, especially if rational offenders anticipate such an opportunity. Additionally, intoxication lowers inhibitions and reduces judgment, which may increase the number of motivated offenders willing to commit economically motivated crimes. I predict that the increase in suitable targets, increase in motivated offenders, and decrease in capable guardians results in more larcenies, motor vehicle thefts, and robberies on public space holidays.

H5: Compared to the daily average, the number of reported burglaries, larcenies, motor vehicle thefts, and robberies will not be notably different on mixed space holidays.

On mixed space holidays, I presume that opportunities for crime both increase and decrease to a similar degree as a result of public and private space activities, respectively. As such, I predict no appreciable change in reported offenses.

National Incident-Based Reporting System (NIBRS)

NIBRS is an incident-based crime reporting system, which houses data on all instances of crime that law enforcement report across the United States. Included in this data set is criminal and victim information, such as demographics, and crime information, such as when, where, and how the crime occurred. 57 different crimes are captured by NIBRS and broken down into three categories: crimes against persons (of which individuals are victims), crimes against property (of which money or property is the object), and crimes against society (which are actions prohibited by society, such as drug use). Each of the 57 offenses are classified in the NIBRS database according to the official FBI definitions (Federal Bureau of Investigation 2010).

NIBRS is a part of the Uniform Crime Reporting (UCR) program administered by the FBI. City, county, and state officials from 48 states voluntarily collect and report incident-based crime logs on a monthly basis to state or federal UCR programs. Given that the organization of reports from different agencies and states may differ, UCR programs must merge, restructure, and subset the data into yearly, formally structured NIBRS data sets. The data are made public on the National Archive of Criminal Justice Data (NACJD) website, which is a part of the Inter-University Consortium for Political and Social Research at the University of Michigan.

Procedure and Data Analysis

2016 NIBRS data were downloaded from the NACJD website into SPSS Statistics software. All incidents of crime outside of burglary, larceny, motor vehicle theft, and robbery were removed from the data set. Burglary includes breaking and entering. Larceny includes pocket-picking, purse-snatching, shoplifting, theft from a building, theft from a coin-operated machine or device, theft from a motor vehicle, theft of motor vehicle parts/accessories, and all other larceny. New variables were created to indicate holidays and holiday space groupings. While working with multiple years of data would be ideal, the computer files for any single year are massive and tax the computing power available to the average person. Thus, 2016 data were aggregated by state and incident date with simple counts of offenses. Weekends were omitted from the data set in order to best compare holiday crime rates with crime rates of the typical Monday through Friday “work-week.” Means comparisons were produced to compare the state daily average number of crimes on holidays versus non-holiday weekdays. The comparisons were run on the total of all four economically motivated crimes, and then broken out for each specific crime category. There are five sets of analyses for examining individual holidays and five sets for examining holiday categories.

Statistical Significance

Statistical significance is not particularly relevant in this study because the NIBRS data set was not acquired through a probability sample. The data can be best described as a convenience sample, given that many police departments choose not to report or are unable to report crime incidents to the UCR. As a result, the data set contains only crimes that are available to the FBI. Additionally, the data are not a sample of available crimes but rather the entirety of those crimes. Therefore, significance has been excluded from the results.

First of the Month

There is an overrepresentation of crime on the first of each month in the NIBRS data set, meaning there are substantially more economically motivated crimes recorded on the first of the month than any other day. Unfortunately, the cause of this is unknown, and I highly suspect it to be a recording artifact as opposed to a real criminological phenomenon. However, because I do not know the cause for certain, I have chosen to keep these days in the data set. Overall, the daily averages are not noticeably affected, but New Years Day has an unusually high number of reported offenses.

Results

All Four Economically Motivated Crimes

Figure 1 illustrates the results of comparing the state daily average number of economically motivated crimes in each holiday category with the state daily average number of economically motivated crimes on non-holiday weekdays. On holidays in all three categories, fewer economically motivated crimes occurred on average per state than the 2016 daily weekday average of 181.39. This finding is inconsistent with H5, in which I predicted that the number of reported burglaries, larcenies, motor vehicle thefts, and robberies would not be notably different on mixed space holidays compared to the daily average.

Figure 1: *State Daily Average Economically Motivated Crimes in 2016 by Holiday Category*

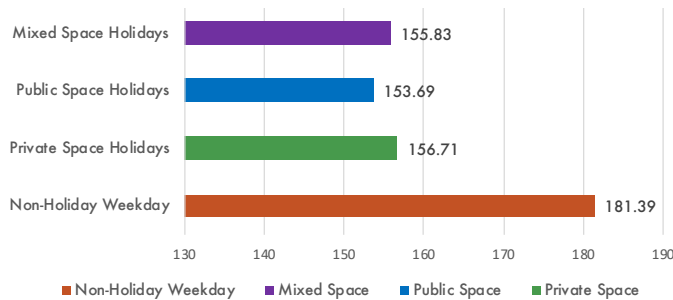
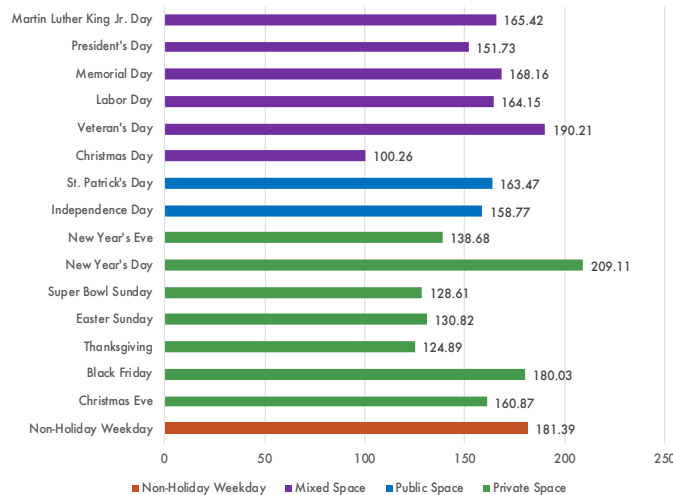


Figure 2 illustrates the results of comparing the state daily average number of economically motivated crimes on each individual holiday with the state daily average number of economically motivated crimes on non-holiday weekdays. On 2 of 15 holidays, more economically motivated crimes occurred on average per state than the 2016 daily weekday average.

Figure 2: *State Daily Average Number of Economically Motivated Crimes in 2016 by Individual Holiday*



Burglary

Figure 3 illustrates the results of comparing the state daily average number of burglaries in each holiday category with the state daily average number of burglaries on weekday non-holidays. On holidays in all three categories, fewer burglaries occurred on average per state than the 2016 daily weekday average of 36.18. This finding is inconsistent with H1, in which I predicted that the number of reported burglaries would be lower on private space holidays and higher on public space holidays compared to the daily average.

Figure 3: *State Daily Average Burglaries in 2016 by Holiday Category*

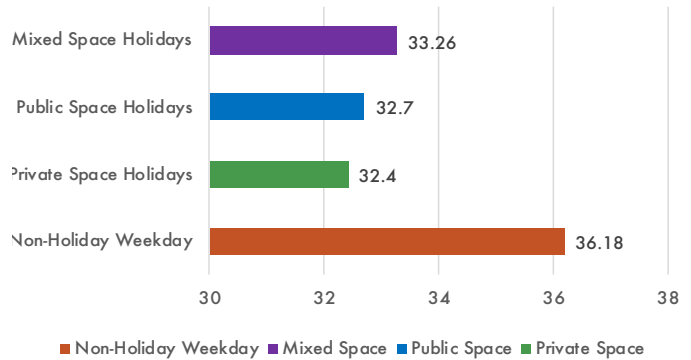
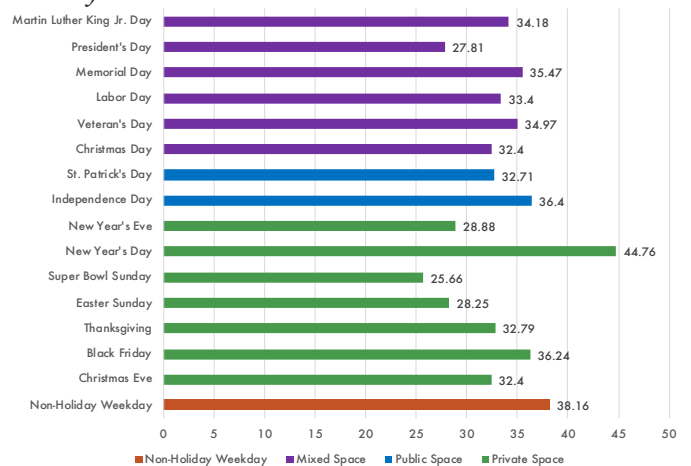


Figure 4 illustrates the results of comparing the state daily average number of burglaries on each individual holiday with the state daily average number of burglaries on non-holiday weekdays. On 3 of 15 holidays, more burglaries occurred on average per state than the 2016 daily weekday average.

Figure 4: *State Daily Average Burglaries in 2016 by Individual Holiday*



Larceny

Figure 5 illustrates the results of comparing the state daily average number of larcenies in each holiday category with the state daily average number of larcenies on weekday non-holidays. On holidays in all three categories, fewer larcenies

occurred on average per state than the 2016 daily weekday average of 128.96. This finding is inconsistent with H2, in which I predicted that the number of reported larcenies would be lower on private space holidays and higher on public space holidays compared to the daily average.

Figure 5: *State Daily Average Larcenies in 2016 by Holiday Category*

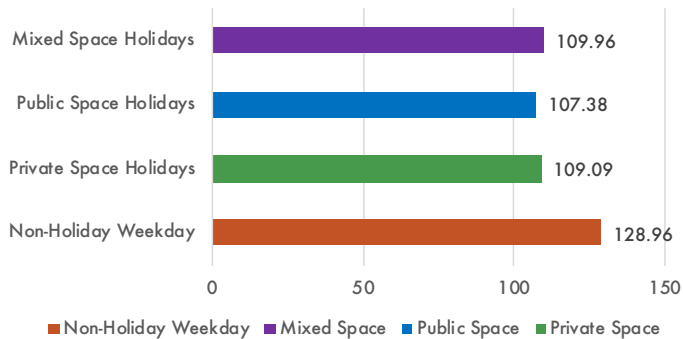
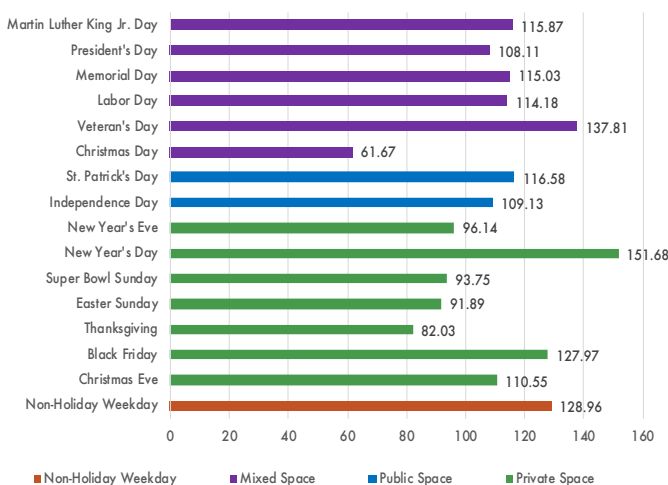


Figure 6 illustrates the results of comparing the state daily average number of larcenies on each individual holiday with the state daily average number of larcenies on non-holiday weekdays. On 2 of 15 holidays, more larcenies occurred on average per state than the 2016 daily weekday average.

Figure 6: *State Daily Average Larcenies in 2016 by Individual Holiday*



Motor Vehicle Theft

Figure 7 illustrates the results of comparing the state daily average number of motor vehicle thefts in each holiday category with the state daily average number of motor vehicle thefts on non-holiday weekdays. On holidays in all three categories, fewer motor vehicle thefts occurred on average per state than the 2016 daily weekday average of 17.22. This finding is inconsistent with H3, in which

I predicted that the number of reported motor vehicle thefts would be lower on private space holidays and higher on public space holidays compared to the daily average.

Figure 7: *State Daily Average Motor Vehicle Thefts in 2016 by Holiday Category*

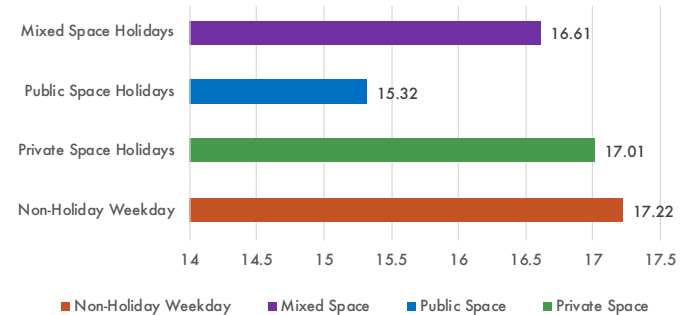
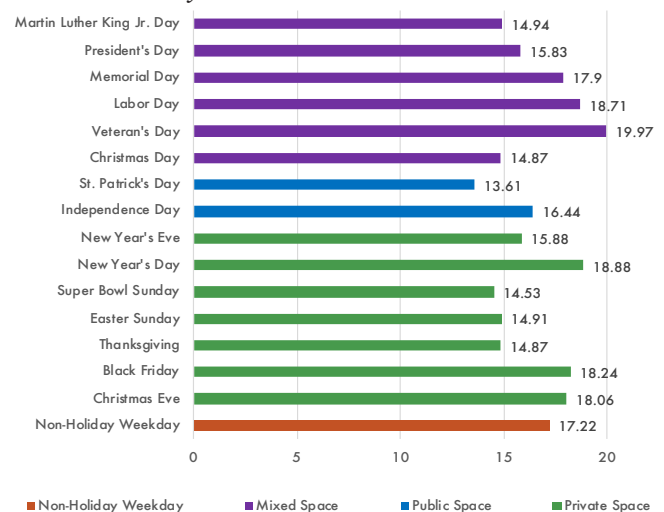


Figure 8 illustrates the results of comparing the state daily average number of motor vehicle thefts on each individual holiday with the state daily average number of motor vehicle thefts on non-holiday weekdays. On 6 of 15 holidays, more motor vehicle thefts occurred on average per state than the 2016 daily weekday average.

Figure 8: *State Daily Average Motor Vehicle Thefts in 2016 by Individual Holiday*



Robbery

Figure 9 illustrates the results of comparing the state daily average number of robberies in each holiday category with the state daily average number of robberies on non-holiday weekdays. On private space holidays and mixed space holidays, fewer robberies occurred on average per state than the 2016 daily weekday average of 7.29. On public space holidays, more robberies occurred on average per state than the 2016 daily weekday average. This finding is consistent with H4, in which I predicted that the number of reported

robberies would be lower on private space holidays and higher on public space holidays compared to the daily average.

Figure 9: *State Daily Average Robberies in 2016 by Holiday Category*

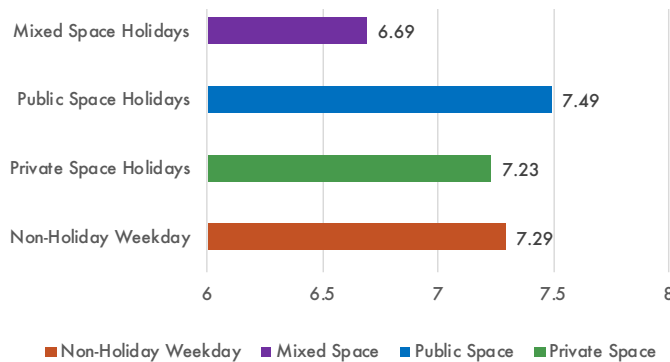
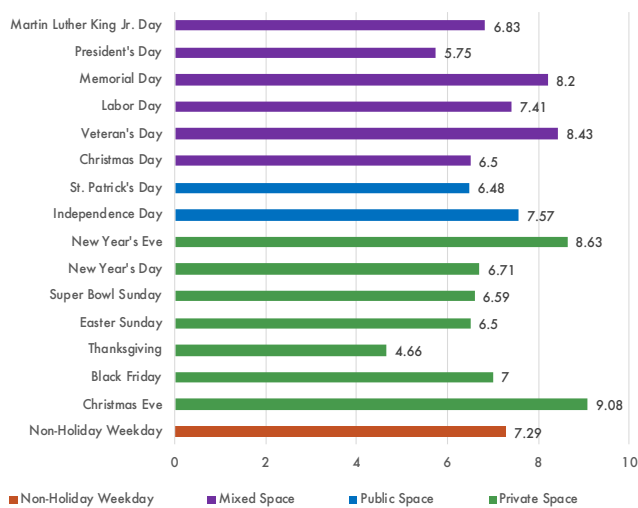


Figure 10 illustrates the results of comparing the state daily average number of robberies on each individual holiday with the state daily average number of robberies on non-holiday weekdays. On 6 of 15 holidays, more robberies occurred on average per state than the 2016 daily weekday average.

Figure 10: *State Daily Average Robberies in 2016 by Individual Holiday*



Discussion and Conclusion

This study analyzes crime rates for burglary, larceny, motor vehicle theft, and robbery on prominent U.S. holidays in 2016 from the perspective of routine activity theory. The results reveal a distinct pattern in crime rates on holidays: economically motivated crimes tend to occur less frequently on holidays, regardless of space classification.

For holiday groups, the results consistently indicate (14 out of 15 times across all five sets of holiday group analyses) that economically motivated crimes tend to occur less frequently

on holidays regardless of category. For individual holidays, the pattern is the same: the results consistently indicate (56 out of 75 times across all five sets of individual holiday analyses) that economically motivated crimes tend to occur less frequently on holidays. While robbery and motor vehicle theft show the least consistency, each of the holidays with crime rates higher than the weekday average show only minor elevations over the average.

The consistently lower rates in economically motivated crimes on holidays found in this study mirrors the findings of de Melo et al. (2018) and Cohn and Rotton (2003). Besides an increase in evening burglaries, de Melo et al. (2018) found that fewer economic crimes occurred on holidays. Likewise, Cohn and Rotton (2003) found that fewer economic crimes occurred on major holidays. In my hypotheses, I predicted that this study's results for private space holidays would match these two previous studies, but I did not predict that crime rates on public space holidays or mixed space holidays would also be lower than the weekday average. My hypotheses were based primarily upon the motivated offender and suitable target elements of routine activity theory. On public space days, I presumed that the paths of motivated offenders and suitable targets would cross more frequently due to widespread celebration in and movement through public spaces, leading to higher crime rates. However, this study's results suggest other factors may be associated with the unanticipated lower crime rates observed. One explanation is that potential offenders are preoccupied with holiday activities and celebration such that there are fewer motivated offenders to take advantage of suitable targets. Another explanation is proposed by de Melo et al. (2018) and Cohn and Rotton (2003): guardianship plays a substantial role in deterring crime on holidays.

I presume that on holidays in all three categories, people tend to gather together. On private space holidays, people are off work and children are out of school, so many people tend to gather in private residences for the day. Not only is there little contact with motivated offenders, there is also family nearby. On public space holidays, people tend to stay in groups. People are celebrating together either with family, friends, or large groups of strangers (e.g., at bars, clubs, or parties). While imbibing alcohol may impact guardianship capabilities on these days, guardians may not need to be entirely capable of "guarding" to be effective deterrents. Simply being with other people may deter potential criminals, regardless of the guardians' sobriety. Additionally, police patrol known public events, so truly "capable" guardianship is typically present as well. On mixed space holidays, people

pursue both private and public holiday activities and are subject to the same guardianship tendencies.

Study Drawbacks

There are four primary drawbacks to this research that should be discussed. First, only 48 states contribute their crime data to NIBRS, and many states have only a few precincts reporting. Therefore, the data do not completely represent all areas of the country, nor the true average number of crimes committed per state. Next, in any given year, a locality, city, or the country as a whole may focus resources on particular types of crime. Policies at each of these administrative levels influence police activity and resource allocation. Therefore, official crime statistics like NIBRS may be a better indicator of police behavior than actual levels of crime. Third, seasonal temperatures may influence the kinds of activities individuals pursue when their routine activities are disrupted. For example, the activities in which people participate on Christmas are different than those on Independence Day. It is likely that different sets of non-routine activities result in different likelihoods of crime occurring. Lastly, this study is only based on one year's worth of data. Adding more years would increase the validity and generalizability of this study's findings.

Study Implications and Future Research

This study was a worthwhile examination of routine activity theory because it shows that the theory can be applied broadly to generalizable sets of activities to better understand where police resources are best applied. The analysis presented here suggests that maintaining police presence on holidays with large gatherings of people in public spaces is an important deterrent of crime. However, police should be wary not to over-distribute resources on holidays given that friends, family, and nearby others are effective deterrents as well.

I have theorized that, despite an increased potential for contact between suitable targets and motivated offenders on mixed and public space holidays, the increase in guardianship may be a primary cause of lower economic crime rates on holidays. It is also likely that the increase in private space activities on private and mixed space holidays also reduces the number of suitable targets. However, the consistency of lower crime rates across all holiday groups makes certainty about the underlying factors impossible. Future research should aim to identify with more confidence the causes for reduced economic crime rates on holidays. This study could be replicated with more years of NIBRS data so that breaking incidents down by state is no longer necessary. Additionally, I suggest that future studies examine the nature

of guardianship on holidays and how criminals navigate and are deterred by its presence. I would also recommend that weekend routines and crime rates be analyzed and compared to those of holidays. Both weekends and holidays are a departure from weekday "business-as-usual" routines, so one might suppose that weekend crime rates are similar to holiday crime rates. Finally, the rates of other crimes, such as homicide or rape, could be examined on holidays. The results of such an analysis could be vastly different than the one presented here, given that acquaintances are more likely offenders than strangers for those crimes.

Author's Note



Wyatt Lam ('19) graduated with a bachelor's degree in sociology and minors in criminal justice, biology, Spanish, and interdisciplinary studies. He is interested in pursuing research in criminal victimization at the graduate level. Wyatt enjoys baking cookies, relaxing at the beach, and participating in family game night. For his honors capstone project, he channeled his love for strategy games into an original board game: *World Throne*.

Dr. Joseph Spear was an invaluable guiding hand to the development of this research. Wyatt is incredibly grateful that Dr. Spear lent so much of his time and knowledge to the project. Additionally, Wyatt thanks Dr. Stephen Poulson for inspiring this research and Dr. Peggy Plass for helping navigate criminal victimization databases.

References

- Badiora, Adewmi I. 2017. "Ecological Theories and Spatial Decision Making of Motor Vehicle Theft (MVT) Offenders in Nigeria." *Journal of Applied Security Research* 12(3):374-391.
- Cohen, Lawrence E., and Marcus Felson. 1979. "Social Change and Crime Rate Trends: A Routine Activity Approach." *American Sociological Review* 44(4):588-608.
- Cohn, Ellen G., and James Rotton. 2003. "Even Criminals Take a Holiday: Instrumental and Expressive Crimes on Major and Minor Holidays." *Journal of Criminal Justice* 31(4):351-360.
- de Melo, Silas N., Débora V. S. Pereira, Martin A. Andresen, and Lindon F. Matias. 2018. "Spatial/Temporal Variations of Crime: A Routine Activity Theory Perspective." *International Journal of Offender Therapy & Comparative Criminology* 62(7):1967-1991.
- Federal Bureau of Investigation. 2010. "Crime in the United States: Offense Definitions." Retrieved February 12, 2020. (<https://ucr.fbi.gov/crime-in-the-u.s/2010/crime-in-the-u.s.-2010/offense-definitions>).
- Franklin, Cortney A., and Tasha A. Menaker. 2018. "Feminist Routine Activity Theory and Sexual Assault Victimization: Estimating Risk by Perpetrator Tactic among Sorority Women." *Victims & Offenders* 13(2):158-178.
- Franklin, Cortney A., Travis W. Franklin, Matt R. Nobles, and Glen A. Kercher. 2012. "Assessing the Effect of Routine Activity Theory and Self-Control on Property, Personal, and Sexual Assault Victimization." *Criminal Justice and Behavior* 39(10):1296-1315.
- Groff, Elizabeth R. 2007. "Simulation for Theory Testing and Experimentation: An Example using Routine Activity Theory and Street Robbery." *Journal of Quantitative Criminology* 23(2):75-103.
- Lester, D. 1979. "Temporal Variation in Suicide and Homicide." *American Journal of Epidemiology* 109(5):517-520.
- Lynch, James P. 1987. "Routine Activity and Victimization at Work." *Journal of Quantitative Criminology* 3(4):283-300.
- Mustaine, Elizabeth E., and Richard Tewksbury. 1999. "A Routine Activity Theory Explanation for Women's Stalking Victimization." *Violence Against Women* 5(1):43-62.
- Navarro, Jordana N., and Jana L. Jasinski. 2012. "Going Cyber: Using Routine Activities Theory to Predict Cyberbullying Experiences." *Sociological Spectrum* 32(1):81-94.
- O, SooHyun, and Pamela Wilcox. 2018. "Routine Activity Theory, Target Congruence, and School Context: A Multi-level Analysis of Teacher Victimization." *Victims & Offenders* 13(3):349-372.
- Perry, Walter L., Brian McInnis, Carter C. Price, Susan C. Smith, and John S. Hollywood. 2013. *Predictive Policing: The Role of Crime Forecasting in Law Enforcement Operations*. Santa Monica, CA: Rand Corporation.
- Pratt, Travis C., Kristy Holtfreter and Michael D. Reisig. 2010. "Routine Online Activity and Internet Fraud Targeting: Extending the Generality of Routine Activity Theory." *Journal of Research in Crime and Delinquency* 47(3):267-296.
- Reyns, Bradford W., and Billy Henson. 2016. "The Thief with a Thousand Faces and the Victim with None." *International Journal of Offender Therapy and Comparative Criminology* 60(10):1119-1139.
- Reyns, Bradford W., Billy Henson, Bonnie S. Fisher, Kathleen A. Fox, and Matt R. Nobles. 2016. "A Gendered Lifestyle-Routine Activity Approach to Explaining Stalking Victimization in Canada." *Journal of Interpersonal Violence* 31(9):1719-1743.
- Williams, Matthew L. 2016. "Guardians upon High: An Application of Routine Activities Theory to Online Identity Theft in Europe at the Country and Individual Level." *The British Journal of Criminology* 56(1):21-48.
- Wood, McKenzie, and Amy Stichman. 2018. "Stalking on the College Campus: The Influence of Suitable Target and Guardianship Variables on Victimization Comparing Male and Female Students." *Victims & Offenders* 13(4):487-503.

An Analysis of Technological Components in Relation to Privacy in a Smart City

Kayla Rutherford, Ben Lands,
and A. J. Stiles

A smart city is an interconnection of technological components that store, process, and wirelessly transmit information to enhance the efficiency of applications and the individuals who use those applications. Over the course of the 21st century, it is expected that an overwhelming majority of the world's population will live in urban areas and that the number of wireless devices will increase. The resulting increase in wireless data transmission means that the privacy of data will be increasingly at risk. This paper uses a holistic problem-solving approach to evaluate the security challenges posed by the technological components that make up a smart city, specifically radio frequency identification, wireless sensor networks, and Bluetooth. The holistic focus in turn permits a set of technical and ethical approaches that can combat malicious attacks and enhance data security across the networks that drive smart cities.

1. Introduction

As cities become increasingly connected through smart technologies and as current big data collection practices continue to go unchecked, information privacy has the potential to diminish. If procedures on data handling and security are not standardized early in the implementation of cyber-physical systems and Internet of Things (IoT) systems, then privacy gaps and invasive data mining will likely arise. These threats have the potential to affect the advancement of smart cities, as citizens may feel their privacy rights are unduly compromised, which in turn may undermine public support. In order to protect the right to privacy from invasive attacks on vulnerable networks and devices in emerging smart cities, solutions that address both social and technical aspects of the issue must be devised and analyzed.

Smart cities are a collection of interconnected technologies that can communicate with one another to monitor, collect, interpret, and distribute data. These entwined devices make up the IoT, a global network of wirelessly-connected devices. A smart city is constructed of a network-based foundation that contains appliances and infrastructures that in turn contain sensors, software, and electrical components. The broader purposes of smart cities vary from customer convenience to power reduction. The technological foundation of smart cities rests on three primary elements: radio frequency identification (RFID) for identification and tracking, wireless sensor networks (WSN) which are stand-alone networks for measuring data, and Bluetooth for connecting separate devices.

To understand and develop a solution to a problem, one must understand the complexity of its dimensions. This is done through holistic problem solving, an approach for examining elements, relationships, and the system dynamics of a complex problem. According to the Penn State College of Agricultural Sciences (n.d.), a complex problem, also known as a “wicked” problem, cannot be solved by a single solution. The problem with privacy in a smart city is complicated because of the value placed on privacy, as well as the technological underpinnings within such cities. Multiple stakeholders with different levels of interest, connection, and power shape the problem. Data security may be presented in many alternative methods, so a single solution will be insufficient to address the various interests of stakeholders.

The first step of a holistic approach, and the focus of this paper, is to determine the problem through framing. Framing is describing and interpreting the problem by choosing which aspects to prioritize and which to leave in the background.

Framing lessens the complexity of the problem by narrowing the scope to a specific area of interest, and thus allows for a more scientific problem statement (Bartee, 1973). Potential solutions must then be analyzed holistically to determine their effectiveness and to understand how they will impact the various stakeholders.

The larger problem is how to ensure users’ rights to privacy in a growing technological world. Using a holistic problem-solving approach, this paper identifies technical solutions that employ existing and emerging RFID, WSN, and Bluetooth technologies, along with policy solutions that begin to address the social and ethical issues involved in building smart cities.

2. Framing the Issue

2.1 Smart Cities and Privacy

Smart cities are designed to improve the lives of citizens by creating an environment that continuously adapts and monitors data collection (Cui et al., 2018; Eckhoff & Wagner, 2018; Sookhak et al., 2019). Amsterdam implemented its smart city plan with the intent of reducing CO₂ emissions among infrastructure and people through smart building management systems, ship-to-grid power connections, and climate streets that feature LED lights, waste reduction systems, and smart meters (Štáhlavský, 2011; Alaverdyan, 2018). Vienna proudly advertises its commitment as a smart city to “digital data (mined using state-of-the-art technologies and analytical methods) to support decision-making and for real-time management of urban systems” (Stadt Wien, n.d.). China alone has more than 200 smart city plans in progress (Cui et al., 2018).

In these cities, multiple data sources from different data holders, devices, and applications can be combined to achieve city efficiency. However, doing so increases the risk of information being intercepted, which can have severe consequences (Eckhoff & Wagner, 2018). Applications which can collect highly sensitive data like citizen location or private documents may be used by system hackers (Sookhak et al., 2019). For instance, the Dyn company was hit with denial-of-service attacks in 2016 that saturated its infrastructure and disrupted host services (Khatoun & Zeadally, 2017). Additionally, a 2015 study demonstrated that a 2014 Jeep Cherokee could be hacked and controlled wirelessly by exploiting the vehicle’s Uconnect system (Miller & Valasek, 2015). This shows that the harm of infringing on someone’s privacy—for example, by locating an individual within a particular vehicle—can be immediate and physical.

2.2 Privacy and Security

Privacy is jeopardized by malicious attacks. There are two primary types of attacks: physical and system. Physical attacks take advantage of a device in a physical manner and are not associated with network intervention. Examples of physical attacks include disabling devices, modifying devices, and cloning tags (Khattab et al., 2017). System attacks use malicious software to acquire information (Attacks, 2015). There are several common types of system attacks:

- Spoofing - impersonating another individual or computer system
- Insertion - sending new messages from a host
- Replay - repeating or delaying data
- Relay - intercepting/manipulating messages between two parties
- Denial-of-Service (DoS) - disrupting services of a network-connected host
- Skimming - capturing information from a cardholder

3. Smart City Technologies

3.1 RFIDs, WSNs, and Bluetooth

While privacy issues are raised by data collection practices used by smart cities and the companies they support, problems may also occur through potential security breaches. Smart cities track the identity and movement of objects through RFID tags, which combine a microchip and an antenna to store, process, and then relay or actively send data (Dominikus & Kraxberger, 2011; Juels et al., 2003). Data in RFID tags is processed and sent through a vulnerable wireless network that connects each tag to its reader (Singh, 2013). The reader sends an electromagnetic wave that drives the internal circuit of the tag to send data to the user if the signal is strong enough (Singh, 2013).

Tracking and identifying objects within a smart city is necessary to provide inventory accuracy, advanced security, and efficiency for everyday usage. For instance, RFID tags are used for monitoring and analyzing locations, such as a greenhouse environment, or information stored on health devices (Subramanian et al., 2005). RFID tags can also be used to gain access to a compound or facility because the reader is able to locate the corresponding tag to gain access. The tags function in the same manner in cases that require bus entry, card access, or personnel tracking. RFID tags are also capable of detecting small concentrations of explosives and other dangerous chemicals (Subramanian et al., 2005).

Smart cities may also rely on WSNs, spatially diverse collections of sensors that monitor and gather data through con-

necting networks to support a range of operations (Conti, 2016). These operations include surveillance, rescue support, fire prevention, and air pollution monitoring (Conti, 2016). WSNs have a vast range of sensor nodes and data storage receivers that can monitor physical and environmental conditions.

Additionally, smart cities may use Bluetooth technology to transfer data between devices. Bluetooth is based on a primary/replica relationship between devices. This means that one device has unidirectional control over the other. Using this relationship, Bluetooth can create ad hoc short-range networks whose wireless traffic can be observed by malicious users within a densely populated area. Securing this wireless communication can increase the privacy individuals have when communicating on these channels.

3.2 Privacy Implications

RFID tags are inexpensive, and connecting them to the IoT is relatively easy; however, security protocols and frameworks must be analyzed to secure the data transmission within a network. Due to the use of these tags in a connected city, data must be secured properly to prevent hacking. RFID tags store information as well as track and monitor objects or people. This can result in a violation of one's privacy if this information is obtained. However, due to the constraints of RFID tags, such as limitations in memory size, energy, and response time, only specific security protocols can be implemented (Dominikus & Kraxberger, 2011). RFID tag memory can be increased, but it would be costly. Currently, RFID tags can hold an average of 64 kB of data depending on the type of tag (Dominikus & Kraxberger, 2011). According to Dominikus and Kraxberger (2011), these limitations of memory "could be a problem for the proposed security layer protocols" (p. 2647).

Security protocols can be different for the different types of RFID tags available: active, semi-active, and passive. Active and semi-active tags are powered by a battery; however, active tags automatically send information while semi-active remain dormant until receiving a reader signal (Dominikus & Kraxberger, 2011). In contrast, passive tags do not have a power source and require energy from the reader to send information (Dominikus & Kraxberger, 2011). Each of these tags has different byte sizes and ranges to account for when looking at its security framework (Singh, 2013). Because passive tags hold less memory and are cheaper to produce, they are more susceptible to attacks compared to active and semi-active tags (Singh, 2013).

WSNs provide high accessibility to data flows, but the “open” nature of the channel makes them prone to hacking (Khan & Mauri, 2014). WSNs are multivariate, meaning they are immune to computer attacks, which increases their security. However, adding mobility to any technology increases its vulnerability to security threats. Data is sent over the network with a larger range, increasing the time it takes for data to be received.

With any technical device, there are constraints on its security implementation. That is to say, all security devices have resource requirements. For WSNs, there are limitations such as memory and power. The memory of a WSN can only hold 178 bytes for code storage in a TelosB with a 10K RAM, 48K program memory, and 1024K flash storage, thus providing limited storage for implementing security protocols (Conti, 2016). Additionally, encryption, decryption, and the transmission and storage of security data all consume power. This energy consumption limits the life span of the node (Khan & Mauri, 2014). Multi-hop routing, network congestion, and node processing can lead to greater latency in the network (Conti, 2016). High latency makes it difficult to achieve synchronization among sensor nodes.

Bluetooth Low Energy (BLE) can be a cost-, time- and energy-efficient way of securely pairing mobile devices within a smart city where they are able to join or leave a network dynamically (Garcia, 2018). The security of each device is essential to the security of the entire network. If the devices of a network are not endowed with the same level of security, this creates a backdoor which can allow malicious activity to enter the network. Malicious attacks can cause technologies to be susceptible to detailed scans exposing informational parameters, service profiles, or even personal data (Haase & Handy, 2004).

4. RFID Technical Solutions

If smart cities rely on RFID technologies, as is expected, security measures must be analyzed to ensure that data being sent over a wireless network is secure. Sensitive data is often found in devices that track information on an object, provide access to facilities, and transmit across the network. Security solutions have been devised at both the network and physical levels.

4.1 RFID Authentication and Eavesdropping

At the network level, RFIDs need to be authenticated properly to prevent hackers from eavesdropping on data transmission. One suggestion has been to make “Smart RFID” tags that generate their own random pseudo IDs so

that a passive eavesdropper cannot encrypt the signal being sent by the reader (Juels et al., 2003; Sobri & Geetha, 2012). In this approach, A-TRAP protocols exchange three values generated pseudo-randomly between the tag and server (Le et al., 2007). The server checks to ensure that a designated value is in the database before accepting the tag as authentic. A-TRAP protocols offer “secure authentication, forward-anonymity, availability, and key-indistinguishability,” but cannot withstand sustained attacks or instances when the tag is lost (Le et al., 2007, p. 13). Later proposed protocols generated four and five pseudo-random values to anonymize the communication between the server and the tag and to prevent replay attacks (Le et al., 2007). Despite the growing sophistication of these key mechanisms, as Avoine et al. (2011) pointed out a decade ago, they remain vulnerable to compromise in open communities with more open networks.

4.2 RFID Denial-of-Service Attacks

Connecting tags to the IoT system in a smart city makes them prone to attacks in an open network. One possibility is to use IPv6 to defend RFID tags against DoS attacks (Dominikus & Kraxberger, 2011). IPv6 is the most recent version of the Internet Protocol, and it uses 128-bit addresses to identify and locate devices on the network and route traffic across the Internet (Dominikus & Kraxberger, 2011). According to Dominikus and Kraxberger (2011), a reader could track the communication with a mobile IPv6-enabled tag while also blocking attacks from suspicious nodes. Timeout values, which end one connection and accept new connection attempts, can also be randomized to defend against hackers.

4.3 Physical Solutions to RFID Attacks

The ability to “kill” RFID tags when a good is purchased can be useful because dead RFID tags cannot collect consumer data (Juels et al., 2003). Similarly, the ability to put RFID tags to sleep allows users to turn tags on and off when desired (Sitlia et al., 2009). A more secure method of defending against physical attacks is through blocker tags. Blocker tags are RFID tags that can block readers from reading the identification of tags that exist in the blocker tag’s range (Juels et al., 2003; Sitlia et al., 2009).

5. WSN Technical Solutions

Wireless sensor networks continuously monitor an environment to gather and organize sensitive information regarding city infrastructure. If this data were intercepted or if the technologies were hacked, one could obtain control over a spatial environment. Solutions have been devised to secure these technologies and their data.

5.1 WSN Authentication and Confidentiality

Public-key cryptosystems are an effective method for securing WSN authentication and confidentiality. Some of the major techniques used in public-key cryptosystems are the Rivest, Shamir, and Adleman scheme (RSA), Elliptic Curve Cryptography (ECC), and Multivariate Quadratic Quasigroups (MQQ) (Gligoroski et al., 2008). Each of these techniques provides different efficiency, security, and memory usage, shown in Table 1. The design of ECC is tough to develop, but its complexity makes the system difficult to crack (Quirino et al., 2012).

Table 1: *Public-Key Cryptosystem Comparisons*

	RSA	ECC	MQQ
Current Implementations and Uses	Widely used for transactions on the Internet Can be used to encrypt and create digital signatures	Primarily developed for solving discrete logarithm problems on elliptic curves	Has a system of multivariate quadratic polynomials over a finite field as a public key
Processing Characteristics	Slower processing Enciphering consumes more time than deciphering	Equivalent time of encryption and decryption Energy efficient	Fastest processing time Enciphering consumes more time than deciphering
Memory Characteristics	More memory required compared to ECC and MQQ	Consumes less memory and processing resources	Economical in memory consumption

Note. Adapted from “Asymmetric Encryption in Wireless Sensor Networks” by G. Quirino, A. Ribeiro, and E. Moreno, 2012, (<https://doi.org/10.5772/48464>).

5.2 ECCE Protocol

One experimental solution for WSN security concerns proposed by Conti et al. (2007) is an Enhanced Cooperative Channel Establishment (ECCE). The purpose of this protocol is to allow a secure wireless channel between two sensors that do not share any pre-deployed key (Conti et al., 2007). According to Conti et al. (2007), “in comparison with other protocols, ECCE performs effectively in “channel existence and channel resilience” when faced with an attacker (p. 61).

5.3 SPINS

A third solution is the use of SPINS, a secure communication protocol proposed by Perrig et al. (2002) that prevents

eavesdropping and active attacks in wireless sensor networks. There are “two secure building blocks” associated with the SPINS protocol: SNEP and μ Tesla (Perrig et al., 2002, p. 521).

Secure Network Encryption Protocol (SNEP) uses a two-party authentication protocol that provides confidentiality between the two corresponding parties (Perrig et al., 2002). A common protocol used for data authentication is the Message Authentication Code (MAC), which sends a message and a signature (Ullah et al., 2009). When the message has been obtained, the receiver performs a computation on the message and compares the generated message’s MAC value to the sent MAC value to determine if the message is from a legitimate user (Ullah et al., 2009). This process makes it feasible to use the SNEP protocol for the network system. SNEP “has low communication overhead” and “only adds 8 bytes per message” (Perrig et al., 2002, p. 524). Therefore, it wouldn’t take up too many resources to use this protocol in a wireless sensor network.

μ Tesla, an experimental, “micro’ version of the Timed Efficient Streaming Loss-tolerant Authentication protocol (TESLA), [provides] authenticated screening broadcast” (Ullah et al., 2009, p. 333). μ Tesla uses asymmetry through a delayed disclosure of symmetric keys, which results in an effective broadcast authentication scheme (Ullah et al., 2009). Asymmetric cryptographic mechanisms by themselves are resource-intensive and require a significant amount of computation (Perrig et al., 2002). By using μ Tesla, this issue can be efficiently resolved.

6. Bluetooth Technical Solutions

There are two key Bluetooth protocols: traditional Bluetooth and Bluetooth Low Energy (BLE). Bluetooth resides within the IEEE 802.15 protocol family dedicated for personal area networks (i.e., the networks for connecting an individual person’s devices). If Bluetooth is to be implemented within smart cities on a wide scale, traditional Bluetooth will not suffice. Traditional Bluetooth design requires one watt of power consumption and operates at a data transmission rate of 25 Mbps while BLE is ~2 Mbps (Bulic et al., 2019). Unfortunately, a reduced capacity for security follows suit with this reduced data transmission rate and lowered power consumption, similar to most wireless device communications.

During the pairing process, devices exchange their specific security and functionality capabilities. If the device-relative

capabilities are supported, the primary device will generate a temporary key, which will be used to produce the short-term key. The short-term key is then used to encrypt the data transferred between devices.

By contrast, the bonding process does persist across connections between devices to bypass the pairing phase on subsequent connections. In order to bond two devices to each other, they must engage in an initial pairing process. Bonding uses a long-term key stored on each device to encrypt the communication channel between them.

The different levels of security for Bluetooth depend on the capabilities of each device. If Bluetooth v4.2 or later is used, then the connection can be further secured, though not 100% secured. BLE v4.2 offers an enhanced security process utilizing the Diffie-Hellman algorithm, which allows two devices to generate a shared key on each side. Still, the security of the locally stored keys is imperative to BLE security (Kainda et al., 2009).

Unfortunately, Bluetooth devices authenticate devices rather than the users of devices. To investigate and enhance user authentication, a study was conducted in 2009 to test the usability of different methods for pairing secure devices (Kainda et al., 2009). Kainda et al. (2009) found that the “Compare & Confirm” method shown in Table 2 is the easiest for users to interface with as they pair unfamiliar devices. In addition, no security failures arose during the study using the “Compare & Confirm” method, suggesting that it is promising for increasing security (Kainda et al., 2009).

To help the general public realize that these low energy devices result in low security, they should be informed of their vulnerabilities. However, the public should also be made aware of possible methods for securing Bluetooth devices.

When pairing Bluetooth devices, Out-of-Band (OOB) channels should be implemented with personal identification numbers as opposed to link keys. This approach should prevent persistent man-in-the-middle attacks in an open environment where attackers can snoop for keys sent between devices. Additionally, these PINs should be set to a longer value that includes both letters and numbers. However, this technique would be restricted to devices which have displays.

An active attack increases the amount of power it consumes as a result of the increased traffic it receives and potentially distributes. Even if the attack is unsuccessful, the increased

Table 2: *Potential Bluetooth Pairing Methods*

Mechanism	Description
Compare & Confirm	A user compares strings, sounds, melodies, or images displayed on both devices and presses a button to indicate a match or a disparity
Compare & Select	A string is displayed on one device and four strings of the same format are displayed on the other device.
Copy & Enter	A device displays a string while the other asks the user to enter the same string
Barcode	One device displays a QR code while the other automatically activates its camera function and asks the user to point the camera at the QR code and take a snapshot of it.

Note. Adapted from “Usability and Security of Out-of-Band Channels in Secure Device Pairing Protocols” by R. Kainda, I. Flechais, and A. Roscoe, 2009, (<https://doi.org/10.1145/1572532.1572547>).

power consumption renders the targeted device offline, thereby reducing the capabilities of the Bluetooth network. Restricting a device’s power consumption rate will reduce the propensity for this issue to occur.

7. Ethical Frameworks for Privacy and Cybersecurity

The big questions concerning the ethics of big data not only pertain to what information is being collected, but also “who and what is subjected to analysis” (Crawford et al., 2014, p. 1666). That is, might some people be subjected to more scrutiny than others? Questions of justice must be considered when the benefits and risks of data collection in a smart city are unevenly distributed.

One issue with big data is the ability to link specific information with an identity. However, if an identity is not associated with information, is it ethical to use this data for analysis? The answer may vary depending on whether it serves civil, commercial, or private interest. Civil interest would include, for example, estimating the number of people by pinging devices for public transportation in the

interest of efficiency. This would not link identity, but rather the number of devices in a specific location.

Commercial interest describes collecting and analyzing data for a profit motive, which may include using Internet browsing history and recent purchases to predict what a user would most likely be interested in. This practice links an identity to data, which could be deemed unethical depending whether the practice is transparent and done with user consent. Ethical dilemmas regarding data analysis will be raised by smart cities. It is important for the public to assess the dangers of unethical data usage early on in the development of smart cities so that policymaking does not lag too far behind the technological advancement these cities will bring. Once smart cities are already built, it will be much more difficult to rethink how they address privacy.

8. Policy Approach

Smart cities are still in the early stages of development. This means that privacy and security concerns will continue to arise, but it also means there is an opportunity now to build smart cities with stakeholders' interests in mind. The severity of privacy issues will depend on how smart cities are governed. In this section, we weigh the best policy scenarios for a developing smart city.

Smart cities will involve vast amounts of information, processed by artificial intelligence or people for the sake of learning individual or societal trends. This information will be analyzed for a range of purposes, from running more efficient in-city transportation to supporting company profit motives (Walker, 2019). Private information, such as one's daily routine, hobbies, and interests, could be acquired by different actors for different purposes. Unlike traditional urban areas, "smart cities have become data-centric projects focusing on the constant generation, collection, and processing of data" (What Are Smart Cities?!, 2008). With information constantly relaying from device to device, proper security protocols and management of this information needs to be regulated by governing entities to ensure privacy and security for citizens, companies, and governments are maintained.

There is a growing push to regulate data for privacy purposes. For example, there is a movement within the United States "calling on the federal government to create an entirely new federal agency tasked with data privacy protection" (Krishan, 2019). An approach in the context of smart cities would be to create mandatory government authorizations to handle different types of information. Additionally, there should

be rules and procedures governing the use and sharing of data. A state level government agency should oversee data flow along with issuing these authorizations to ensure local control in the smart city developing process. Its purpose would be to inspect and investigate companies suspected of illegal information practices. This will make data harder to obtain while also punishing individuals or companies who mishandle it.

Table 3: *Data Priority Tiers*

Tier Level	Description
Tier 1	Involves data that is not linked to an identity. This would be the least sensitive type of data.
Tier 2	Includes data linked to an identity. The higher tier would prevent unauthorized access to someone's social media account, web history, location, etc.
Tier 3	Deals with encrypted information. Breaching unauthorized encrypted data should be looked at as a major offense.
Tier 4	Deals with encrypted information. Breaching unauthorized encrypted data should be looked at as a major offense.

Note. Adapted from "District of Columbia Data Policy" by Office of the Mayor, April 27, 2017, (https://octo.dc.gov/sites/default/files/dc/sites/octo/page_content/attachments/2017-115_District-of-Columbia-Data-Policy.pdf).

Data makes a smart city function. Therefore, it is important to help the public recognize that not all data has the same level of sensitivity. To do this, data could be classified into tiers like those displayed in Table 3. Smart cities might consider creating data regulatory agencies to oversee this classification system. As Washington D.C. has done with its dataset classification levels, higher tiers could correspond to greater security risks and greater offenses if information is mishandled or stolen (Office of the Mayor, 2017). For example, Tier 1 could include data not linked to individual identity. The data regulatory agency might determine that accessing this tier of data does not need authorization except for specific cases. de Groot (2019) summarizes three principles for classifying data: context, content, and user. Context-based classification looks for sensitive information; content-based classification

“looks at application, location, or creator,” and user-based classification “relies on user knowledge and discretion at creation, edit, review, or dissemination” (de Groot, 2019).

Authorizations to handle this information would be issued by the data regulatory agency. These authorizations would ensure proper care for the different types of data and hold those accountable who use it incorrectly or jeopardize its privacy/integrity. The agency could also coordinate inspections to make sure companies and other entities are complying with proper data protocols.

Predicting the future outcomes of a smart city will steer development as well. A societal shift concerning the importance of data must be viewed as an important step in smart city development. An informed public should be the first step toward protecting privacy. Smart cities involve uncertainties which means many legislative decisions may be made in a reactive manner; however, steps can be taken to proactively protect privacy at this early stage of development. This can be done through planning and the construction of a data governing framework. This should push the citizens affected by the new framework to better understand the system and what it means for them.

9. Conclusions

Smart cities prioritize efficient systems over privacy. This will continue to be the case “as the amount of data gathered via the IoT continues to grow” (Newman, 2019). Privacy will always be a major concern in smart cities due to the vast collection of data through many systems. Many of these systems link identity with the data. This poses a threat to privacy and raises questions: Who owns and analyzes this data, and, as Newman (2019) asked, “At what point does the data collection become too much?” and “When is privacy more important than convenience?”

With a society that is constantly connected to a network, privacy will be a concern due to the prevalence of data breaches and hackings. Devices constantly collect and analyze data whether citizens have agreed to it or not. To implement security practices that ensure data integrity and confidentiality, a holistic analysis is required to understand the interconnected systems that collectively comprise a smart city. If a holistic approach is not taken, many “well-intentioned efforts [could] lead to policy resistance, where our policies are delayed, diluted, or defeated by unforeseen reactions” (Sterman, 2000). Additionally, while technical solutions can address and even anticipate hackers’ security attacks, only policy planning can control how data will

collected and design how it will be used.

Complex problems rarely have simple solutions; therefore, it is important to assess all dimensions of a smart city before implementing change. It is also important to understand what these changes might do to the system because none of the proposed solutions work independently from one another. They are all a part of the same system to combat the interference of hacking and the invasion of privacy. Due to the complex nature of the problem, technical and regulatory solutions must be devised to work hand in hand to protect privacy as smart cities progress.

Authors' Note



Kayla Rutherford ('20) graduated with a degree in Integrated Science and Technology and a concentration in Energy and Environment. She is currently pursuing her master's degree in Environmental Engineering at Old Dominion University. She loves hiking, kayaking, or any other activity that involves exploring the outdoors. She was a member of the JMU Club Quidditch team; she helped found JMU's Theta Tau Colony and served as President during the 2019-2020 year.

Not pictured: Ben Lands and A. J. Stiles

References

- Alaverdyan, D., Kučera, F., & Horák, M. (2018). Implementation of the smart city concept in the EU: Importance of cluster initiatives and best practice cases. *International Journal of Entrepreneurial Knowledge*, 6(1), 30-51. <https://doi.org/10.2478/ijek-2018-0003>
- Avoine G., Coisel I., Martin T. (2010) Time measurement threatens privacy-friendly RFID authentication protocols. In S. B. O Yalcin (Ed.), *Radio frequency identification: Security and privacy issues* (pp. 138-157). Springer. https://doi.org/10.1007/978-3-642-16822-2_13
- Attacks on computer systems. (2015, November 25). *Australian Cybercrime Online Reporting Network*. <https://www.acorn.gov.au/learn-about-cybercrime/attacks-computer-systems>
- Bartee, E. (1973). A holistic view of problem solving. *Management Science*, 20(4), 439-448. <https://doi.org/10.1287/mnsc.20.4.439>
- Bulic, P., Kojek, G., & Biasizzo, A. (2019). Data transmission efficiency in Bluetooth Low Energy versions. *Sensors*, 19(17). <https://doi.org/10.3390/s19173746>
- Conti, M. (2016). *Secure wireless sensor networks: Threats and solutions*. Springer-Verlag New York. <https://doi.org/10.1007/978-1-4939-3460-7>
- Conti, M., Di Pietro, R., & Mancini, L. V. (2007). ECCE: Enhanced cooperative channel establishment for secure pair-wise communication in wireless sensor networks. *Ad Hoc Networks*, 5(1), 49-62. <https://doi.org/10.1016/j.adhoc.2006.05.013>
- Crawford, K., Gray, M. L., & Miltner, K. (2014). Critiquing big data: Politics, ethics, epistemology: Special section introduction. *Internal Journal of Communications*, 8, 1663-1672. <http://ijoc.org/index.php/ijoc/article/view/2167/1164>
- Cui, L., Xie, G., Qu, Y., Gao, L., & Yang, Y. (2018). Security and privacy in smart cities: Challenges and opportunities. *IEEE Access*, 6, 46134-46145. <https://doi.org/10.1109/ACCESS.2018.2853985>
- de Groot, J. (2019, July 15). What is data classification? A data classification definition. *Digital Guardian*. <https://digitalguardian.com/blog/what-data-classification-data-classification-definition>
- Dominikus, S., & Kraxberger S. (2011). Secure communication with RFID tags in the Internet of Things. *Security and Communication Networks*, 7, 2639-2653. <https://doi.org/10.1002/sec.398>
- Eckhoff, E., & Wagner, I. (2018). Privacy in the smart city—Applications, technologies, challenges, and solutions. *IEEE Communications Surveys & Tutorials*, 20(1), 489-516. <https://doi.org/10.1109/COMST.2017.2748998>
- Garcia, L., Jiménez, J., Taha, M., & Lloret, J. (2018). Wireless technologies for IoT in smart cities. *Network Protocols and Algorithms*, 10(23), 23-64. <https://doi.org/10.5296/npa.v10i1.12798>
- Gligoroski, D., Markovski, S., & Knapskog, S. J. (2008). *A public key block cipher based on multivariate quadratic quasigroups*. <https://eprint.iacr.org/2008/320.pdf>
- Haase, M., & Handy, M. (2004, September 7-10). *BlueTrack—Imperceptible tracking of Bluetooth devices [Poster Presentation]*. Conference on Ubiquitous Computing, Nottingham, England. <http://www.ubicomp.org/ubicomp2004/adjunct/posters/haase.pdf>
- Juels, A., Rivest, R., & Szydlo, M. (2003). The blocker tag: Selective blocking of RFID tags for consumer privacy. *Proceedings of the 10th ACM conference on computer and communications security*. <https://doi.org/10.1145/948109.948126>
- Kainda, R., Fléchaïs, I., & Roscoe, A. W. (2009). Usability and security of out-of-band channels in secure device pairing protocols categories and subject descriptors. *SOUP's '09: Proceedings of the 5th Symposium on Usable Privacy and Security*. <https://doi.org/10.1145/1572532.1572547>
- Khan, S., & Mauri, J. L. (Eds.). (2014). *Security for multihop wireless networks*. CRC Press.

- Khatoun, R., & Zeadally, S. (2017). Cybersecurity and privacy solutions in smart cities. *IEEE Communications Magazine*, 55(3), 51-59. <https://doi.org/10.1109/MCOM.2017.1600297CM>
- Khattab, A., Jeddi, Z., Amini, E., & Bayoumi, M. (2017). *RFID security threats and basic solutions*. In RFID security: A lightweight paradigm. (pp. 27-41). Springer International Publishing.
- Krishan, N. (2019, January 18). Consumer groups want a new government agency created to protect data privacy. Mother Jones. <https://www.motherjones.com/politics/2019/01/consumer-groups-want-a-new-government-agency-created-to-protect-data-privacy/>
- Le, T. V., Burmester, M., & de Medeiros, B. (2007). *Forward-secure RFID authentication and key exchange*. IACR Cryptology ePrint Archive. <https://eprint.iacr.org/2007/051.pdf>
- Miller, C., & Valasek, C. (2015, August 10). *Remote exploitation of an unaltered passenger vehicle*. Illmatics. <http://illmatics.com/Remote%20Car%20Hacking.pdf>
- Newman, D. (2019, January 23). *Are privacy concerns halting smart cities indefinitely?* Futurum. <https://futurumresearch.com/privacy-concerns-for-smart-cities/>
- Office of the Mayor. (2017, April 27). *District of Columbia data policy*. https://octo.dc.gov/sites/default/files/dc/sites/octo/page_content/attachments/2017-115_District-of-Columbia-Data-Policy.pdf
- Penn State College of Agricultural Sciences. (n.d.). *Complex or "wicked issues."* <https://aease.psu.edu/research/centers/cecd/engagement-toolbox/problems/complex-or-wicked-issues>
- Perrig, A., Szewczyk, R., Tygar, J. D., Wen, V., & Culler, D. E. (2002). SPINS: Security protocols for sensor networks. *Wireless Networks*, 8(5), 521-534. <https://doi.org/10.1023/A:1016598314198>
- Quirino, G. S., Ribeiro, A. R. L., & Moreno, E. D. (2012). Asymmetric encryption in wireless sensor networks. In M. A. Matin (Ed.), *Wireless sensor networks: Technology and protocols*. (pp. 217-232). <http://dx.doi.org/10.5772/48464>
- Singh, K. (2013). Security in RFID networks and protocols. *International Journal of Information and Computation Technology*, 3(5), 425-432. http://www.irphouse.com/ijict_spl/10_ijictv3n5spl.pdf
- Sitlia, H., Hamam, H., & Selouani, S. A. (2009). *Technical solutions for privacy protection in RFID*. <https://www.researchgate.net/publication/242605065>
- Sobti, R., & Geetha, G. (2012). Cryptographic hash functions: A review. *International Journal of Computer Science Issues*, 9(2), 461-479. https://www.researchgate.net/publication/267422045_Cryptographic_Hash_Functions_A_Review
- Sookhak, M., Tang, H., He, Y., & Yu, F. R. (2019). Security and privacy of smart cities: A survey, research issues and challenges. *IEEE Communications Surveys & Tutorials*, 21(2), 1718-1743. <https://doi.org/10.1109/COMST.2018.2867288>
- Šťáhlavský, R. (2011, May 24). *Amsterdam Smart City project* [Slides]. <http://www.top-expo.cz/domain/top-expo/files/tee/tee-2011/prednasky/prednasky%202.%20den/2-3%20stahlavsky%20roman%20-%20amsterdam%20smart%20city%20project.pdf>
- Sterman, J. (2000). *Business dynamics: Systems thinking and modeling for a complex world*. McGraw-Hill Education.
- Stadt Wien (n.d.). *The dimensions, headline goals and thematic fields of the Smart City Wien Framework Strategy*. https://smartcity.wien.gv.at/site/files/2020/05/SCWFS_objectives_overview.pdf
- Subramanian, V., Frechet, J. M. J., Chang, P. C., Huang, D. C., Lee, J. B., Moles, S. E., Murphy, A. R., Redinger, D. R., & Volkman, S. K. (2005). Progress toward development of all-printed RFID tags: Materials, processes, and devices. *Proceedings of the IEEE*, 93(7), 1330-1338. <https://doi.org/10.1109/JPROC.2005.850305>
- Ullah, F., Mehmood, T., Habib, M., & Ibrahim, M. (2009, July 10-12). *SPINS: Security protocols for sensor networks*. International Conference on Machine Learning and Computing, Perth, Australia. https://www.researchgate.net/publication/312626436_SPINS_Security_Protocols_for_Sensor_Networks
- Walker, J. (2019, January 31). *Smart city artificial intelligence applications and trends*. Emerj. <https://emerj.com/ai-sector-overviews/smart-city-artificial-intelligence-applications-trends/>
- What are smart cities?!* (2018, May 4). Privacy International. <https://privacyinternational.org/explainer/1864/what-are-smart-cities>

Submit Your Research and Scholarship to the Next Volume of JMURJ



RESEARCH. CREATE. SUBMIT. GET PUBLISHED.

Send us your work at

jmurj@jmu.edu



For more information visit www.jmu.edu/jmurj



SUBMIT YOUR RESEARCH IN BUSINESS

James Madison Undergraduate Research Journal is a scholarly, peer-reviewed research journal dedicated to publishing undergraduate work from all JMU disciplines.

Case Studies | Business Plan | IT Consultant Reports
Applied, Theoretical, and Historical Research | Literary and Rhetorical Analyses | Media and Design Projects
Digital Scholarship | Business System Analyses | Quantitative and Qualitative Data Assessments | Consumer and B2B Marketing Research | Seminar Papers and Capstone Projects




SUBMIT YOUR RESEARCH IN INTEGRATED SCIENCE AND ENGINEERING

James Madison Undergraduate Research Journal is a scholarly, peer-reviewed research journal dedicated to publishing undergraduate work from all JMU disciplines.

Research Papers | Computing Projects | Engineering Designs
Policy Statements | Technical Papers | Analytical Methods
Project Reports | Geospatial Investigations | Other Texts and that Address the Role of Science and Technology in Society




SUBMIT YOUR RESEARCH IN ARTS & LETTERS

James Madison Undergraduate Research Journal is a scholarly, peer-reviewed research journal dedicated to publishing undergraduate work from all JMU disciplines.

Theoretical and Historical Research | Literary and Rhetorical Analyses | Media and Design Projects | Digital Scholarship
Investigative Journalism | Comparative Studies




SUBMIT YOUR RESEARCH IN HEALTH AND BEHAVIORAL STUDIES

James Madison Undergraduate Research Journal is a scholarly, peer-reviewed research journal dedicated to publishing undergraduate work from all JMU disciplines.

Empirical and Theoretical Research | Research in Evidence-Based Practice | Statistical Analyses | Case Studies | Research in Assessment and Evaluation | Review Essays | Other Texts and Multimedia that Address Disciplinary Social Questions



SUBMIT YOUR RESEARCH AND SCHOLARSHIP TO JMURJ

JMU.EDU/JMURJ | SUBMIT TODAY



SUBMIT YOUR RESEARCH IN VISUAL AND PERFORMING ARTS

James Madison Undergraduate Research Journal is a scholarly, peer-reviewed research journal dedicated to publishing undergraduate work from all JMU disciplines.

Primary Research | Process Papers | Theoretical Approaches
Histories | Reflections | Recital Lectures




SUBMIT YOUR RESEARCH IN EDUCATION

James Madison Undergraduate Research Journal is a scholarly, peer-reviewed research journal dedicated to publishing undergraduate work from all JMU disciplines.

Literacy and Reading Studies | Fieldwork | Curriculum and Pedagogy Research Assessment Reports | Historical Research
Digital Literacy Projects | Discipline-Specific Teaching Strategies | Instructional Models Document Analysis | Other Theoretical or Applied Research




SUBMIT YOUR RESEARCH AND SCHOLARSHIP FROM THE HONORS COLLEGE

James Madison Undergraduate Research Journal is a scholarly, peer-reviewed research journal dedicated to publishing undergraduate work from all JMU disciplines.

Rhetorical Analyses | Creative Project | Collaborative Projects
Research Project | Seminar Papers and Capstone Projects




SUBMIT YOUR RESEARCH IN SCIENCE & MATH

James Madison Undergraduate Research Journal is a scholarly, peer-reviewed research journal dedicated to publishing undergraduate work from all JMU disciplines.

Scientific Research | Statistical Analyses | Geological Reports | Mathematical Investigations | Other Texts and Multimedia that Address the Role of Science and Math in Society



CELEBRATING SEVEN VOLUMES

Check out Volumes 1–7 of *JMURJ*! Through seven volumes, the *James Madison Undergraduate Research Journal* has sought to promote, publish, and share JMU undergraduate research and scholarship. All *JMURJ* volumes are available through JMU's Scholarly Commons platform at <http://commons.lib.jmu.edu/jmurj/>



For more information, including submission guidelines, publishing history, and steps to become a board member, visit our website at www.jmu.edu/jmurj/

