

Vol. 10, Issue 1, Spring 2023

Colorado Journal of Asian Studies

A publication of the Center for Asian Studies at the University of Colorado Boulder



Note from the Editors, Dr. Lauren Collins and Luke Hahn

After a brief break from publishing in 2022, the Center for Asian Studies is pleased to publish our 10th issue of the *Colorado Journal of Asian Studies* undergraduate journal in Spring 2023. The journal accepts outstanding Asia-related papers written by students in various disciplines at CU and other universities in Colorado and beyond, covering a wide range of topics. The 10th issue of CJAS features research and creative pieces featuring topics related to Asian politics, history, and current events. In *Ai Weiwei: Resistance and Authoritarianism*, Nathan Boesan discusses art as a means of political dissent with his own artistic piece inspired by Chinese artist Ai Weiwei. L Barr's piece titled *Protest Across the Asian Continent* showcases various protest movements throughout Asian history through a series of drawings. Rumi Natanzi's work, *The Iranian Monolith: The Power of Imperial Imagination*, reveals how Western tropes and ideologies continue to negatively impact Iran by portraying it unfavorably. In *Sun Wukong's Transformation: From Trickster to Hero*, Bruno Unger highlights the complexity of Sun Wukong's character in *Journey to the West* and its relevance to Chinese literature and culture. Yuka Vogenthaler's *Atomic Bomb Nationalism: The Construction of the Japanese Postwar Pacifist Identity Through the Hiroshima Peace Memorial Museum* explains how the Japanese government changed its international image through a focus on peace after the atomic bombings of Hiroshima and Nagasaki. In a piece by an author who requested anonymity, *What Happened in Xinjiang to the Uyghurs? An Overview of the Chinese Government's Role in the Uyghur Genocide*, reveals and identifies the complex policies and practices the Chinese government utilizes to oppress its Uyghur population. In *Migration and its Impact on Left Behind Women: Examining Kerala's Low Female Labor Force Participation Rates*, Meenakshi Manoj uses statistical analysis to analyze how women in the Kerala region are affected by labor migration. *Unsustainable Practices: How China and America Caused the Scrap Trade Panic* by Julia Harvey provides a case study looking at of how the U.S.-China scrap industry has been affected by international regulation, resulting in the obstruction of environmentally friendly practices. In *Japanese Peace and Soft Power: Osaka Expo '70 in the Cold War's Space Race* Reese Hollister discusses how Japan displayed its development of science and technology during the Cold War Era.

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Ai Weiwei: Resistance and Authoritarianism

Nathan Boesen, University of Colorado



In this piece, I stand in black and white, holding a T.V. screen with a picture of Xi Jinping walking off the stage at the 2022 Communist Party Congress, where he was elected for a third term as president of China. This event broke from Chinese historical precedent of not remaining the leader for more than two terms. In the piece I drop the T.V. screen, allowing it to shatter on the ground below.

I created this art piece as a positive mimicry of a 30-year-old photo created by Chinese dissident artist Ai Weiwei. In the

photos, he dropped an ancient urn from the Han Dynasty, signaling the rejection of tradition in China. It was made in criticism of the Chinese government's erasure of Chinese history under the Party.

For my piece, I hoped to convey a similar message by rejecting the image on the screen being dropped. In this sense, I was not just smashing the T.V., but the face of the Chinese Communist Party Leader, Xi Jinping, displayed in the image on the T.V.

This art piece is symbolic when viewed in the context of Chinese events in 2022, being

the largest mass protests Mainland China has experienced since the 1989 democracy protests. In these 2022 protests, Chinese citizens have been calling for the easing of COVID-19 lockdowns and restrictions, but also more broadly the expansion of rights including freedom of speech and assembly. Some protesters have even called for President Xi Jinping to relinquish control and resign, something that was not called for even during the 1989 protests. In this context, my piece caters to this sect of protesters. Just as Chinese protesters reject Xi Jinping's continued leadership of China, my piece rejects his third term as president.

My piece utilizes the jarring contrast between the black and white of the photo's background, and the bright red of the

Standing Committees stage. Upon the T.V. breaking and the photo becoming entirely black and white, the fading out of the Communist Party's rule in China is symbolized.

Because I am American, it might be viewed as disrespectful or insensitive for me to create such an image. However, I feel that it is important for people outside of China to provide support for those who are risking their lives to fight for their rights in China. During the 2019-20 Hong Kong protests, the American flag was utilized as a symbol of Hong Kongers efforts for freedom, and foreign support was called upon by those leading the protest. I feel it is important for myself and others to show support for such events through images like this.

Protest Across Asia

L Barr, University of Colorado



For this piece, I wanted to create a piece that showed the diversity around a single idea exhibited across Asia, as I felt focusing on a single event only affecting one region of the continent would do a disservice to the wide breadth of the course. I looked at the various demonstrations of protest across the Asian continent, ranging from 1900 to events currently happening today. I decided to make it one cohesive piece consisting of 7 separate parts, a nod to the diversity of the various countries' diasporas, all while still being part of a singular overarching identity.

Protest Across the Asian Continent depicts 7 significant protests that have occurred throughout Asia. Each is accompanied by a letter of the word 'protest' (so that it spells the word when they are lined up together), as well as a figure representing an identity of their respective protest. Small drawings symbolize an important aspect of the event. The widely accepted name of each protest is also written in the bottom left-hand corner, along with the country of origin below it. This allows for the piece to be understandable without access to historical explanation, while still leaving some to the imagination to avoid visual clutter.

The first event (representing P in protest) is the **Great Hanoi Rat Massacre**. While not a conventional protest, this event stuck out to

me as a clear demonstration of dissent against French colonists occupying Hanoi (and the rest of Vietnam) and was done in a way the impoverished Vietnamese citizens could reasonably accomplish. A monetary bounty was placed on rat tails due to a rat infestation worrying the French. Not wanting to do the dirty work themselves, the French sent out Vietnamese workers to do it. However, they found that they could simply cut off the rat tails and leave the rats alive, thus gaining the bounty reward while not conforming to the French rule.

Second is **Occupation Day in the Philippines**, with the figure shown being Manuel L. Quezon, the first Filipino president of the Philippines. Occupation day is celebrated as the day the Philippines was freed from outside rule, and President Quezon determined that it would be forever. Quezon and many other Filipinos fought for nationalism within the country rather than conformity to Western powers (especially the United States) and worked to implement programs of culture preservation and restoration around the country. While not a traditional protest either, I believe that President Quezon and his supporters going against westernization, which many other Asian countries adopted, showed a strong resistance to the norm.

Third is the **Chinese Invasion of Tibet**, with the figure represented being the Dalai Lama. He led a mass emigration of Buddhist Tibetans to India during China's invasion, where they intended to rid of the Dalai Lama and end the Buddhist governing in the region. His leadership against the Chinese military saved the lives of many people and kept Tibetan Buddhist culture safe as well.

Fourth is the **Red Shirt Protests in Thailand**, which was a citizen-led protest against the 2006 coup d'état which deposed the then "people's representative", Prime Minister Thaksin Shinawatra. The people had been routinely taken advantage of by the monarchy, faced increasing socio-economic inequality, and the resulting mass public protests raged on despite violent military backlash. The Thai people stood up for desperately needed change, and the mass turnout certainly got the attention of a neglectful government as well as the world.

Fifth is the Burmese **Spring Revolution**, which was a set of protests in Myanmar against the military's government coup and the degradation of human rights. Despite the ongoing pandemic, the citizens of Myanmar felt that it was necessary to turn out in droves against the tyrannical government. Various methods were used to protect identity during this time to avoid violent persecution,

including facial coverings and public artwork displays. This allowed for worldwide awareness of the event while citizens could avoid military violence.

Sixth are the **Women's Protests in Iran**. Hundreds of Iranian women, mostly teenagers, and university students turned out to protest the repeated abuse of women under the Iranian government's rule, as well as opposing strict decency laws and other such ideas governing women's bodies. The government retaliated by sending out police to quell the protests, and due to their violence, multiple young protestors have been killed. However, instead of backing down, women have rallied behind the faces of those lost to violence and continue the fight for women's rights today.

Lastly, the **Blank Paper Protests** in China revealed an even more extreme need for anonymity due to the CCP's widespread government surveillance. The protests are against the zero-covid policy, in which the Chinese government enforced strict lockdowns and limitations on civil rights supposedly to completely get rid of COVID-19. However, the citizens were tired of being restricted by harsh policy and turned to protesting in the streets and covering their faces with blank sheets of paper, almost mocking the facial recognition software that

has been employed against them. So far, this is fairly successful in evading the government and its attempts to censor the events, though these are still ongoing.

Overall, there are many types of ways to protest oppression, as seen across the Asian continent. I hope this piece can begin to show the diversity and creativity of protest across all these different situations.

The Iranian Monolith: The Power of Imperial Imagination

Rumi Natanzi, University of Colorado

On September 16th, 2022, Jina Mahsa Amini, a young Kurdish woman from the town of Saqqez in the Kurdistan Province of Iran, was visiting the capital city of Tehran, where she was arrested, detained, and later beaten to death by the morality police for improperly wearing of her headscarf (NPR, 2022). Although this is a prevalent occurrence as far as brutalities concerning the Islamic Republic's forces go, something about this particular instance was different. Within hours of the news breaking, along with the release of a photo of Mahsa in fatal condition on a ventilator, outrage quickly spread across the nation, extending to Iranians and individuals all over the world. In the eighth month of protests, 19,763 have been arrested, detained, abused, and violated, while hundreds more have been killed (HRANA, 2023). Despite this, the international community has neglected to recognize the enormity of this situation, and the severity of the implications it has for those currently in Iran, living in the diaspora, and human rights in the region and world at large.

This is a pattern seen in the Western world, particularly prevalent in “U.S ideological machinery” as author and Iran historian Hamid Dabashi refers to it: “the phenomenal ignorance and misrepresentation of Iran as a culture, country, and people based on historical delusions minimized, due to contention between the West and Iran historically” (Dabashi, 2008). The Western media has especially been known to universalize and spread misinformation when it comes to conflicts in the SWANA region (decolonial language for the Middle East, Southwest Asia, and North Africa). Western media utilizes Islamophobic rhetoric and tropes to disseminate their message to the greater population in the region. This is extremely harmful and poses a severe disadvantage to those who are not from the SWANA region, especially in the Western world, where information regarding these countries and their respective peoples is minimal. Without access to truthful, comprehensive reports, the risk of detrimental outcomes are ever present, such as hate crimes, racism, and interventionism. In

the case of this monumental, women-led revolution in Iran, media attention and efforts seem to be minimal, with one headline reading, "Iran: A really simple guide to the protests" (BBC, 2022). The report seems to be a lackluster attempt to summarize the complex systemic issues the protests aim at accomplishing. In December of 2022, the New York Times, an extremely well-known and highly regarded news source, published an article about the supposed "dismantling" of the morality police, after months of sparse reporting on this issue, showing no real commitment or interest in the materializing events (NYTimes, 2022). This report was swiftly checked by Iranian activists in the diaspora as misinformation conjured up by the writers from a sliver of information released from the Iranian government, with no confirmation or evidence to truly support these claims (Iranian Diaspora Collective, 2022). One can surmise that Western media is severely misinformed about the past, present, and future of Iranians by this indolent attempt at reporting on what's happening in Iran and are satisfied with nonfactual reports that will help them move on from an already non-existent reality.

This serves to further diminish solutions and relationship mending between the two cultures and is deliberately used as a means to

resist Iranian power by rewriting the fundamental events and aspects of a nation. Especially in the case of Iran, a complex entity with a longstanding relationship with the Western world, imperialist themes are revised to work specifically toward dismantling traditional cultural aspects integral to the functioning and prosperity of Iranian nationalism. This has been particularly evident under the guise and flash of modernity and globalization. Through an Iranian monolith created by colonial motivations and continued imperialist ploys, which seek to universalize the experiences of the people, their culture, and their religion, the following question can be posed: To what extent are the continual distortion and perpetual ignorance of Iranian history and culture part of a greater ideological weaponization waged by the West, rooted in imperialist logic? Through the deliberate usage of perpetual ignorance by the West condoning Islamophobic rhetoric and practice, lack of consideration of coloniality and systemic structures that affect society enables a savior mentality justifying brutality and unawareness is utilized, furthering the perceivable chasm between the SWANA region and the Western world, leading to an overall persistence of the "West and the Rest" mindset.

An integral part of any monolithic creation is to substantiate enough general claims and corroborations for a believable and easily transferable message. In the case of Iran, this was not difficult. With a tumultuous history of a CIA-backed overthrowing of the democratically elected Prime Minister Mohammed Mosaddegh in 1953 and the imposition of a puppet government in order to serve the West's oil and monetary interests, the presence of an enemy was naturally born when the Western-backed Shah was ousted, and the Islamic Republic began. However, with the establishment of the Iranian monolith, the history and complex interplay of a country and its regional positioning was erased, and as Dabashi points out, "something is fundamental to imperial conquest."

In their book, "Iran: A People Interrupted", Dabashi discusses the term "imagined consciousness", specifically in regard to the general and accepted lack of historical comprehension many in the West have. As they state in the introduction: "[Western individuals have] distorted the history of my [Iranian] people, in order to belittle them, destroying their will to resist the regional domination of a predatory empire" (2007, pg. 7). The deliberate degradation imposed by Western powers, solely out of their own interests and

confirmation biases showcases the calculated approach taken to imperial conquest and colonialism. This then lends itself to the continual perpetuation of modernity, in which people unable to resist this type of ideological domination are subjected.

Along with conceptualizing a country into a universalized and easily promoted monolith, dangerously formulated delusions paired with immense ignorance are all part of "the US ideological machinery", a helpful mechanism in promoting brutalities and misinformation utilized by Western imperial powers to justify their actions. Dabashi illustrates this point further. "The image of a passive, corrupt, and malignant culture, through misrepresentation that they [Western/US government] have manufactured and conveniently put at the disposal of their employers at the Pentagon" (pg. 8). While this example seeks to demarcate the US relationship with Iran specifically, more generally, this idea of the imagined consciousness illustrates a quantifiable understanding of a culture that posits the West at the top of the hierarchical relationship of power. This implicates the West in a savior position, regardless of motivations. With the immense power of delineating the historical narrative that informs how a country and culture is perceived and treated worldwide, the construction of whatever narrative serves

their best interest is at their disposal, heightening the ability to orchestrate harmful prejudices and manufacture conflict. Through the U.S.' global power, this was accomplished after creating devastating impacts on relationships within the SWANA region, and between Iranians and the Western world.

The connection between imperial politics and culture is an important relationship to examine within the contexts of greater imperial power and imagined consciousness. As detailed in Edward Said's groundbreaking book, "Culture and Imperialism," imperialism is a term rarely used, especially when describing the accounts of U.S. culture, politics, and history (1993, pg. 8). However, the correlations between imperialism and the U.S.' interventionist style are almost synonymous with one another. Colonialism and its processes are widely understood and more comfortable in Western usage. While the characteristics of imperialism are complex, they often are built off of market and geographical goals towards domination. Colonialism and imperialism both, however, play off hierarchies of race, economic standing, and gender to create an "us/them" relationship to truly detail the perils of the "other". In this case, what is referred to as the "West and the Rest" mentality—the conflation between terrorism and the greater "war on

terror"—further adds substance to the monolith creation campaign. Through this construction of the "other", two things are achieved: intentional practices of vilification are now established, and the "axis of evil" is now tangibly associated with the SWANA region, creating a physical outlet for anger, hostilities, and exploitation to occur.

Eurocentric hierarchies on the basis of race, ethnicity, gender, and religion are also created, which leads to a savior mentality. They are prevalent in the Western world, insistent on their innocence and "do no harm, see no evil" frame of mind. In a "doing good, fighting for freedom" (1993, pg. 8) attitude, as Said puts it, seeks to place all atrocities committed under the guise of "necessary intervention" as a means of establishing vitality, prosperity, and "freedom". The imposition of "freedom" however, is important to consider within the context of which the term is used. Especially in situations considering the SWANA region, freedom is assumed to be on the terms of those who are "gifting" it, placing its conditions purely within Eurocentric understandings. Created and often administered by Western powers solely to serve their interests, Western-imposed freedom completely disregards centuries of complex history, social norms, and cultural traditions. Their precarious

intersection further serves the idea of white supremacy and colonial domination. With this comes a lack of recognition for the resulting systemic structures deeply embedded in cultures and governments, including thought conception and materialization, political formation, religious dogmas, and hetero-patriarchal manifestations.

The systemic structures created by colonialism, now deeply rooted worldwide, are integral to understanding Iranian history and culture. One cannot think about patriarchy in Iran, without recognizing the parallels seen worldwide, most notably within Western countries. Through the perpetuation of colonial, racial, societal, sexual, and gendered binaries, patriarchal practices within Western societies is fundamental in understanding how imperialism and feminism are consistently reproduced within societies in the Western world (Bahlieda, 2015). Current attacks on bodily autonomy, gender expression, sexual orientation, and race within the United States illustrates this perfectly.

In understanding grievances in a holistic manner, one must look to colonial modernity's presence and impact within Iranian culture. As Dabashi suggests, colonial modernity in Iranian history has consisted of misunderstandings produced by the Western

world in order to continually diminish modernization on Iranian terms without consideration of confounding cultural and regional recognition (2007). As is evidenced by this statement: "Literary imagination, a critical consciousness, and a cultural modernity of unprecedented dimensions and tenacity took shape and defined the terms of Iranian resistance to colonial modernity" (pg. 66). Due to the legacy of imperialism within Iranian consciousness, the terms of modernity and development were set very precisely within an already constructed imagined consciousness, allowing only for room left by colonial consciousness to define the response and movement forward in Iranian society. This "imperialism of the imagination" has harmful impacts in shifting the thought of those dominated in restrictive ways; politically, economically, socially, and religiously. The plight of the Iranian people was changed from being solely a physical attack on their geographical space, to one that impacted their thoughts and considerations, regarding culture, traditions, and lifestyles.

In Afsaneh Najmabadi's book, "Women with Mustaches, and Men without Beards" (2005), refers to this phenomena as Westoxification, or *Gharbzadegi* in Farsi. Originally coined by Iranian intellectual, Jalal al-e Ahmad, this term describes the West's

imposition and fascination on the SWANA region, its manufactured dependency on Western culture and ways of life, much to the detriment of the Islamic world's traditional, historical, and cultural ties to Islam, resulting in cultural alienation (Oxford Reference, 2022). Thinking about colonial modernity in the context of cultural alienation, the West creates ample opportunity for cultural imperialism and political domination.

This also coincides with previously mentioned Western ambitions of imagined consciousness and complete control. As Najmabadi explains that, "considering the impact of 'the East' on 'the West' as an issue of denial of agency for Europe is a colonial/anticolonial legacy that continues to inform our current thinking" (2005, pg. 6). Here, Najmabadi understands that agency and influence move in multiple directions, and while the realities of Westoxification are real and visceral, agency does not need a power vacuum to exist. It would, in fact, be meaningless outside of a matrix of power, one controlled by imperial forces, maximizing its impact (pg. 5). By creating the standards to which societal, cultural, and religious frameworks are understood, the West can influence modernization efforts, within this subjective hierarchy that makes it difficult for

those within imperialized societies to combat against.

Thinking about the infiltration of systemic thought imposed by colonial modernity in Iran specifically, one would be remiss to not examine protests within a patriarchal context.. In Azita Ranjbar's publication, "Soapboxes and Stealth on Revolution Street: Revisiting the Question of 'Freedom' in Iran's Hijab Protests" (2021), the term freedom is reexamined in the context of choice at the root of hijab protests that occurred in Iran back in 2017. Ranjbar details the state of women's rights and freedoms under the Islamic regime and discusses the danger of conflating appearance with personal beliefs (2008). This danger is part of the greater "US Ideological Machinery": the generalizing of an entire people based on extremities within their societies, and the systematic conflating of people and this constructed monolith. As discussed by author and scholar Saba Mahmood, this monolith has been continuously capitalized on by the West as an opportunity to further secure monolithic images of Iran and other Islamic countries that fit their narratives of the "right way to live." It is often used as interventionist justification to "enlighten and liberate Muslims from the misogyny of their cultural practices through the bringing of democracy"

(Feminism, Democracy, and Empire: Islam and the War of Terror, 2009, pg. 85). The persistence of the “West and the Rest” line of thinking utilizes a savior mentality to justify brutality, unawareness, and further the divide between the SWANA region and the Western world. This perpetuates indifference and enables ignorance as acceptable in considering crises that occur within the systemic roots of these manifestations.

Details thus far have showcased many Western strategies of imperialistic ventures imposed on the SWANA region, specifically on the nation of Iran. This has resulted in the continual distortion of Iranian history, rooted in imperialist logic. Deliberate usage of perpetual ignorance by the West materialized through Islamophobic rhetoric, practice, and lack of comprehension and consideration of coloniality, along with recognition of greater systemic structures that affect Iranian society have been continuously used as means for intervention. This is further realized by the overall persistence of the “West and the Rest” mindset that utilizes savior mentalities to justify brutality and unawareness, perpetuating Westoxification and cultural divide. Through the terminology of “imperial consciousness” and “imperial imagination,” one can surmise that the coloniality of the West, despite colonialism never being an

active reality for many within the SWANA region, has permeated Iranian society, resulting in longstanding and continual consequences. As scholar Aníbal Quijano writes in their publication *Coloniality and Modernity/Rationality*, “The relationship between European culture, and the others continues to be one of colonial domination (2007, pg. 16). This is visible within societies either in the active thrusts of imperial invasion or still reeling from its effects, as is seen in Iran.

In terms of the revolution actively materializing within Iran, the ideas these scholars have conjured are intimately connected to understanding the Iranian protests. Discontent has been widely known and palpable in the past decades of the Islamic Regime, waiting for a catalyzing event, which was unfortunately found in Jina’s untimely death. But as devastating as her abnormal passing was, there have been many before her, and unfortunately as seen in the past months, many after. Her death and the massive response to it is an indication of the systemic issues that have created an insufferable quality of life for millions of Iranians within the country, especially its female and minoritized populations. Instead of recognizing this, however, the West is bent on turning this situation into a projection of the

deep, barbaric disparities between Iran and more “civilized” places, like those in the Western world.

As seen in other situations where there have been visible manifestations of these systemic issues, Western propositions for interventions arise. In connection to previous discussions about freedom, the intervening and supposedly “helpful” motivations of the West must be challenged by thinking about whose terms this “freedom” is on. By acknowledging political structures where Western imperial thought has attempted to dominate societal systems, history shows how complicated and terribly misguided these endeavors are, due to a multitude of exterior factors often neglected. The imposition of Western systems as a means to “save” these otherwise “desolate” countries must be thought of as new imperialism, with motivations purely rooted in domination, capital gain, and reinforcement of white supremacy.

The question then remains: how can one move forward with the weight of an unacknowledged history pressing against your chest, consistently tricking your mind into believing an undisclosed reality? The brilliance of imperialism is not always found in active domination: brutalities are often later condemned, and the horrors are

witnessed far and wide. Imperialism is also successful when the minds of those under domination become complacent within these forced systems, eventually picking up and wielding the tools that were once used to inflict oppression onto them, and in many ways, continually are. In the case of Iran, one would be remiss if these systemic structures and damages from Western intervention both in 1953 and 1979 were not acknowledged. Recognition of the disproportionate impact these constructions have on racially, ethnically, and sexually marginalized Iranians is imperative in moving forward. The West has been, for so long, complicit in the creation of the systems that are actively being shaken to their core. The generations born long before and long after their inception are finding the courage within themselves, with little to no international support or recognition, to face these complicated, intrinsically linked beasts. By leading the dismantling of harmful structures within Iranian society, reverberation around the world is bound to follow. The Western-controlled power matrix is vulnerable to a paradigm shift, which the incredibly brave Iranian people are fervently unveiling.

This paper is dedicated to Mohsen Shekari, Majid Reza Rahnavard,

Mohammad Mehdi Karami, Mohammad Hosseini, Majid Kazemi, Saleh Mirhashemi, Saeed Yaghoubi, and all the protesters in imminent danger of execution, and the

brave people in Iran fighting for freedom every day.

Be Omide Azadi

Jin, Jíyan, Azadí

Zan, Zendegi, Azadi

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Sun Wukong's Transformation: From Trickster to Hero

Bruno Unger, University of Canterbury, New Zealand

Wu Cheng-En's novel *Journey to the West* was originally published in the Ming dynasty and is seen today as one of the four great classical novels of Chinese literature (Kherdian, 2005). *Journey to the West* is widely celebrated in modern China, with this being apparent from large-scale *Journey to the West* film projects, to *Journey to the West*-themed street performers. The text reached fame through its storytelling, political and social critique, and psychological insights embedded throughout the story (Plaks & Yu, 1977). Sun Wukong is one of the main characters in *Journey to the West*, portrayed as the mischievous and powerful monkey king with extraordinary abilities and a rebellious spirit. This article focuses on Sun Wukong's character transformation from a trickster to a hero throughout the novel through both extrinsic and intrinsic motivators. This will be discussed through the concept of the hero's journey, the three key Chinese philosophies and Wukong's motivations analyzed through a psychodynamic lens. My intention is for the reader to finish this article with an

understanding of how Wukong overcomes his weaknesses and emerges as a hero.

To provide a deeper understanding of Wukong's transformation, a brief overview of *Journey to the West's* plot can help to provide context for his character development. *Journey to the West* is a retelling of the 7th-century pilgrimage of Buddhist monk Tripitaka to fetch scriptures from India. The story depicts his pilgrimage to the West (India) to obtain Buddhist texts and return them to China, with an emphasis on the adventures that are met on the way. Wu Cheng-En embellishes this story with the addition of comedic and surreal elements, as well as aspects of political, bureaucratic, and social satire. The novel begins by initially focusing on a monkey named Wukong and his pursuit of immortality through learning the art of Tao. Born from a stone egg, Wukong is a comedic troublemaker who acts in a self-gratifying manner. His actions progressively become more extreme, culminating with Wukong staging a destructive rebellion in heaven. The famous scene of Wukong causing havoc in the heavens

results in his pride and vanity prompting him to unsuccessfully challenge Buddha. This led to his banishment and punishment by being trapped under a mountain for 500 years. It is at this point that Tripitaka is introduced.

Tripitaka is given the task of going to the West to obtain the sacred Buddhist scriptures and bring them to China. As his journey progresses, Tripitaka meets various disciples whom he recruits on the journey to allow them to atone for their sins in a previous life. It is through Tripitaka we see Wukong being freed from his entrapment under the mountain and offered a chance at redemption as a disciple of Tripitaka on the journey.

Tripitaka's recruits include Pigsy (Zhu Bajie), Sandy (Sha Seng), and White Dragon Horse (Xiao Bailong). The four disciplines must fend off attackers and temptations to help keep Tripitaka safe over the 81 adventures they encounter. The novel concludes with Tripitaka and his disciples reaching India where they receive the scriptures from the Buddha.

Tripitaka and Wukong achieve Buddhahood, resulting in Wukong being redeemed for his past actions. The entourage then returns to the Tang dynasty with the scriptures, completing their journey (Kherdian, 2005; Wu & Lovell, 2021). Although Wukong is just one of the many characters in the book, his

transformative journey throughout the text, from an exiled troublemaker to achieving Buddhahood, demonstrates the brilliance of *Journey to the West* and deserves further analysis.

Carl Jung described the Trickster archetype as being an individual with a large degree of intellect that uses their ability to play tricks on others and push societal rules and mock authority (Jung & Carrington, 1990; Radin et al., 1988). Tricksters are a cross-cultural phenomenon, with Wukong being representative of the trickster archetype in a Chinese context (Radin et al., 1988). At the beginning of the novel, Wukong is portrayed as a troublemaker with a sense of humor, and it is quickly evident in the novel that Wukong is characterized by the Buddhist principle of the "Monkey Mind". The Monkey Mind symbolizes one that is unsettled, inconstant, confused, and uncontrollable. Wukong's actions stemming from his Monkey Mind result in him challenging societal expectations and those in authority, often resulting in offense and anger (Carr, 1993). Therefore, the Monkey Mind is an archetypical example of the Trickster in Wukong. In contrast, the hero archetype is characterized by courage, achievements, and noble qualities (Jung & Carrington, 1990). In *Journey to the West*,

Wukong's journey from the trickster archetype to the hero archetype can be captured through the concept of the hero's journey when applied to his adventure protecting Tripitaka and receiving the scriptures.

In mythology, the hero's journey is a complex storytelling template that captures the transformation of a character throughout their journey to becoming a hero. The hero's journey begins with a call to an adventure where an individual sets out to achieve a goal or quest. During this journey, the character's shortcomings limit their ability to complete their task and require the individual to have a revelation of needing to overcome their limitations to ensure success. If successful, this revelation allows them to transform themselves and atone for their past shortcoming, and ultimately achieve their goal and hero status. The alternative to completing the hero's journey is choosing the path of being enslaved by one's desire and becoming a villain (Campbell, 1968; Leeming, 1981).

Throughout the first chapters of the novel, Wukong's journey to the West is constantly hindered by his Monkey Mind. His pride, disrespect for authority, and impulsivity often result in harm to others and serious consequences for Wukong. This is

demonstrated through the havoc he caused in Heaven and the punishment of being trapped under a mountain. Wukong is given a chance for salvation after being freed by Tripitaka, who recruits him on his journey to the West to fetch Buddhist scriptures. Even after being freed, Wukong's Monkey Mind interferes throughout the journey as he refuses to listen to his new master Tripitaka. This results in divine intervention when Bodhisattva Guanyin intervenes and gives Tripitaka a magical circlet that allows him to control Wukong by inflicting a severe headache when he misbehaves (Wu & Lovell, 2021). This allows initial control over Wukong, but Wukong still is reluctant in his journey as his Monkey Mind is still active.

However, this control coupled with an initial encounter with Pigsy causes Wukong to have a revelation and exert further control over his Monkey Mind. Pigsy is a character in the novel that Tripitaka and Wukong encounter on their quest who is terrorizing a village and has taken a woman captive as his wife. Wukong aids the villagers and the woman's father by engaging in battle with Pigsy and defeating him, recruiting Pigsy on their journey to the West (Wu & Lovell, 2021). It is from this point forward in the novel that we see Wukong reflect on his powers and his

ability to do good. This results in him having a revelation that allows him to improve control over his Monkey Mind and is the start of Wukong fulfilling his transition to the hero archetype.

A deeper understanding of Sun Wukong's hero journey can be obtained by applying the three Chinese philosophical doctrines of Confucianism, Daoism, and Buddhism. Firstly, Confucianism is a key doctrine seen throughout *Journey to the West* and embedded throughout Chinese society. Therefore, it encapsulates values that readers can relate to. Confucianism is recognized as a rule-bound philosophy with high levels of respect for authority, and values that conflict with the trickster archetype (Confucius, 2014). For Wukong, his initial disrespect for authority directly conflicts with Confucian values and causes him to face various consequences and battles. Although Wukong strives to gain various titles and powers during the earlier chapters of the book, he is constantly pushing back against authority and showing disrespect. Wukong's mockery of Confucian values results in him being ostracised and punished, most notably by being placed under a mountain. After he begins to transition into the hero archetype, Wukong begins to show more respect and a better following of

Confucian values. This is demonstrated through showing respect to authority and following the five bonds, the Confucian concept that refers to the fundamental relationships that govern social interactions and personal conduct.

After his transition, Wukong demonstrates the Ruler and Subject bond with Tripitaka being his master whom he follows loyally and obeys. This demonstrates that Wukong does not only overcome his Monkey Mind but also begins to respect Confucian values that Chinese readers resonate with (Confucius, 2014; Wu & Lovell, 2021). Furthermore, throughout the text, we also have Daoist values interacting with Wukong. After a Daoist birth from a stone egg, Wukong initially cultivates a strong Taoist identity. He initially pursues the Daoist ideal of immortality in the early chapters of the book. He trains under the Daoist master Puti Zushi who helps him achieve immortality and bestows him with his Daoist title (Sun Wukong) (Laozi et al., 2004; Wu & Lovell, 2021).

Being a Buddhist text, we also see Wukong progress through his hero's journey as more Buddhist ideals are incorporated into his character. After Wukong becomes a Buddhist monk, we see him abandon his

Confucian and Daoist goals of fame and immortality. Instead, he focuses on completing his hero's journey, where he reaches Nirvana and becomes an enlightened being (Watson & Kumārajīva, 1994). We see this in the text as Wukong's Monkey Mind becomes less prevalent, focusing on mental enlightenment and mental cultivation. He consistently becomes more aware of his actions and does his best to follow Buddhist values, which ultimately allows him to reach enlightenment and fully transition to the hero archetype (Leeming, 1981; Wu & Lovell, 2021). The embodiment of these three philosophies throughout *Journey to the West* reflects the Chinese experience and perhaps can begin to explain the novel's popularity as it speaks to the lived experiences and values of its readers. This also means that Wukong's archetypal transformation on his hero's journey throughout the text can be communicated through these values and ultimately be more accessible to the reader.

Wukong's intrinsic factors can also be analyzed through a psychodynamic lens. Freud (1923) proposed that personality is complex and can be seen as three fragmented components called the Id, Ego, and Superego. It was proposed that these components interplay and have their unique contribution

to one's personality and how they interact with the world. The Id is present from birth and is driven by the pleasure principle. This results in the Id seeking instant gratification for one's desires, wants, and needs. Acting on Id alone results in demands being met but this is often done in a manner that is disruptive and socially unacceptable. The Ego is the next aspect to develop, and it ensures that the Id's impulses are expressed in a manner that is acceptable in one's immediate environment. Ultimately, the Ego allows one to function in a socially acceptable manner. The Superego is the last aspect to develop and holds one's internalized moral standards acquired from those around us and society and allows us to act on these standards providing longer-term thinking. This ultimately helps us to make judgments and act on moralistic standards beyond that of the Ego's immediate standards. Freud proposed that a balance between the Id, Ego and Superego creates a healthy personality, and an imbalance results in an unhealthy personality (Boag, 2014).

Applying this psychodynamic approach to Wukong helps us understand his journey from trickster to hero in greater detail. Initially, when Wukong is a trickster we see his Monkey Mind being highly active. This results in him acting out his desires to the detriment

of others, demonstrating little reflection, and expressing narcissistic behaviors. We can see a clear imbalance in his drives, with an overactive Id and a limited Ego and Superego. Even after being placed under the mountain and being freed after the chaos caused in heaven, we still see Wukong acting selfishly and impulsively. He is reluctant to help Tripitaka on his quest and is eventually punished with magic and a head-tightening ring to control his behavior. This ring is symbolic of the Ego as Tripitaka can activate its powers to control Wukong's behaviour. This is coupled with the prior-mentioned experience where Wukong saved the village from Pigsy, he not only demonstrated an extrinsic change, but we also see intrinsic growth. From this point, we begin to see self-reflection in Wukong where he realizes his actions can be moralistic and can help others, potentially reflecting the development of his Ego and Superego. As the novel continues, Wukong becomes more receptive to Tripitaka and helps others. This spiritual enlightenment allows him to develop a stronger moral code and accordingly reign in his Monkey Mind. This reflects Wukong developing his Ego and Superego and regaining control over his destructive Id drives. Wukong ultimately attains enlightenment after demonstrating he

has achieved a stable personality by balancing his Id drives with his Ego and moralistic Superego values (Boag, 2014; Leeming, 1981).

Wukong's advancement from the Monkey Minded archetypal trickster to archetypal hero not only captures many of the complexities in Chinese ideology but also exemplifies the hero's journey and the obstacles one needs to overcome both extrinsically and intrinsically. *Journey to the West* is no doubt a classic Chinese text that is not only an enjoyable read but also offers moments that allow for deep reflection on the psychological and cultural aspects of the text. This conclusion reminds the reader that the actual journey in *Journey to the West* is about the personal transformations that occur on it. Wukong can jump 108,000 leagues and could have reached the West quickly if needed, but if Wukong didn't experience the transformation that we share with him on the journey, a chance for reflection is lost. Hopefully, we can use Wukong's journey as a blueprint in our own lives and allow ourselves to begin working towards reaching our own form of enlightenment.

Acknowledgments: Thank you to Chia-Rong Wu for introducing me to and educating

me on the brilliance of *Journey to the West* and for your encouragement and support in writing this article. As well, I would like to thank Xuechen Xiao, Laika & Bustav, for your

support. Finally, thanks to Johnathon Shine for lending me your copy of *Journey to the West*, much appreciated.

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Atomic Bomb Nationalism: The Construction of the Japanese Postwar Pacifist Identity Through the Hiroshima Peace Memorial Museum

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Abstract

The Japanese national narrative of post-WWII Japan has yet to really evolve since the Cold War. As the only nation in the world to experience an atomic bombing, this has become Japan's prevalent identity. This makeshift identity of atomic bomb nationalism, known informally as "A-Bomb Nationalism," has brought to light an important question: why did contemporary Japan decide to adopt this particular identity of being the only nation to experience an atomic bombing as a new form of nationalism? The goal of this paper is to examine the nature of this question, exploring how A-Bomb Nationalism became an essential

tool belt for being able to bury the ethical questions about war crimes committed by the Japanese Imperial Army during Japan's reign as a colonial power. One can observe the construction of this identity by analyzing media like the Manga/Film *Barefoot Gen* created by Keiji Nakazawa, and through examining the Hiroshima Peace Memorial Museum and how its displays perpetuate A-Bomb Nationalism to greater Japanese society. Through the works of *Hiroshima in History and Memory* by Michael J Hohan, *Resurrecting Nagasaki: Reconstruction and the Formation of Atomic Narratives* by Chad R. Diehl, and *The Victim as Hero: Ideologies of Peace and National Identity in Postwar Japan* by James Joseph Orr (2001), this paper will breakdown the formation, construction, and influence of A-Bomb Nationalism.

Introduction

Postwar Japan found itself in a predicament at the end of World War II (WWII) when it was faced with embracing a new, non-militant identity while still trying to preserve its national pride and patriotism. The devastation WWII brought upon Japan was ridden with tremendous loss, and the emperor's formal surrender left its people

feeling humiliated in front of the world.¹ While the entire nation needed to rebuild, rebuilding the people's spirit was perhaps an even more challenging task. The morale of the population and their national image was completely broken and dispirited. The people of Japan lost faith in their country when it surrendered. Following a treacherous decade of immense suffering and sacrifice, Japan was unsure how to heal from its postwar trauma and move forward as a united nation. The division was felt throughout the country as civil unrest broke out after the war was lost. With time, it became apparent that pacifism would be an easy movement to co-opt when it cultivated an image of global peace and unity. A pacifist front meant regaining respect as a country facing the global community as a reformed nation, being able to embrace new anti-war sentiments while adopting a new national identity that could unite its people again. Postwar Japan created the Hiroshima Peace Memorial Museum as a means to cultivate a new national identity to bury the ethical controversies of Japanese imperialism. This became known as A-bomb nationalism.

On August 6th, 1945, a ten-thousand-pound atomic bomb named "Little Boy" was dropped on the city of Hiroshima, Japan. Three days later, a second atomic bomb named "Fat Man" was dropped on the city of Nagasaki, Japan.² Tens of thousands of lives were lost, and the world was forever changed by the mass annihilation never seen before in human history. The two atomic bombings were the last fatal acts of WWII, marking the end of the Asia-Pacific war that had ties back to the 1930s.³ Much of Southeast Asia fell to the Japanese Empire by the time American forces showed up to fight in the Asia-Pacific war, with Japanese Imperial forces fighting to the death in battles in the Philippines, Saipan, Iwo Jima, Midway Island, Corregidor, Tarawa, Guadalcanal, Okinawa, and Bougainville.⁴ The loss of life consisted of countless soldiers and civilians. The reality of this total war brought unimaginable brutality like the firebombing of Tokyo and the Rape of Nanking.⁵

The inhumanity and decimation that took place cannot be understated when assessing what the world faced when recovering. The atomic bombing of the two Japanese cities led to the Japanese government's surrender on

¹ Hogan, Michael J. 1996. *Hiroshima in History and Memory*. Cambridge [England]; New York: Cambridge University Press, 1.

² *Ibid.*, 1.

³ *Ibid.*, 2.

⁴ *Ibid.*, 2.

⁵ *Ibid.*, 3.

August 10th, 1945, four days after the bombing of Hiroshima.⁶ With all the sacrifices and losses Japan made for the war effort, the American demand for unconditional surrender was daunting and the last thing the Japanese government wanted to do. The Japanese Empire promoted the *kokutai* ideology; believing that Japan's military is equal to the strength of its nation, utilizing this ideology to justify its expansionism and the immeasurable sacrifices of its people.⁷ Japan's leaders led their people to believe that the war was worth fighting to the death for and feared that surrender would mean Japan becoming diminished in the eyes of the people as well as the disintegration of the state.⁸ Sixty-six cities (including Hiroshima and Nagasaki) were bombed, and approximately three million Japanese soldiers, sailors, and civilians were killed between the Manchurian Incident of 1931 (what many consider the beginning of the Asia-Pacific War) and the surrender in 1945.⁹

Japan rooted its national identity in its military and imperial conquest across Asia, but the surrender of WWII meant the

disintegration of its military and its expanded empire. The Japanese people felt deceived by their leaders who led their country into a hopeless war.¹⁰ Frustration in postwar Japan increased drastically because of food shortages caused by the demands of the war and the millions that were left displaced by the bombings.¹¹ The severity of this shortage was especially felt when their resources from occupied lands in Korea, China, and Taiwan were terminated by unconditional surrender.¹² These problems were further aggravated by the repatriation of the Japanese from liberated occupied lands, placing more strain on the already limited resources.¹³ These conditions in postwar Japan led to a collective, widespread despair, a decline in morale, and a deep exhaustion felt among the Japanese population. This was infamously termed the *kyodatsu* condition.¹⁴

With its national sense of pride and spirit broken, the state of postwar Japan was highlighted by what eventually became known as the pinnacle of the nation's anguish, the atomic bomb survivors who became known as the *hibakusha*. The *hibakusha* at first were

⁶ Ibid., 3.

⁷ Ibid., 85.

⁸ Ibid., 107.

⁹ Ibid., 121.

¹⁰ Ibid., 120.

¹¹ Dower, John W. *Embracing Defeat: Japan in the Wake of World War II*. New York: W.W. Norton & Co, 1999, 90.

¹² Ibid., 90.

¹³ Ibid., 54.

¹⁴ Ibid., 229.

gravely neglected, alienated, and had to fight for care immediately after the bombing. The years between 1945 and 1957 became infamously known as the “dark era” due to the lack of national recognition, compensation, and medical benefits for the *hibakusha*.¹⁵ During this time, government officials pursued urban reconstruction priority on historical urban identity rather than the victims of the atomic blasts, leaving the *hibakusha* with little to no support in terms of commemoration, psychological healing of their trauma, and their radiation illnesses (known as *genbakushō*).¹⁶ The *hibakusha* were forced to fend for themselves due to absent relief by their government and had no choice but to organize amongst themselves to engage in relief efforts to help one another.¹⁷ The Japanese government refused to see the *hibakusha* as different from other war survivors, so the lack of recognition prevented them from receiving any proper government support for their medical costs.¹⁸ For the entire first decade after the atomic bombings,

aid to the *hibakusha* were extremely limited.¹⁹ Since the struggle for state care was futile, many self-help groups emerged in response to provide relief and minimal medical care, but they were not enough.²⁰

Many *hibakusha* experienced a fracturing of identity in response to their trauma. This includes Mieko Hara, a young *hibakusha* from Hiroshima known for her statement: “*The Mieko of today is completely different from the Mieko of the past.*”²¹ This profound sense of disjuncture was felt worldwide due to the holocaust in Europe and the nuclear genocide of Hiroshima and Nagasaki; the fearsome changing reality signified the end of modernity as it had always been known.²² While this shift in the world was felt globally, Japan’s situation was unique being the only country to ever experience nuclear destruction; and for the years immediately following, they were not allowed to publicly engage with the meaning of this new identity because of US censorship restricting press and

¹⁵ Diehl, Chad R. 2018. *Resurrecting Nagasaki: Reconstruction and the Formation of Atomic Narratives*. Ithaca: Cornell University Press, 119.

¹⁶ *Ibid.*, 119.

¹⁷ *Ibid.*, 122.

¹⁸ *Ibid.*, 119.

¹⁹ Orr, James Joseph. 2001. *The Victim as Hero: Ideologies of Peace and National Identity in Postwar Japan*. Honolulu: University of Hawai'i Press, 142.

²⁰ *Ibid.*, 142.

²¹ Hogan, Michael J. 1996. *Hiroshima in History and Memory*. Cambridge [England]; New York: Cambridge University Press, 116.

²² *Ibid.*, 116.

discourse on the bombs out of fear of civil unrest during the US occupation.²³

The *hibakusha* were rendered silent and ostracized in various ways. Those with scarred bodies in particular did not fit into reconstruction narratives since Japan only wanted “hygienic” bodies to represent the nation in forging their new alliance with the US.²⁴ In addition to this rejection of their bodies, the *hibakusha* endured the scorn of their fellow citizens for being walking reminders of the country’s defeat and for the fear of contagiousness from their post-atomic sicknesses.²⁵ In response, many *hibakusha* decided to fight for both social and political acknowledgment of their exceptionally traumatic circumstances by coming together and forming multiple activist groups.²⁶

Hibakusha activist groups promoted an atomic narrative pushing a focus on human suffering and the remembrance of it.²⁷ They argued that they represented an essential reality of postwar Japan as the totally guiltless and innocent who had the atomic bomb dropped on them by America amid the war and were

now forced to face this tragic fate they never asked for.²⁸ This emerging rhetoric posed *hibakusha* relief as an ideological weapon against Japan’s budding alliance with the US.²⁹ Before the occupation censorship, the *Asahi* newspaper even ran a vivid article about the hatred of Americans being visible in the eyes of the *hibakusha*.³⁰

The *hibakusha* could not grieve publicly due to US occupation censorship, and this inhumane act of not being able to have a public voice was compounded by the unparalleled calamity of the Japanese government and the absence of any substantial government aid.³¹ The American-sanctioned isolation of the *hibakusha* in their own society caused deeper psychological trauma through the psychic numbing of their agony. Both Japanese and American press frequently used the phrase “*shikata ga nai*”, translating roughly to “nothing can be done about it” to accentuate the people’s resignation and acceptance of the harsh occupation conditions.³² Censorship continued until late 1948 and paved the way

²³ Ibid., 117.

²⁴ Diehl, Chad R. 2018. *Resurrecting Nagasaki: Reconstruction and the Formation of Atomic Narratives*. Ithaca: Cornell University Press, 119.

²⁵ Ibid., 120.

²⁶ Ibid., 120.

²⁷ Ibid., 120.

²⁸ Orr, James Joseph. 2001. *The Victim as Hero: Ideologies of Peace and National Identity in*

Postwar Japan. Honolulu: University of Hawai’i Press, 143.

²⁹ Ibid., 143.

³⁰ Hogan, Michael J. 1996. *Hiroshima in History and Memory*. Cambridge [England]; New York: Cambridge University Press, 119.

³¹ Ibid., 126.

³² Dower, John W. *Embracing Defeat: Japan in the Wake of World War II*. New York: W.W. Norton & Co, 1999, 91.

for numerous media materials about the *hibakusha* to be created.³³

The 1983 anime Barefoot Gen (*Hadashi no Gen*), based on Keiji Nakazawa's 1970s manga of the same name, is about a fictional, pacifist family in Hiroshima who ended up becoming *hibakusha* after the bombing. The animated film depicts an adolescent boy named Gen and his family, the Nakaokas, who are portrayed as resilient, peaceful individuals that hold personal anti-war sentiments. Their lives are turned upside down by the unspeakable horrors of the bomb that destroys their city and home. Gen and his pregnant mother watch his father and siblings perish in the fires of their bombed home. The shock of watching them die causes Gen's mother to give premature birth to his infant sister. Post-bombing, Gen and his mother struggle to survive and receive aid, they witness *hibakusha* who've become horribly disfigured by the explosion and take in an orphaned boy named Ryuta. Gen rummages through the wreckage to find scraps of food and looks for work with Ryuta to earn money for food and milk for his mother and infant sister. Gen loses

his hair due to atomic bomb sickness and isn't able to get the milk in time for his sister who died of malnutrition.

Similarly, Odagiri Hideo's film Twenty-Four Eyes (*Nijuushi no Hitomi*) plays on similar themes of adolescent suffering and has become widely regarded as one of the most successful anti-war works in postwar Japan.³⁴ Twenty-Four Eyes presents the people of Japan at the mercy of the growing brutal hyper-militant system which offered no respite from poverty and war violence, forcing everyone into a seemingly inescapable victimhood.³⁵ In these postwar stories like Barefoot Gen, Twenty-Four Eyes, and countless others, children play an indispensable role as the archetype of pure victimhood.³⁶ The viewers of these stories are drawn to identify the children's innocent detachment from their gruesome reality but also witness how the child characters are free to express their joy and sadness without fear of censure, playing on the raw and unrefined emotions of the human experience.³⁷ These perceptions gave greater concreteness to the victim consciousness and worked to cement a

³³ Hogan, Michael J. 1996. Hiroshima in History and Memory. Cambridge [England]; New York: Cambridge University Press, 129.

³⁴ Orr, James Joseph. 2001. The Victim as Hero: Ideologies of Peace and National Identity in

Postwar Japan. Honolulu: University of Hawai'i Press, 109.

³⁵ Ibid., 110.

³⁶ Ibid., 110.

³⁷ Ibid., 110.

national fixation on Japan's nuclear victimization.

Victim consciousness (*higaisha ishiki*) is a popular euphemism in postwar works, and atomic bombs occupy a central place in this consciousness.³⁸ From this viewpoint, nuclear victimization spawned new forms of nationalism in postwar Japan, a neo-nationalism that coexists in complex ways with antimilitarism.³⁹ This new form of Japanese nationalism can be adequately labeled as "atomic bomb nationalism" or "A-bomb nationalism" for short. The trauma of nuclear devastation and unconditional surrender reinforced an abiding sense of Japan's peculiar vulnerability and victimization as the bombs came to represent the war as a fundamentally Japanese tragedy.⁴⁰ Hiroshima and Nagasaki became icons of Japanese suffering, serving as perverse national treasures that encapsulate the Japanese memory of the war while simultaneously blotting out recollections of the Japanese victimization of others.⁴¹ In the consciousness of A-bomb nationalism, the

bombs are almost regarded as if they were natural disasters rather than man-made ones.

The effect of the SCAP censorship is prevalent when observing how America remains relatively absent from the works of A-bomb rhetoric.⁴² The idea of presenting Hiroshima as a "city of peace" was supported by the US occupying forces to minimize their own role and guilt in that destruction, while also successfully promoting the creation of a Japan that is non-threatening and has "moved on" from its past to become a new champion of peace. The US deliberately installed these anti-war sentiments from the beginning when encouraging the Japanese emperor to address a formal surrender to the entire nation; his sacred decision (*seidan*) was the beginning of his national image rebranding as a pacifist and benevolent sage.⁴³ There is also inescapable difficulty in assigning total guilt to the victors who are now Japan's ally, which renders the nuclear bombing to be interpreted as a faceless crime against humanity that is absent of a perpetrator; but effectively absolve the state's war crimes by attempting to bolster the universality of human suffering to be an

³⁸ Hogan, Michael J. 1996. *Hiroshima in History and Memory*. Cambridge [England]; New York: Cambridge University Press, 123.

³⁹ *Ibid.*, 124.

⁴⁰ *Ibid.*, 123.

⁴¹ *Ibid.*, 123.

⁴² Orr, James Joseph. 2001. *The Victim as Hero: Ideologies of Peace and National Identity in Postwar Japan*. Honolulu: University of Hawai'i Press, 57.

⁴³ Hogan, Michael J. 1996. *Hiroshima in History and Memory*. Cambridge [England]; New York: Cambridge University Press, 115.

inevitable symptom of war that all must accept. It can be understood as a way of avoiding accountability through claims that the playing field had been evened out or even canceled out. By globalizing human suffering as a monolith, it conflicts with the very idea of having to answer for crimes that were committed by the Japanese Imperial Army.

This convenience of self-focused suffering to dismiss the inflicted suffering on others became the new national face, and the Hiroshima Peace Memorial Museum is no exception to this. The Hiroshima Peace Memorial Museum was founded in August of 1955 and became the first national coalition against atomic and hydrogen bombs.⁴⁴ The museum itself gives national coherence to the antinuclear movement on a professional political scale which casts new questions about the human cost of the bombs.⁴⁵ The establishment of professional peace in politics gave legitimacy that was transformative for the a-bomb consciousness; it had now become more fully realized in ways that paved a new global spotlight. The early conception of this was even proposed by Mamoru Shigemitsu, Prime Minister April 20, 1943 – April 7, 1945,

who authored an early internal memorandum explicitly proposing that the Japanese use the atomic bombs as counterpropaganda to Allied accusations of Japanese war crimes.⁴⁶ The formal political recognition and backing were essential for reinforcing a national image that opposed nuclear violence. The Hiroshima Peace Memorial Museum portrays the pain of the *hibakusha* by filling its galleries with their records, belongings, photographs, testimonies, essays, and more. However, from start to end, it fashioned their victimhood to be completely detached from Japan's wartime aggression. The entrance to the museum begins with the introduction:

*"A single atomic bomb indiscriminately killed tens of thousands of people, profoundly disrupting and altering the lives of the survivors. Through belongings left by the victims, A-bombed artifacts, testimonies of A-bomb survivors, and related materials, the Hiroshima Peace Memorial Museum conveys to the world the horrors and the inhumane nature of nuclear weapons and spreads the message of 'No More Hiroshimas.'"*⁴⁷

This opening sets the atmosphere with themes of sweeping humanism that are

⁴⁴ Ibid., 137.

⁴⁵ Ibid., 137.

⁴⁶ Ibid., 117.

⁴⁷ Hiroshima Peace Memorial Museum Virtual Museum. Naka Ward, Hiroshima, Japan.

Established August 1955.
http://www.pcf.city.hiroshima.jp/virtual/index_e.html,
 Introductory Exhibit.

almost indisputable. By phrasing that the bomb “indiscriminately” killed thousands, it effectively reimagines Japan’s experience as a ubiquitous human experience. The use of “inhumane nature” to describe nuclear weapons strikes a critical declaration that nuclearism and humanism are inherently incompatible ideologies. The message of “no more Hiroshimas” connects the museum observer to the broader understanding that what happened to Hiroshima can happen anywhere. It invokes a passive call to action that one must be opposed to nuclearization in order to care about the good of humanity. There are many ways to break down this opening passage, but the political implications of where it stands are undeniable. This is followed by the first section the museum brings its visitors called, “The Devastation on August 6” which opens with:

“The city was instantly destroyed by the atomic bomb, and many people were killed not knowing what had happened to them. Those who escaped death were fleeing fires in confusion with their appearance completely changed – the faces were swollen by the burns, the peeled skin was hanging down, and the bodies were covered with blood.”⁴⁸

⁴⁸ Ibid., Hiroshima on August 6 Exhibit.

This exhibit caption immediately highlights the scarred bodies of the *hibakusha* at the forefront. The use of graphic language to describe the conditions of their bodies invokes highly explicit imagery to its observers coupled with graphic illustrations and sculptures of them. This speaks to how the scarred bodies of the *hibakusha* became relevant in discussions of the war and the atomic bombings only after antinuclear activism and nuclear victimhood became key components of national narratives.⁴⁹ The other written statements within this exhibit put further emphasis on this concept:

Relief stations were temporarily set up in locations, such as foots of bridges and schools. They soon became flooded with victims groaning for water. Medicine and other supplies were scarce. Laid on straw mats, the injured died one after another without receiving adequate medical treatment. The atomic bomb destroyed the relief system of Hiroshima. City and prefectural government functions were lost, and communication and transportation were paralyzed. Despite the turmoil, military personnel, including the Army Marine Headquarters (commonly known as Akatsuki Corps), surviving doctors, and police

⁴⁹ Diehl, Chad R. 2018. *Resurrecting Nagasaki: Reconstruction and the Formation of Atomic Narratives*. Ithaca: Cornell University Press, 120.

*officers took the lead to carry out their relief efforts from the very day of the bombing.*⁵⁰

These vague reports of the relief system mention the lack of adequate medical support without any actual proper explanation of why *hibakusha* were neglected by their government. The only reasoning it provides is “the atomic bomb destroyed the relief system of Hiroshima” which doesn’t give the full picture nor acknowledgement of the way the Japanese government failed to help the *hibakusha* in their greatest time of need. It describes city and prefectural government functions as lost while paying no mention to the lack of efforts made by central powers of the state. This selective account of the lack of relief paints the situation as if nothing more could have been done by Japan’s leadership. Likewise, this exhibit illustrates a similar image of the children *hibakusha*:

*“On the morning of August 6, thousands of students were exposed to the atomic bomb while engaging in building demolition work outside. Suffering severe burns, they died in pain and agony.”*⁵¹

This description of the children’s school uniforms plays on the pathos of their pain and agony. As mentioned before, the depiction of

adolescent suffering plays a particularly crucial role as the archetype of innocent victimhood. The involvement of children truly marks the atomic blasts as profoundly tragic. However, the problem arises when tribute is only paid to Japanese children and not the victimized children that were killed by the Japanese Imperial Army during the Asia-Pacific war. When only Japanese families are depicted as innocent victims of the atomic bombing without being balanced by any representations of Japanese aggression and the atrocities of total war, the full scope of the war’s carnage is missed. The selective memory indulges in the universalist discourse of humanity by ignoring factors of total war conditions which prompts the phantasm of Japanese civilian innocence. This kind of narrative results in the fusion of Japanese atomic victimization and victims of Japanese aggression in WWII which effectively erases the colonial victims of Japanese imperialism. The memory and commemoration of non-Japanese suffering become overshadowed when the emphasis is only geared towards centering Japanese suffering.

As the memory of the Asia-Pacific war continues to be defined as a war between

⁵⁰ Hiroshima Peace Memorial Museum Virtual Museum. Naka Ward, Hiroshima, Japan. Established August 1955.

http://www.pcf.city.hiroshima.jp/virtual/index_e.html, Hiroshima on August 6 Exhibit.

⁵¹ Ibid., Hiroshima on August 6 Exhibit.

America and Japan, it is important to recognize all aspects that came with this dichotomy. One aspect of this relationship is that the memory of Japan's imperialism has been heavily reimagined into that of a unique primary victimhood of the atomic bombs. This narrative benefits Japan immensely, and Japan has been criticized for not taking the task of elevating marginalized memories of Japan's imperialist policy seriously. Examples of this include 800 million dollars paid to the Republic of Korea (ROK) in a treaty so that the ROK would drop claims of wartime atrocities with Japan, as well as various other nations in the Asian-Pacific that had been affected by Japanese imperialism who Japan had been able to get to drop charges and claims against.⁵² Post-1945 Japan had managed to continuously ignore the issues of those most directly injured by finding ways to pay for economic reconstruction instead.⁵³

As discussed earlier, the victimized *hibakusha* became increasingly useful to the narrative of A-bomb nationalism. During the "dark era," the *hibakusha* were essentially invisible in the eyes of government support.⁵⁴

⁵² Hogan, Michael J. 1996. *Hiroshima in History and Memory*. Cambridge [England]; New York: Cambridge University Press, 170.

⁵³ *Ibid.*, 171.

⁵⁴ Diehl, Chad R. 2018. *Resurrecting Nagasaki: Reconstruction and the Formation of Atomic Narratives*. Ithaca: Cornell University Press, 117.

Their role in aiding the creation of A-bomb nationalism was not clearly defined, nor did it seem wanted in the immediate years following Japan's surrender. In addition to the social stigmatization of the *hibakusha*, it wasn't until 1978 that the Supreme Court ruled in favor of a Korean *hibakusha* whose benefits had been denied.⁵⁵ In their ruling, the court declared that aid for *hibakusha* was fundamentally the state's responsibility. Over time, the victimized identity that the *hibakusha* represented would end up earning the sympathy of the international community and thus garner a pacifist role that distanced Japan from questions of post-war responsibility.⁵⁶

Another way the legacies of the Hiroshima Peace Museum and A-bomb nationalism influenced the public was through education. Starting in 1955, not long after the Lucky Dragon incident in 1954, the Japanese government took steps to change the process by which social studies textbooks were approved.⁵⁷ With this change, the panelist then chose to review textbooks that had notably conservative thinkers installed.⁵⁸ The

⁵⁵ Orr, James Joseph. 2001. *The Victim as Hero: Ideologies of Peace and National Identity in Postwar Japan*. Honolulu: University of Hawai'i Press, 147.

⁵⁶ *Ibid.*, 170.

⁵⁷ *Ibid.*, 89.

⁵⁸ *Ibid.*, 90.

revisionist impact of the new certification process is most noticeable in *Kyōiku Shuppan's* sixth-grade textbook describing narratives of the Japanese and Asian people's victimization both being at the hands of the Japanese military.⁵⁹ Accompanying this change in the selection process, was the increased pressure to display Japanese atomic victimhood.⁶⁰

Japan has agreed to actively participate in the act of historical revisionism by not adequately discussing its role as the colonialist aggressor, silencing its former colonial subjects across the world. As much of the time, money, and energy has gone into breaking down Japan's conflict with America only, the conflicts Japan had in the Asia-Pacific outside of the scope of their relationship with the US become further decontextualized. It is thus important to understand the marginalizing experience created by Japan in its attempts to define itself as the primary victim and how this identity has come at the continued expense and marginalization of its former colonial victims.

⁵⁹ Ibid., 90.

⁶⁰ Ibid., 85.

⁶¹ Hayashi, Hirofumi. "Disputes in Japan over Japanese Military 'Comfort Women' System and Its Perception in History." *The Annals of the American Academy of Political and Social Science* 617, no. The Politics of History in Comparative Perspective (n.d.), 123.

The ability of Japan to develop a pacifist and victimized identity has resulted in the denial of marginalized experiences like that of the "comfort women". This includes former Prime Minister Abe's comments in 2007 denying Japanese military involvement in coercing women into sexual slavery in service to Japanese military personnel.⁶¹ With this, thousands from China, Hong Kong, Indonesia, Korea, the Philippines, and Taiwan, in addition to some in the Netherlands and the United Kingdom filed a lawsuit against the Japanese government in the early 1990s.⁶² These represent a select few of the various grievances and damages that the plaintiffs wished to seek reparations for.

Japan's lack of concern for those directly impacted by wartime aggression also in changing the legal status of Korean and Taiwanese servicemen and civilian contractors to be considered "aliens" due to the 1947 Alien Registration Law.⁶³ As a result of this, Korean and Taiwanese people who would've been eligible for postwar aid were denied it unless they had applied for Japanese naturalization.⁶⁴ Thus, the same legal status

⁶² Hogan, Michael J. 1996. *Hiroshima in History and Memory*. Cambridge [England]; New York: Cambridge University Press, 168.

⁶³ Ibid., 170.

⁶⁴ Ibid., 170.

that was stripped from them became the very grounds upon which they could receive rightful reparations. To further exacerbate the myriad of struggles placed before them, the decision as to whether or not they would receive naturalization was at the discretion of the Japanese government.⁶⁵ Ultimately, the erasure of these memories and the inflicted trauma from war crimes can be understood as the primary purpose of A-bomb nationalism.

A-bomb nationalism frames Japanese civilians and colonized victims alike as shared sufferers of war, glossing over the active role Japan played in orchestrating the vile nature of its total war. From the Japanese Imperial Army's earliest pursuit of the Asia-Pacific war, its forces had excessively killed noncombatants intentionally as evident in the Rape of Nanking. The nuclear bombing of Hiroshima and Nagasaki indiscriminately killing noncombatants was already a symptom of the total war that Japan manifested. Japan's inauguration of the Hiroshima Peace Memorial Museum gave the nation an

exclusive and seductive claim to leadership of the world anti-nuclear weapon movement.⁶⁶ Cabinet ministers routinely declare Japan as the "only country in the world to have suffered an atomic bombing" (*sekai yuiitsu no hibakukoku*) branding the *hibakusha* as special symbols of the nation that the museum commemorates.⁶⁷ The Hiroshima Peace Memorial Museum is only one medium of many that perpetuates the A-bomb nationalism narrative and until Japanese people can become cognizant of how a victimized national identity causes historical amnesia that prevents the restitution of dignity for the victims, Japan as a nation has yet to rightfully amend their war crimes. In conclusion, if A-bomb nationalism continues to reconstruct Japan's memory of the war as being a victim rather than an aggressor, then the inability to reconcile the conflict between the corrupted memory and identity will only persist to plague the nation with intergenerational historical amnesia.

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⁶⁵ Ibid., 170.

⁶⁶ Ibid., 36.

⁶⁷ Ibid., 37.

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What Happened in Xinjiang to the Uyghurs? An Overview of the Chinese Government's Role in the Uyghur Genocide

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Abstract

The Uyghur population in China is a small ethnic minority group that differs from the Han Chinese majority population in language, culture, and socioeconomic structure. Geopolitical and ethnic differences create a unique relationship between China and the Xinjiang region that some scholars have described as rooted in colonialism. China has vested economic interests within the region, and this coupled with other factors has led to Uyghur internment in camps, which the Chinese government proclaims to be a “vocational training camp”. Regardless of its true premise, Uyghur internment

camps are the largest incident of ethnic internment since World War II. Yet there has been a severely disproportionate response from the international community relative to previous occurrences of ethnic genocide. This has enabled the Chinese government to continue running these camps without compelling repercussions that aim to eradicate the practice.

This study aims to understand the motivating factors behind the Chinese government's attitudes and policies toward the Uyghur population. Existing literature suggests that there are a variety of reasons for these policies, including anti-terrorist initiatives, economic growth, and geopolitical, and cultural factors that contribute to the Chinese government's justification for these policies. These actions committed against the Uyghurs are particularly heinous due to the nature of systematic destruction that the Chinese policies bring to fruition. Examination of these policies shows that withholding consequences or criticism of the Chinese government for inciting these policies will lead to the ultimate erasure of the entire Uyghur population, cultural traditions, and identity.

Introduction

The occurrence of an ethnic genocide is not a novel one, including Darfur in Western Sudan, the genocide in Rwanda, to Israel's occupation of Palestinian territories. Most recently, there have been reports of cultural erasure and genocide of the Uyghur population in China. The Uyghur ethnic group traces its origins to the 8th century CE and is a Turkish-speaking group that is primarily Sunni Muslim (Brose, 2017). The Chinese Uyghur population resides within the Xinjiang Uyghur Autonomous Region. They differ from the Han Chinese majority population in language, culture, and socioeconomic structure. The population within the Xinjiang region is currently estimated to be around 25 million, and half of those citizens are Uyghur. Relative to China's current total population of 1.4 billion, the Uyghur group comprises less than 1% of the total population.

Outside of China, the term Uyghur was unfamiliar until 2017 when news of Uyghur internment camps, referred to as "vocational training camps" first began circulating in the media. The details at first were vague, and over time more details regarding the exact treatment of the Uyghur population have been gleaned

from independent surveillance efforts, first-hand eyewitness accounts, and leaked government documents. However, efforts to condemn these actions and consequently raise the international status of this occurrence to ethnic genocide, have been difficult to determine and categorize. The United Nations defines ethnic genocide as "any of the following acts committed with intent to destroy, in whole or in part, a national, ethnical, racial or religious group, as such: (Killing members of the group; Causing serious bodily or mental harm to members of the group; Deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part; imposing measures intended to prevent births within the group; Forcibly transferring children of the group to another group)" (United Nations, 1948, 1).

There are three primary reasons why some countries have difficulty in assigning this definition to what has occurred in Xinjiang. The first is that China has stringent control over its media, and sources from firsthand witness accounts are difficult to verify (Hill, 2021). Second, there is a complex and nuanced shared history between the Han majority and the

Uyghur population that must be understood to try to make sense of this conflict. Third, China is a formidable economic player, and countries that benefit from their economic relationship with China may be hesitant to condemn China's actions because of the possible economic loss. Globalization of the economy and China's coercive practices has disincentivized many nations from responding to the reported abuses. The Chinese government has stated that these camps are the result of an anti-violence, anti-terrorism campaign. However, analysis of the impacts of these labor camps has shown evidence supporting the premise that this policy has benefited the economy more than it has prevented Uyghur terrorism (Boehm, D., 2009, p. 81). Economic factors alone are not sufficient to explain the treatment of the Uyghur population but reports on happenings within the camps reveal human rights violations that extend beyond a government wanting to quell disruption from an ethnic group for the sake of economic advancement. In this essay I argue that the culmination of these factors interacting with one another creates a set of circumstances requiring a multi-faceted approach to examine the motivations for

creating these labor camps and if they will continue to occur in the future.

Literature Review

Introduction

China has an idiosyncratic relationship with Xinjiang. This region is like that of a country and its colony, but this differs from European colonialism in that the two are close in proximity and those residing within the "colony" are not migrants from the mother country, but rather an entirely different ethnic group. The effects of imperialism have an enormous influence on the way that modern China has control over that area (Roberts, 2020, p. 23). The means that China exploits natural resources and human labor without granting proper representation within government is analogous to the way that Great Britain took advantage of the American colonies. The relationship between the two regions is heavily influenced by their complex shared history, geopolitical and economic factors. Deep seeded differences between the two groups are often the cause of social friction, which is only exacerbated by the exploitation of the natural resources found within Xinjiang. Economic factors, coupled with the complex history rooted in ethnic tension

have created extenuating circumstances that have allowed for this occurrence to take place.

Xinjiang's Economic Importance

Xinjiang is crucial for China's energy production, as the primary industries within that region are oil and gas which contributes to around 60% of Xinjiang's gross regional product. Xinjiang is so rich in oil and gas that China has made investments in large-scale infrastructure projects that create pipelines extending from Xinjiang to major coastal cities like Shanghai, and the regional economy is now significantly tied to resource production (Cao, X. et al., 2018, p.131). Alongside oil and gas, the region also produces substantial amounts of cotton. 20% of the world's cotton comes from China, and the Xinjiang region produces 84% of that. Their participation within the manufacturing sector has been proven to be beneficial to over 80 global companies, including Abercrombie and Fitch, Nike, Mercedes-Benz, etc. (Save Uighur, 2020). This resource-centric economy has inadvertently contributed to growing tension within Xinjiang and adds another layer of complications. Profits from these industries are not shared with the Uyghur population and instead go to Han-

dominated government-contracted firms that cause a large influx of Han people and exploit the region's wealth without investing any capital in Uyghur priorities and interests. Today, approximately 40% of the population within Xinjiang are Han citizens (Congressional Primer). Both factors have fostered resentment toward the Uyghur population and fueled ethnic conflict. This is part of the premise some scholars employ when arguing that the CCP (Chinese Communist Party). Instead, it has intensified and become more stringent in nature (Munro, 2020).

The Belt and Road Initiative (BRI) was created by the Chinese government in 2013, a year before Uyghur internment began. Cotton manufacturing and fossil fuel extraction are major contributors to the economy in Xinjiang, but there is an economic initiative that China has taken on that may precede these industries in importance and scale to the Chinese government. The BRI is an initiative aiming to create infrastructure and trade links between East Asia and Europe via land and sea routes that will benefit both parties and deepen economic integration and geopolitical relationships. Xinjiang is crucial to this initiative, as the BRI has six "corridors" that link China with

surrounding countries, three of which run through Xinjiang. This places the political stability of Xinjiang and its residents as a priority for the Chinese government, as Beijing fears that instability in the region could have negative effects on surrounding countries, like Tibet, Mongolia, and Taiwan (Davis, V.W., 2008). The government fears that the BRI could create opportunities for violence if there are other Muslim populations and influences entering the area.

To sequester this population, the Chinese government has implemented stringent control, rounding up members of the Uyghur population and forcing them to succumb to various checkpoints and surveillance. The surveillance extends beyond “physical monitoring and forced kinship but also automated, technology-driven tools such as GPS (Global Positioning System) tracking, voice and facial recognition technologies, machine learning algorithms, and other software and hardware.” The Chinese government argues that these surveillance efforts coupled with the internment camps and subsequent factory work is key in helping the Uyghur population assimilate into the Han population and are a legitimate part

of the Strike Hard Against Terrorism initiative.

Ethnic Separatism and Counter-Violence Initiatives

This economic exploitation, alongside differences in culture and ethnicity, are factors that culminated in separatist sentiments found within both the Han Chinese and Uyghur population. Cultural and political dissonance and exploitation of the Uyghur population are found at the root of this problem. The Uyghur population has always maintained its own distinctive culture and religious practice outside of the Han majority. This difference has led to ethnic separatism, defined as “the process whereby an ethnic group (nation) dissatisfied with any combination of social, economic, and political conditions in the country in which it is located undertakes moves toward greater autonomy from the central government of a state, or even secession.” In the case of the Uyghur population and China, ethnic separatism refers to the various feelings belonging to the Han majority and the Uyghur population regarding the existence of the Xinjiang region within China. Such sentiments range from wanting Xinjiang to be a separate state, to some Uyghurs wanting

to assimilate into the Han majority. There is no singular agenda that the entire Uyghur population agrees upon, which also means that there is little reason to believe that there is currently an organization of the entire Uyghur population to secede from China nor mobilize efforts to attack the Chinese government. This calls into question the legitimacy of China's claims that these actions are being taken to counter-terrorism, as it's unclear what violence they are trying to prevent.

The Uyghur population's distinctive and vibrant culture is centered around religion and has survived many attempts of oppression brought forth by the Chinese government. In October of 1949, Mao Zedong decided that the Xinjiang region would also fall under Chinese control after declaring the formation of the People's Republic of China. To promote ethnic equality, Mao recognized the Uyghur population as one of the many ethnic minority groups in China in 1954. Over a decade later in 1966, Mao enacted policies that were supposed to act as a catalyst for renewal and sought to destroy everything that resembled the traditional way of life within China. The Xinjiang region was not exempt; where there once

stood mosques were now buildings for the Communist party, religious texts, and Uyghur-language books were deemed anti-revolutionary and were subsequently confiscated and destroyed (Ponka, T.,2019, p. 36). In addition, millions of youths in China were sent to do hard labor in the countryside, including in Xinjiang. Mao referred to this as "reeducation". However, the most recent slew of acts of oppression from the Chinese government is the most significant and is a result of the Strike Hard against Violent Terrorism initiative that launched in 1996 (Boehm, D.,2009). In remarks made by Wang Yi, the State Councilor and Foreign Minister of China, in a meeting with The United Nations Human Rights Council, Yi claimed that the placement of the Uyghur population into the reeducation camps was for the purpose of "countering violent terrorism and separatism" as per the Strike Hard initiative (Ministry of Foreign Affairs of the People's Republic of China, 2021).

The Strike Hard against Violent Terrorism initiative allegedly identifies and eradicates threats of violence within China in a precise and in-depth manner. This initiative was traditionally used as a framework for isolated conflicts between the Uyghurs and Han majority. Whereas it

has historically been utilized on a case-by-case basis since 2017, multiple reports came out regarding the mistreatment of the Uyghur population. According to the Chinese Government's 2019 White Paper on re-education camps, there are three types of individuals who would be sent to the camp. The first are those that have been convicted of extremist/terrorist crimes and are assessed upon completion of their sentence, whether they are a continuing threat to society or not. The second are those who have been coerced into participating in terrorist activities or those that have participated in terrorist activities that are not serious enough to be considered a crime. The last category comprises people who participated in terrorist or extremist activities that posed a real danger but did not cause actual harm (United Nations Human Rights Council, 2022, p.12). However, this is a façade used by the CCP to persecute and mistreat the Uyghur population, as ordinary Uyghur citizens are being brought into these internment camps based on practicing Islam without undergoing due process and the people who are brought into these camps do not fall within these categories.

Uyghur Internment

These camps were unusually not acknowledged as “vocational re-education camps” by the Chinese government until 2018, a year after allegations began to surface, and only after satellite images from the Australian Strategic Policy Institute revealed 85 camps with barbed wire and watchtowers in the Xinjiang region. If they were innocent vocational training camps as proclaimed by the Chinese government, then an investigation conducted by a third, independent party would not have been necessary. The most compelling piece of evidence that these detention centers are for more than re-education and are committing serious human grievances being committed comes from six leaked Chinese government documents, later called the China Cables, by the International Consortium of Investigative Journalists (ICIJ). The ICIJ received these documents from a chain of exiled Uyghur individuals. The first document is a telegram from the Communist Party Commission in charge of Xinjiang's security. The telegram essentially acted as an operation manual for running the internment camps. Marked as secret, it was received and approved by Zhu Hailun, who was the deputy secretary of Xinjiang's Communist

Party and the top security official for the region.

The document is addressed to the Party's Political and Legal Affairs Commission of the Yili Kazakh Autonomous Prefecture, and five main broad initiatives are outlined within the document. The first initiative is to ensure that these re-education camps are safe, but upon reading the document, it is evident that these protocols don't typically run a safe facility. The manual's second point under this portion of the initiative outlines the importance of preventing Uyghurs from escaping the camps and methods of surveillance to ensure Uyghurs stay within the camp. The point that immediately follows is titled "Prevent Trouble" and instructs officers to have full video surveillance coverage constantly in dorm rooms and classrooms without blind spots, and to "evaluate and resolve students' ideological problems and abnormal emotions at all times" (Zhu, 2017, pg.1)

The second main initiative outline encompasses methods of culture erasure and propaganda tools used to spread Han Chinese culture and language within the detention centers. Uyghurs are punished for speaking any language other than

Mandarin and are forced to learn the language within classrooms, even being subjected to tests. The wording of the document is troubling, as this document also urges the officers to pay attention to the psychological nature of the "students" as they are called within the document. It is important to note that this document is incredibly thorough and has extremely specific instructions that are meant to eradicate any semblance of Uyghur culture within the camps. The stringent methods of control and psychological torture that this population was subjected to are sure to corrode one's cultural and ethnic identity in a pervasive and devastating manner. This document creates a clear picture of the Uyghur genocide.

In addition to the telegram were four "bulletins," secret government intelligence briefings that come from a centralized data collection system. Bulletin #2 was disseminated on June 16, 2017. Labeled confidential and accompanied by a handwritten note authored by Zhu Hailun, urging the bulletin be hastily distributed to various commissions so that "examinations" could be arranged. It then goes on to discuss the applications of Uyghur citizens for Chinese visas. The

next bulletin, #9, is a brief about suspicious bank activity within counties in the Xinjiang region, where the same ID was used by an individual to open and shut a bank account at least three times. The conclusion of bulletin #9 was that the activity was flagged for being suspicious terrorist activity, and that immediate action should be taken to address it in accordance with the law and to report back with an update within three days of detaining the citizens. There was no instruction to question the apprehended citizens, but that this action was sufficient to qualify as suspected terrorist activity and is considered sufficient to detain them.

Bulletin #14 is the third of the four bulletins acquired, and it was released on June 25, 2017. It covers discrepancies in surveillance data on certain individuals whose addresses are not up to date or citizens whose cell phones that are not registered with real names match government identification. Six key issues are listed. The response to these discrepancies the CCP implements to fix this issue, culminating in tighter documentation and verification of identity and control within the region. Bulletin #20 was written four days later on June

29, 2017. The bulletin warns Chinese officials of a new software created called "Kuai Ya," which the government claims spreads audio and video with violent terrorist characteristics. The bulletin lists the exact number of users of this software in each county and states that users are terrorists of the states and that they too are taken into the camps.

Assuming that the detention of this ethnic group within these "vocational camps" is a legitimate result of this anti-terrorism initiative, this does not entirely justify the severity of human rights violations the Chinese government is committing. Members of the Uyghur population were rounded up by the Chinese government into proclaimed "re-education camps" under the guise that the Uyghur population would be able to learn methods that would help them better participate in the economy. They were instead placed in internment camps where their most rudimentary human rights were consistently violated. Reports indicate there are many human rights abuses within the camp, including physical and psychological torture, forced sterilizations, organ harvesting and other human rights travesties. Thus, some scholars have gone as far as to call upon

the international community to recognize this as the “Uyghur Genocide” and as a form of cultural genocide.

There have been numerous reports from these camps that the CCP has continuously violated the human rights of the Uyghur population by actively exercising extreme “counter-terrorism strategies”. These include blatantly humiliating, assaulting, and psychologically tormenting the citizens in the camp, “causing serious bodily or mental harm to members of the group; deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part”. These are all conditions considered within the United Nation’s definition of ethnic genocide. Additionally, victims who have managed to escape to other countries recall Chinese officials forcing Uyghurs to renounce their religious identity and confess to crimes that they did not commit. The initiative did the opposite of what it intended and solidified the separatist movement and made it more prominent than it was beforehand (Boehm, 2009, p. 69). Beyond psychological torture, the Chinese government also used tactics to physically torment the Uyghur population, placing

them in conditions that featured “overcrowding, unsanitary conditions, food deprivation, sexual assault, and torture.” (Kanat, O., 2021, p. 222).

Human rights violations also include the CCP’s efforts to diminish the Uyghur population through forced sterilizations and birth control, which became widespread amongst the women within the camp. Statistics on birth control rates and intrauterine contraception device (IUD) distribution reveal a disparity between the Uyghur population and the Han Majority. Women within the Uyghur population received higher IUD insertions relative to that of the Han majority. The family planning budget from Hotan, the capital city of a prefecture in southern Xinjiang, and Guma, two counties mostly home to Uyghurs, have a combined population of 2.85 million (about the population of Mississippi), indicating that the government aimed to have 5,970 IUD insertions and 8,604 female sterilizations for that year. Whereas that may not appear to be unusually high within a population of that size, consider that it represents more sterilizations per capita in one year than the total number performed in China during the twenty years between 1998 and 2018. As a direct

result, recent birth rate data indicates a steady decline within Xinjiang beginning in 2015, declining more with each passing year. This is crucial in identifying the nature of this crime against the Uyghur population, as this constitutes yet another one of the conditions listed within the United Nations' definition of ethnic genocide. Forced sterilizations, pervasive birth control policies, and IUD insertions are examples of imposing measures intended to prevent births within the group.

After completing their time in the camps, the Uyghur population is then forced into slave labor (Quinn, 2020, p.18). Surveillance from the Australian Strategic Policy Institute has revealed that more than 80,000 Uyghurs between 2017 to 2019 were transferred out of Xinjiang to work in 27 factories spread across nine different Chinese provinces across China. The estimation that 80,000 Uyghurs have been moved, however, is a conservative estimate of the true figures.

International Response

As such actions taken to this extreme against any ethnic group is inherently detrimental and unethical, it demands international attention and consequences. The United States and countries within

the EU (European Union) have imposed travel and economic sanctions on Chinese government officials. The Biden administration has made tremendous strides in addressing this issue relative to its predecessor. The Biden administration enacted policies that directly address the Uyghur Genocide, such as officially declaring the treatment of Uyghur Muslims to be a genocide on March 30, 2021, in the annual human rights report. The signing of the Uyghur Forced Labor Prevention Act in 2021 ensures that the import of goods that come from the Xinjiang region is prohibited. The administration also implemented economic sanctions on biotech and surveillance firms on top of the preexisting economic sanctions.

Despite official recognition from the United States of this humanitarian crisis as genocide, not all countries share this sentiment. In a United Nations assembly, Cuba's U.N representative Ana Silvia Rodríguez Abascal read a statement on behalf of 45 countries that were actually in defense of Chinese policy, stating that the actions taken by the government were centered around the best interests of their citizens and that the Chinese government has taken effective and appropriate

measures to address threats of terrorism and extremism within their country. The remaining member states did not sign onto either group to maintain neutrality regarding the conflict.

Conclusion

The Chinese government claims that they were acting in accordance with the Strike Hard Against Terrorism initiative when they were violating the Uyghur population for common Muslim practices. These policies were driven solely by their desire to eradicate this smaller ethnic group to increase nationalist sentiment and use assimilation via manufacturing jobs as a cover for labor and natural resource exploitation. This discrepancy between the premises portrayed and the reality of what is occurring is the main contention of this study.

After more information was gathered regarding what was occurring within these internment camps, the evidence became overwhelming that a Uyghur genocide was occurring within China. The present ethnic internment of the Uyghur population has figures that range from one million to three million, with exact estimates being difficult to glean due to tight data control. What is not difficult to

see is that the horrific and prolific nature of mistreatment, as demonstrated by the occurrences within the camp, shows that this is a deliberate attempt by the Chinese government to sequester and assimilate a small ethnic group into a majority population that is fundamentally different from their own for the sake of advancing their own political and economic motives. The drastic nature of these crimes also indicates a desperation from the Chinese government to diminish this group of people is indicative of the land they occupy being valuable to the Chinese government. Despite certain countries accepting the actions of the Chinese government, widespread acknowledgment and action taken by Western democracies are an encouraging sign that human rights violations in the future may be treated with a greater sense of urgency. Sanctions imposed on China's economy indicate disdain for the action itself and send a message that no country would be exempt from facing repercussions after launching a deliberate and pointed campaign targeting an ethnic minority group residing within the country.

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Migration and its Impact on Left Behind Women: Examining Kerala's Low Female Labor Force Participation Rates

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Abstract

The state of Kerala, India has some of the lowest female labor force participation rates in the country, coupled with high rates of female literacy and migration. In this paper, I estimate the effect of the presence of an emigrant or outmigrant member in a household on a woman's labor force participation outcomes. The heterogeneous effects of migration are investigated for different religious groups and education levels using interaction terms. This paper groups the emigrants based on a woman's relationship with them to further ascertain the different effects it causes. My findings show a -5.2-percentage point decrease in female labor force participation when a woman has an emigrant household member

and a -2.2-percentage point decrease when a woman has an outmigrant household member. These results are consistent with previous literature. The effect of emigrant presence on labor force participation was less negative for the subgroups (high socioeconomic status women, degree-holders, Muslim women).

Introduction

As of 2018, remittances made up 19% of Kerala's Net State Domestic Product (NSDP) (Rajan & Zachariah, 2019). Kerala has had a long history of migration since the 1970s, and this has shaped Kerala's economy, influencing the decision-making of households. Remittances received from family members increase household income and can change behavior by increasing the reservation wage of certain household members. In the context of Kerala, most emigrants and outmigrants are men, leaving behind female family members, who face a labor market with historically high rates of unemployment (Zachariah & Rajan, 2009).

Kerala has lower female labor force participation rates than the rest of India at about 16% in 2017 (Shaju, 2021). However, Kerala also has the highest female enrollment in secondary education in India at 57% as of 2013 (Rasheeja & Krishnan, 2013). The high

rates of female secondary education coupled with a low female labor force participation rate makes it imperative to understand how migration and remittances may impact a woman's willingness to work. Kerala has a unique situation in which a highly educated female population has incredibly low labor force participation rates, and migration may be a significant factor in this phenomenon.

In this paper, I estimate the effect of the presence of an emigrant or outmigrant (internal migrant) in a household on an individual woman's labor force participation outcome in the context of Kerala, India. I aim to further understand the relationship between migration and the labor force participation outcomes of women.

Increased household income due to migrant remittances may increase the reservation wage for women, leading their income effect to dominate. This could result in women choosing to not participate in the labor force and to have more leisure time as a normal good.

To examine this relationship, I will be using cross-sectional data from the Kerala Migration Survey from the years 2003, 2007, 2010, and 2013. The endogenous variable is the labor force participation outcome of a woman i in year t . The two key exogenous

variables are the presence of an international emigrant member in a woman's household in year t , and the presence of an Indian internal outmigrant member in a woman's household in year t . The regression analysis controls for religion, age, and education levels. I will include district-year fixed effects to account for economic shocks within certain regions during a specific year.

Relevant literature includes Khan and Valatheeswaran (2016) who also use the Kerala Migration Survey from 2010. They find that household members left behind by an emigrant member are less likely to participate in the labor force. Khan and Valatheeswaran (2016) do not incorporate the presence of outmigrants in a household. Outmigrants who have left for other states in India still have a significant effect on household income and choices. By including this element, this paper can further analyze the impact of migration on female labor force participation in Kerala by including the effect outmigration has.

Literature Review

Migration and its effect on women is an important area of study with the rise of globalization. Who exactly is migrating and who stays behind can influence women's financial decisions. Desai and Banerji (2008)

analyzed responses from the 2005 India Human Development Survey to find that the migration of their husbands is not always financially empowering for female respondents. The survey results indicated that women feel financially empowered only when living independently without elder family members (Desai and Banerji, 2008). This suggests that women's living conditions also influence their financial decisions and labor force participation. This research incorporates these findings by controlling for whether a woman is an in-law in relation to her household. Additionally, this paper will further delve into how a woman may be affected differently according to which household member is abroad.

Rodriguez and Tiongson (2001) find that Filipino women and Filipino men reduce their labor force participation when they have an emigrant in the household. However, Rodriguez and Tiongson (2001) also find that the education level of a woman can mitigate this effect. They find that the negative effect of migration on labor force participation for women who have a university degree is smaller in magnitude (Rodriguez & Tiongson, 2001). This paper will examine the difference in the effect of migration on women with higher education in the Kerala context. Kerala

has high rates of women in tertiary education; however, it still has high rates of female unemployment and migration. By examining this relationship in a different context, this paper will contribute further understanding with evidence from different circumstances.

The effect of migration can also vary based on the income level of the household. In Egypt, Binzel and Assaad find that an increase in household income due to remittances can reduce female labor force participation by 3 percentage points (2011). However, this increase in household income incentivized higher-income women to work since they could afford to outsource household chores (Binzel & Assaad, 2011). The opposite has also been found, as Lokshin and Glinskaya found in Nepal, increases in household remittances significantly decrease higher-income women's labor force participation (2009).

Dorantes and Pozo (2006) find that in Mexico, a 100 pesos increase in remittance payments decreases female participation in non-paid work by 4% and informal sector work by 7%. They find that women appear to work less in response to increased remittances, but this effect is exclusive to

non-paid and informal sector work (Dorantes & Pozo, 2006).

Overall, the literature indicates a negative correlation between migration and female labor force participation, however, this effect may be intensified or lessened for certain subgroups. This difference in effect may be due to socioeconomic status, lower barriers to entry for women with higher education, and different cultural norms.

This paper contributes to the literature by further examining the difference in effect migration has on different cohorts in Kerala. These papers have different cultural contexts, and Kerala is filled with diverse cultural norms due to religions other than Hinduism having a large presence in the region. By comparing the difference in effect for certain groups in Kerala with other regions, this paper can further understand the impact migration has on subgroups like women with tertiary education.

Many of these papers do not account for small side businesses that these women may have started alongside their unpaid housework. Rather, the focus is purely on formal employment versus unpaid household work. The Kerala Migration Survey specifically denotes self-employment as a category for respondents. This research will

incorporate self-employment as an endogenous variable to understand the heterogeneous effect migration may have on different forms of employment.

There exists literature focusing on migration and its impact on the economy in Kerala specifically. Kannan and Hari (2020) find that household income inequality has quickly grown due to the uneven distribution of migrants, which is due to certain households and communities having established migration networks. For example, districts in Northern Kerala have historically strong ties to the Gulf states and are more likely to have established avenues of migration to the Gulf (Mazumdar and Guruswamy, 2006). Additionally, there are regional differences in the economy and labor force participation rates. Northern Kerala has an agricultural economy which in turn results in higher female labor force participation rates due to the demand for laborers (Mazumdar and Guruswamy, 2006). By including district-year fixed effects, this paper can account for these regional differences and further focus on the effect migration has on labor force participation.

Khan and Valatheeswaran (2016) have examined the impact of household emigration on the labor force participation

rate of left-behind family members. They find that women with emigrant family members are less likely to participate in the labor force. This paper contributes to the literature by including the presence of internal migrants, or migrants who have left for other states within India. Khan and Valatheeswaran (2016) do not include households with outmigrants in their examination of migration's impact on labor force participation. However, outmigrants send back remittances and change household income, which can shape labor force participation decisions. The presence of migrants, internal or external, impacts household income. By including outmigrants, this paper can gain further insight into the impact migration has on women's labor force participation.

Data and Variables

The Kerala Migration Survey (KMS) was utilized for my regression, which is a cross-sectional data set. I also used data from the years 2003, 2007, 2010, and 2013. The Kerala Migration Survey is a household survey that uses stratified random sampling from 15,000 households each year from urban and rural districts in Kerala. I did not include women under the age of 18 or women over the age of 65 in the sample, as I wanted to focus on

working-age women. I also excluded students and pensioners from the sample, as they are not part of the labor force. For the reference group to not have experienced any migration, the sample will also exclude women whose households have returned migrants. This leaves the number of observations to be 57,164.

Since there are multiple categories for employment, I created a binary variable that simply indicated whether an individual is in the labor force. This served as the key endogenous binary variable, LFP (Labor Force Participation). LFP equaled 1 for employed women, self-employed women, and women who are job seekers. LFP equaled 0 for women who are doing unpaid housework as well as women who are not looking for employment. The other endogenous variable of interest, self-employment, is the binary variable SEMP. This variable indicates whether a woman is self-employed.

The key exogenous variable is EMI, which equals 1 if the woman has an emigrant household member, and IMI, which equals 1 if the woman has an outmigrant household member. To further break down the relationship a woman has with an emigrant member, I created three mutually exclusive situations. EMH, a binary exogenous variable

that equals 1 if a woman's husband is the only emigrant in her home. EMF, a binary exogenous variable that equals 1 only if a woman's household members have emigrated, and not her husband. And finally, EMB equals 1 if a woman's household members and husband have emigrated.

For outmigration, the Kerala Migration Survey does not provide adequate information to ascertain a woman's relationship to the outmigrant, so the breaking down of these relations is not possible. To further examine the difference in effect migration has on certain women, I created the binary variable HED which indicates whether a woman holds at least a bachelor's degree.

To construct a control for a woman's religious affiliation, I created a categorical variable RDEN. The five categories include (1) upper-caste Hindus (Nairs and Brahmins), (2) other scheduled castes, (3) historically high socioeconomic status (SES) Christian denominations (Syrian Catholic), (4) other Christian denominations, and (5) Muslims. Another binary variable I constructed from this is "HSES", or high SES, which is 1 when the individual is an a Hindu or a high SES Christian.

To denote the relationship a woman has to her household, I created the binary variable INL, which equals 1 if a woman has an in-law relation to the head of her household. I also created the binary variable MAR to indicate if a woman is currently married or not.

The Kerala Migration Survey only has data regarding if a woman has dependents in 2013, so for this particular year, I constructed a binary variable DEP which equals 1 if a woman has dependents.

Methodology

Using the Kerala Migration Survey from 2003, 2007, 2010, and 2013, I ran this OLS regression.

$$(1) LFP_{it} = \beta_0 + \beta_1 EMI_{it} + \beta_2 IMI_{it} + \alpha_{pt} + X_{it}\beta + \epsilon_{it}$$

Where i is an individual woman in year t . The dependent variable is the labor force participation outcome of woman i in year t . The key endogenous variables are the presence of an emigrant member in a woman's household (EMI) and the presence of an internal migrant member in a woman's household (IMI).

Model 1 includes α_{pt} , district-year fixed effects. α_{pt} controls for district-level yearly shocks, or shocks that are specific to a district within a certain year. This helps control

district-level differences in specific years, such as a specific region undergoing an economic shock in 2003.

Each observation is a woman in a given year. The key estimated parameters are β_1 and β_2 are the effect that the presence of an emigrant in a household has on a woman's labor force participation outcome, and the effect that the presence of an outmigrant in a household has on a woman's labor force participation outcome, respectively.

X_{it} is a control matrix that includes dummy variables for religious denomination, household relation, marital status, and age.

The religious affiliation of a woman can affect her labor force participation. Certain cultural norms might influence the labor force participation of a woman, leading to lower female labor force participation rates for one religion (in this case, Islam) compared with another religion. Additionally, marital status, age, and household relations all have cultural significance and hold sway when a woman is considering joining the labor force.

$$(2) \text{SEMP}_{it} = \beta_0 + \beta_1 \text{EMI}_{it} + \beta_2 \text{IMI}_{it} + \alpha_{pt} + X_{it}\beta + \epsilon_{it}$$

Model 2 takes the same exogenous variables and controls of Model 1, however, the endogenous variable in this model is self-

employment. β_1 and β_2 now estimate the effect emigration and outmigration have on whether a woman is self-employed.

As explored in previous literature, the labor force participation decisions of women with a university degree differ from women with less education when a household member has migrated (Rodriguez & Tiongson, 2011). I will employ models with an interaction term for migration and degree-holding.

$$(3) Y_{it} = \beta_0 + \beta_1 \text{EMI}_{it} + \beta_2 \text{HED}_{it} + \beta_3 (\text{EMI}_{it} \times \text{HED}_{it}) + \beta_4 \text{IMI}_{it} + X_{it}\beta + \alpha_{pt} + \epsilon_{it}$$

$$(4) Y_{it} = \beta_0 + \beta_1 \text{EMI}_{it} + \beta_2 \text{HED}_{it} + \beta_3 \text{IMI}_{it} + \beta_4 (\text{IMI}_{it} \times \text{HED}_{it}) + X_{it}\beta + \alpha_{pt} + \epsilon_{it}$$

Here, HED is a binary variable indicating whether the individual has a degree. In Model 3, β_3 is the parameter for the interaction term, EMI*HED, which shows the different effect that emigration has on labor force participation when a woman is highly educated. In Model 4, β_4 is the parameter for the interaction term, IMI*HED, which shows the different effect that outmigration has on labor force participation when a woman is highly educated. The fixed effects and controls remain the same as in Model 1.

These interaction models will be used for other certain dummy binary variables. To examine the difference in effect of migration

on multiple subgroups, I will interact IMI and EMI with MUS, the binary variable indicating if a woman in Muslim. I will also interact IMI and EMI with HSES, the binary variable indicating if a woman is of high SES (socioeconomic status).

These models will not include controls for religion to avoid multicollinearity.

I also created another interaction model for the difference in the effect of migration on women with dependents. However, the model for dependent interaction will only use 2013 data and therefore will not have district-year fixed effects, only district-fixed effects.

Model 5 further examines how a woman's relation to the emigrant abroad affects labor force participation:

$$(5) Y_{it} = \beta_0 + \beta_1 EMH_{it} + \beta_2 EMF_{it} + \beta_3 EMB_{it} + \beta_4 IMI_{it} + X_{it}\beta + \alpha_p + \tau_t + \epsilon_{it}$$

In model 5, the first three variables are mutually exclusive cases for a woman's household having an emigrant family member abroad. The parameter β_1 estimates the effect of having only a woman's husband abroad would have on her labor force participation outcome. The parameter β_2 estimates the effect of having only a woman's household members abroad would have on her labor force participation outcome. The parameter β_3 estimates the effect of having

both a husband and household members abroad would have on her labor force participation outcome.

The controls and district-year fixed effects remain the same as Model 1.

All models will also be run without controls to further understand how the key exogenous variables respond to the addition of them.

Descriptive Statistics

Female Labor Force Participation Rate in Kerala

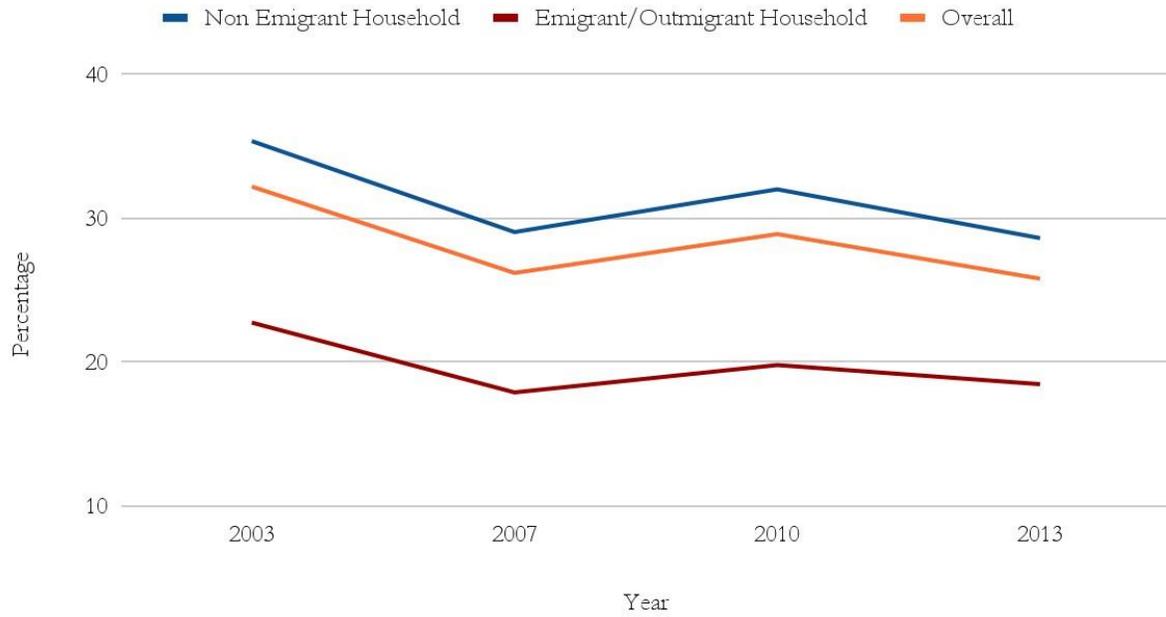


Figure 1 is a line graph representing female labor force participation rates in Kerala using Kerala Migration Survey data from the years 2003, 2007, 2010, and 2013. The overall participation rate is in yellow, which ranges from 30% to 25%. The graph indicates that households with emigrants or outmigrants consistently have a female labor force participation rate that is about 10 percentage points less than the overall female labor force participation rate.

Households without emigrants or outmigrants have a female labor force participation rate that is slightly higher than the overall rate by a couple of percentage points. This figure illustrates Kerala's low female labor force participation rates, alongside the trends seen in households with or without migrant members. Women in migrant households have lower labor force participation rates than their counterparts in households with no migrant members. Due to this information, I expected to see a negative relationship between labor force participation outcomes for women and the presence of a migrant member in a woman's household.

Table 1 is a table of means for individual characteristics for women across all years, grouped by the presence of a migrant in their household. Out of the 57,164 total

observations, 42,470 of the observations are households without migrant members, and 14,694 observations do have a migrant member. 25.7% of households in this sample have migrant members. The largest difference in means for migrant versus non-migrant households is the percentage of Muslim women. Among women in migrant households, 40% of the women are Muslim, compared to 16% of Muslim women among women in non-migrant households. Overall, Muslim women constitute 22.6% of the sample, and they are overrepresented in proportion among women in migrant households. This difference is in line with the history of migration in Kerala, specifically with the Gulf states. Muslim families began migrating more than the rest of the population due to their connections and migration networks with the Gulf states (Mazumdar and Guruswamy, 2006).

Table 1: Individual Characteristics of Households

Individual Characteristics	Emigrant/Outmigrant Households		Non-Emigrant/Outmigrant Households		Total Number
	Mean (Standard Deviation)	Number	Mean (Standard Deviation)	Number	
Labor Force Participation	0.19 (0.39)	2,891	0.31 (0.46)	13,239	16,130
Age	38.71 (12.88)	14,694	39.16 (12.40)	42,470	57,164
Currently Married	0.81 (0.38)	12,045	0.74 (0.43)	31,732	43,777
In-Law Status	0.30 (0.46)	4,481	0.22 (0.41)	9,641	14,122
Degree-Holding	0.12 (0.33)	1,857	0.10 (0.30)	4,558	6,415
Upper-Caste/High SES Denomination	0.22 (0.41)	3,286	0.22 (0.42)	9,483	12,769
Self-Employment Rate	0.01 (0.12)	224	0.02 (0.15)	1,045	1,269
Muslim	0.40 (0.49)	5,994	0.16 (0.36)	6,925	12,919
Total Number		14,694		42,470	57,164

Data from Kerala Migration Survey: years 2003, 2007, 2010, 2013

Table 2: Breakdown of Emigrant Households

Individual Characteristics	Only Husband Abroad		Only Household Member(s) Abroad		Husband and Household Member(s) Abroad	
	Mean (Standard Deviation)	Number	Mean (Standard Deviation)	Number	Mean (Standard Deviation)	Number
Labor Force Participation	0.17 (0.38)	835	0.18 (0.39)	881	0.14 (0.35)	292
Age	35.98 (11.07)	4,769	41.84 (13.91)	4,698	33.58 (11.80)	1,983
In-Law Status	0.38 (0.48)	1,846	0.18 (0.39)	881	0.52 (0.50)	1,035
Degree-Holding	0.14 (0.35)	715	0.08 (0.27)	386	0.13 (0.34)	273
Upper-Caste/High SES	0.21 (0.41)	1,040	0.18 (0.38)	876	0.13 (0.34)	277
Denomination Muslim	0.43 (0.49)	2,079	0.46 (0.49)	2,162	0.65 (0.47)	1,290
Total Number		4,769		4,698		1,983

Data from Kerala Migration Survey: years 2003, 2007, 2010, 2013

Age for women across the two household statuses is similar, along with the percentage of women who have a degree. The high socioeconomic status (SES) indicator includes women of high caste status and women in certain Christian denominations that have experienced higher socioeconomic indicators historically. The proportion of these women is the same across the two household types.

However, the percentage of women who are currently married differs across the two household types. The percentage of women in migrant households who are married is higher at 81%, compared to 74% of women in non-migrant households who are married. Additionally, 30% of women in migrant households are in-laws in relation to the household head, meaning they are a daughter-in-law or sister-in-law. This is higher than the percentage of women in non-migrant homes that are in-laws, which is 22%.

These trends may be because, among women who have a migrant member in their household, 58.96% of these women have a husband abroad. Since most of these women are married, this percentage is higher.

A common practice in Kerala is for the wife to move into her husband's family after marriage. Since most women have migrant husbands in the migrant household group, they are more likely to be in-laws in relation to their household.

Overall, women who have migrant household members are more likely to be married, in-laws, and Muslim than women who do not have migrant household members. Marriage and religion have a significant cultural impact on women and their propensity to work.

Table 2 breaks down individual characteristics further for emigrant households; women who have migrant household members who went abroad. These are split into three categories, (1) where the woman's husband is the only one abroad, (2) where only the woman's household members are abroad, and (3) where the woman has household members and her husband abroad.

The labor force participation rate is low, at 14% for women with both her household members and husband abroad, which may be due to the multiple streams of remittances her household would receive, increasing her reservation wage. The mean labor force

participation rates for the other two categories are similar.

All three categories have high percentages of Muslim women, especially the 'both' category, with 65% of women being Muslim, which again is in line with migration trends. Women with only a husband abroad, as well as women with a husband and household members abroad, have a younger

mean age than women with only household members abroad. This could be due to the household members-only category having older women, who could have nieces or children abroad.

Overall, women with husbands abroad are on average younger and are more likely to be highly educated than women who only have family members abroad.

Results

Table 3: Results for Migrant Household Impact and Degree-Holding Interactions

Variables	Labor Force Participation (LFP)					
	(1)	(2)	(3)	(4)	(5)	(6)
Emigrant Household Member(s) (EMI)	-0.112*** (0.004)	-0.052*** (0.004)	-0.123*** (0.004)	-0.062*** (0.004)	-0.117*** (0.004)	-0.059*** (0.004)
Outmigrant Household Member(s) (IMI)	-0.040*** (0.007)	-0.022*** (0.007)	-0.051*** (0.006)	-0.032*** (0.007)	-0.054*** (0.007)	-0.035*** (0.007)
Degree-Holding (HED)			0.280*** (0.007)	0.244*** (0.007)	0.289*** (0.006)	0.248*** (0.007)
IT for Degree-Holding and Emigration			0.015** (0.015)	0.029* (0.015)		

(EMI*HED)

IT for Degree-Holding

and Outmigration

(IMI*HED)

	N	Y	N	Y	N	Y
Controls†						
Constant	0.311*** (0.002)	0.624*** (0.025)	0.281*** (0.002)	0.589*** (0.024)	0.280*** (0.002)	0.588*** (0.024)
Observations	57,164	57,164	57,164	57,164	57,164	57,164

 Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

† Controls for Religious Denomination, Age, Marital Status, Household Relation

District-year fixed effects for all regressions

The initial regression 1 in Table 3 shows labor force participation regressing on the presence of an emigrant or outmigrant in a woman's home with district-year fixed effects. It reveals a negative relationship between labor force participation and having a migrant household member, which is consistent with the findings of previous literature. This is in comparison to the labor force participation rate of women in

households who do not have any outmigrants or emigrants.

Regression 1 in Table 3 estimates that the presence of an emigrant family member impacts a woman's labor force participation outcome by -11.2 percentage points, and the presence of an outmigrant member impacts it by -4.0 percentage points.

Regression 2 in Table 3 includes controls for religious denomination, age, marital status, and household relations. With the

addition of these controls, the magnitude of the coefficients for emigrant household members and outmigrant household members decreases. The labor force participation decisions of women are also impacted by cultural factors included in the controls, causing the magnitude of the coefficients for emigrant presence and outmigrant presence to decrease.

Regression 3 interacts with degree-holding and emigration. It shows the difference in the effect of having an emigrant member for degree-holding women versus non-degree-holding women to be 1.5 percentage points. The effect of having an emigrant member on labor force participation for women with a degree is still negative at -10.8 percentage points. However, this relationship is smaller in magnitude compared to the effect of an emigrant member in labor force participation for

women without a degree at -12.3 percentage points.

Regression 4 has similar results with added controls; however, the interaction coefficient is larger in magnitude. Overall, it illustrates the less negative effect of emigration on labor force participation for women with degrees. Degree-holding women are less negatively impacted by emigration due to having lower barriers to entry to the workforce and usually have higher-paying jobs that they are hesitant to leave.

Regressions 5 and 6 interact degree-holding with outmigrant presence in households, with regression 6 including controls. Both regressions do not show a statistical difference in the effect of outmigration on labor force participation for degree-holding women versus non-degree-holding women.

Table 4: Results for Impact of Emigration Based on Relation

Variables	Labor Force Participation (LFP)	
	(1)	(2)
Only Husband Abroad (EMH)	-0.106*** (0.006)	-0.080*** (0.006)

Only Household Members Abroad (EMF)	-0.116*** (0.006)	-0.063*** (0.006)
Both Husband and Household Members Abroad (EMB)	-0.122*** (0.008)	-0.069*** (0.008)
Outmigrant Member (IMI)	-0.041*** (0.007)	-0.039*** (0.007)
Controls†	N	Y
Constant	0.548*** (0.014)	0.572*** (0.024)
Observations	57,164	57,164

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

† Controls for Religious Denomination, Age
District-year fixed effects for all regressions

A woman's relationship with the emigrant in her household has meaningful implications for labor force participation. If a woman's husband is a migrant, she would receive more remittances from him compared to if her niece had migrated for example.

Table 4 are results for the effects of emigration on labor force participation, split by the relation the woman has to the

emigrant abroad. Regressions 1 and 2 have negative coefficients for all categories, however, their magnitude differs. In regression 1, women with only a husband abroad (EMH) have the smallest coefficient in magnitude, with a -10.6-percentage point effect on labor force participation outcome. Having only household members abroad (EMF) has a larger effect in magnitude.

Women with both a husband and household member abroad (EMB) are estimated to have a -12.2-percentage point effect on the labor force participation outcome.

Regression 2 in Table 4 adds controls for religious denomination and age, which alters the ranking of magnitude for the coefficients. In regression 2, the coefficient for EMH is the largest in magnitude at -8 percentage points.

The coefficients for EMB and EMF are similar. However, in the case where a woman has both a husband and household members abroad, the woman should receive more remittances than when only her other household members are abroad. EMB should have a more negative effect on labor force participation.

Table 5: Wald Tests

Wald Tests	p-value (F-value)
EMH = EMB	0.20 (1.62)
EMF = EMB	0.56 (0.33)
EMH = EMF	0.03 (4.70)
EMI = EMB = EMH = 0	0.00 (97.33)
Observations	57,164

To further explore this result from Table 4, Regression 2, I conduct Wald tests to test the null hypothesis that the coefficients are equal. I fail to reject the null hypothesis that the effect of having a husband abroad is equal to having both household members and a husband abroad at a significance of $p < 0.1$. I also fail to reject the null hypothesis that the effect of having household members abroad is equal to having both household members and a husband abroad.

Since the Wald test found that the coefficients of EMH and EMB are not statistically different from one another, the difference in their magnitude is not statistically significant in this regression. However, the p-value when testing the null hypothesis that the effect of having only a husband abroad (EMH) is equal to having only household members abroad (EMF) was 0.03, significant at $p < 0.05$.

This indicates there is a difference in the effect of having a husband abroad versus having only other household members abroad. When a woman has both a husband and household members abroad (EMB), however, the difference from having only one (EMF or EMH) is not statistically significant.

When testing the null hypothesis that all the coefficients equal 0 in Regression 2, the Wald test p-values are all statistically

significant at $p < 0.01$. I can reject the null hypothesis that these coefficients are equal to 0, however, the difference in their magnitudes is not statistically significant.

Table 6 reports the results of regressions with interaction terms centering around religion. A woman's religious identity has cultural implications for how acceptable and common it is for her to be employed. These specifications explore the difference in effect of migration on labor force participation for certain religious groups. The group "high SES" here includes high SES Christian women and upper-caste Hindu women, so this group is identified by their SES (socioeconomic status) rather than solely by their religion.

Table 6: Interaction Terms with Religion

Variables	Labor Force Participation (LFP)							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emigrant Member(s) (EMI)	-0.126*** (0.005)	-0.108*** (0.004)	-0.113*** (0.004)	-0.096*** (0.004)	-0.086*** (0.006)	-0.077*** (0.006)	-0.076*** (0.004)	- 0.063*** (0.004)
Outmigrant Member(s) (IMI)	-0.039*** (0.007)	-0.035*** (0.007)	-0.040*** (0.008)	-0.033*** (0.008)	-0.044*** (0.007)	-0.039*** (0.007)	-0.041*** (0.008)	- 0.037*** (0.008)
High SES Indicator (HSES)	-0.023*** (0.005)	-0.034*** (0.005)	-0.011** (0.005)	-0.024*** (0.005)				
IT for Emigrant Member and High SES (EMI*HSES)	0.067*** (0.011)	0.059*** (0.010)						
IT for Outmigrant Member and High SES (IMI*HSES)			0.000 (0.015)	-0.005 (0.014)				

Muslim (MUS)					-0.151***	-0.138***	-0.142***	-	0.127***
					(0.005)	(0.005)	(0.005)		(0.004)
IT for Emigrant Member and Muslim (EMI*MUS)					0.027***	0.037***			
					(0.008)	(0.008)			
IT for Outmigrant Member and Muslim (IMI*MUS)							-0.018	-0.010	
							(0.014)	(0.013)	
Controls†	N	Y	N	Y	N	Y	N	Y	
Constant	0.552***	0.614***	0.549***	0.611***	0.555***	0.625***	0.552***	0.622***	
	(0.014)	(0.023)	(0.014)	(0.023)	(0.014)	(0.024)	(0.014)	(0.024)	
Observations	57,164	57,164	57,164	57,164	57,164	57,164	57,164	57,164	

Robust standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

† Controls for Religious Denomination, Age, Marital Status; District-year fixed effects for all regressions

Regressions 1 and 2 run an interaction term between the high SES indicator and the presence of an emigrant member. Both interaction terms are positive and statistically significant at $p < 0.01$, indicating that migration's effect on labor force participation is less negative for women of a higher SES. The effect of migration on labor force participation is negative for both groups, however, the magnitude of the effect is larger for women who do not have high SES. This effect may be due to these women already being able to afford workers to complete household chores. Therefore, they have lower barriers to entry into the workforce, may have attained higher-paying jobs, and are more hesitant to leave these jobs due to additional household remittances.

Regressions 3 and 4 do not find a difference in the effect of having an outmigrant member on labor force participation for women with high SES versus women who do not have high SES on labor force participation outcomes.

Regressions 5 and 6 run an interaction between Muslims and the presence of an emigrant household member. The interaction terms for both regressions are positive and statistically significant at $p < 0.01$. The model

is estimating that the effect of having an emigrant member on labor force participation is less negative for Muslim women compared to non-Muslim women. This could be because Muslim women already have low female labor force participation rates, and so the effect of an emigrant member in their household is not negative.

Many of these women already are not in the labor market, so there's a smaller negative effect on these women when there is an emigrant member.

Regressions 6 and 7 neither find a statistically significant difference in the effect of an outmigrant member on labor force participation for Muslim women versus non-Muslim women.

Exploration on the Effect of Dependents

Whether or not a woman has dependents is a significant factor in her decision to participate in the labor force. To include the effects of dependents in this relationship, I will run regressions with interaction terms between the presence of dependents and migration. However, data on dependents is only available in the 2013 dataset, so this separate regression will only include one year.

Table 7: Dependents and Impact on Labor Force Participation

Labor Force Participation (LFP)				
Variables	(1)	(2)	(3)	(4)
Emigrant Member(s) (EMI)			-0.115*** (0.009)	-0.065*** (0.009)
Outmigrant Member(s) (IMI)			-0.026** (0.011)	-0.021* (0.011)
Presence of Dependents (DEP)			-0.087*** (0.007)	-0.012 (0.007)
IT for emigration and dependents (EMI*DEP)			0.028** (0.013)	0.021* (0.013)
IT for outmigration and dependents (IMI*DEP)				0.014 (0.023)
Controls†			N	Y
Constant			0.310*** (0.005)	0.356*** (0.037)
Observations			20,964	20,964

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

† Controls for religion, district, age, marital status, household relation

In regressions 1 and 2, the interaction term coefficient is 0.028, estimating a 2.8 percentage point difference. This positive difference indicates a negative, but smaller in magnitude effect of emigration on labor force participation for women with dependents. This has a contrary result to previous literature (Khan & Valatheeswaran, 2016). It is important to note that the binary variable for dependents includes all minor dependents. If a woman has an emigrant household member, she may be less compelled to leave the labor force if she has school-age dependents that do not require caretaking. This is because the addition of dependents requires more household income to sustain them, therefore the substitution effect may be dominant here for women with dependents.

Regressions 3 and 4 use an interaction term between outmigrant presence and the presence of dependents. These two interaction terms estimate the difference in

the effect of having an outmigrant member on labor force participation for women with dependents versus women without dependents. The interaction term is small in magnitude, and statistically insignificant at $p < 0.1$, meaning the results do not find there to be a difference in the effect.

Migration and Self Employment

The previous regressions all had labor force participation regressed on migration. Self-employment may not be as impacted by migration as other forms of employment. Left-behind women usually must dedicate more time to household duties such as child rearing once a household member migrates (Rodriguez & Tiongson, 2001). However, if the woman is running a side business like tailoring from her house, labor force participation may not be as negatively impacted. To ascertain a better understanding of this relationship, I regress self-employment on migration.

Table 7: Self-Employment and Migration

Variables	Self-employment Rate (SEMP)	
	(1)	(2)

Emigrant Member(s) (EMI)	-0.009*** (0.001)	-0.004** (0.001)
Outmigrant Household(s) (IMI)	-0.002 (0.002)	-0.001 (0.002)
Controls†	N	Y
Constant	0.024*** (0.001)	0.022*** (0.007)
Observations	57,179	57,179

robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

† Controls for religion, age, marital status, household relation
District-year fixed effects for all regressions

Overall, emigration and outmigration are estimated to have a small effect in magnitude on self-employment, especially in comparison to their effect on overall labor force participation. The coefficient of outmigration is statistically insignificant in both regressions. The estimated effect of emigration on self-employment is small in magnitude but still negative.

This could indicate that emigration and outmigration have a much smaller effect on a woman's choice to be self-employed, possibly

because this category can include side businesses managed along with household work. However, the number of self-employed women made up about 2% of the sample overall, so the results may reflect the smaller sample size.

Discussion

Emigrant household members and outmigrant members negatively affect women's labor force participation. The estimated coefficient for the presence of an emigrant member in Table 3 Regression 2 is

about -5 percentage points, which has a significant effect on the average female labor force participation is around 28%. The coefficient for the presence of an outmigrant is half in comparison, at -2.2 percentage points. Overall, the income effect dominates for women who are left behind. With added household income, they choose to have more leisure time and not participate in the labor force. There is a consistent negative effect of the presence of emigration and outmigration on labor force participation throughout the results.

My results seem to align with the previous body of literature surrounding migration and female labor force participation, as my results find that emigration has a negative impact on female labor force participation. The magnitude of my results is comparable to some of them (Lokshin & Glinskay, 2006; Binzel & Assaad, 2011; Dorantes & Pozo, 2006). However, the paper that this research is most closely related to estimates a larger magnitude negative effect on labor force participation (Khan & Valatheeswaran, 2016). This could be due to Khan & Valatheeswaran (2016) not using religion as a control, which has decreased the magnitude of the coefficient of emigration in my findings.

The magnitude of emigration's effect is larger than the magnitude of outmigration's effect across most regressions. This could be because wages emigrants earn abroad are higher on average. Outmigrants receive wages in other parts of India, and these are more comparable to wages within Kerala. Contrast this with an emigrant member in a Gulf state or the United States, whose wages exceed Indian standards and increase household income considerably.

Outmigration in general has a less drastic effect on household income. The reservation wage for women does not increase as much with outmigration, and as a result, women's labor force participation decisions are less affected.

Whenever outmigration interacts with another variable, it does not have a statistically significant different effect for the group it is interacting with. This could also be due to the difference in the amount of remittances. Outmigrant remittances aren't enough to have a drastically different effect on labor force participation for certain groups. In comparison, emigration terms that interact with another variable were generally found to be statistically significant at $p < 0.10$. The interaction term between high SES and emigration was positive, estimating a less

negative effect of emigration on women of high SES. These results are in line with Binzel & Assaad (2011), but contradict the findings of Lokshin and Glinskay (2009). All the interaction terms between emigration and subgroups found a less negative effect of migration on labor force participation for the subgroup in relation to the outgroup (Muslim, high SES, women with dependents).

The grouping of emigrant effects on labor force participation by a woman's relation to emigrants also produced results that didn't seem to make sense. However, since the coefficients for EMB (both household members and husband abroad) and EMH (only husband abroad) are not found to be statistically different, the magnitudes of the coefficients do not reflect the actual different impacts each scenario has. For example, a woman would generally receive more income if her husband and family members were migrants, while she wouldn't receive as much if only her husband was a migrant. Therefore, these coefficients from my results do not reflect the difference in effect these scenarios would have in the actual population. However, there is a significant difference between the coefficients for having only a husband abroad (EMH) and having only family members abroad (EMF). This reflects

how a woman would receive more direct income from remittances from an emigrant husband, as opposed to remittances from another household member like a niece.

There are some limitations this research faces. They contribute to the significance the coefficients of emigration and outmigration have in my results. First, the issue of reverse causality. Economic shocks and the changes in the labor market may influence migration. Labor force participation outcomes would, in this scenario, influence the decision to migrate. For example, a region or household may experience a shock that compels them to send a household member abroad. I have employed district-year fixed effects to mitigate this issue. For example, if an agriculture-based Northern Kerala district experienced a drought in a specific year, causing a negative shock in employment, my methodology would control for that. However, there could be smaller taluk-level or panchayat-level shocks that are confined to a smaller region that impact employment. One of the potential strategies to mitigate this is to have fixed effects at a smaller regional level. Instead of using district-year fixed effects, the regressions could include panchayat (municipality)-year fixed effects.

This method could control for even more localized economic shocks.

Second, dependents and whether a woman has them has a great influence on labor force participation outcomes. Especially for women with younger dependents, women may choose not to join the labor force due to having to caretake for their dependents. However, this crucial variable is not included in the results that aggregate across years, because the Kerala Migration Surveys in 2003, 2007, and 2010 do not have data regarding dependents. While this research includes an analysis of the impact of dependents for one year, the other results do not regard the impact of dependents. The direction of this omitted variable bias would be positive because dependents have a negative effect on labor force participation. Also, dependents and emigration, as well as dependents and outmigration are negatively correlated in the data. With this upward bias, the coefficients for emigration and outmigration are overestimated in the results.

Conclusion

Keeping in mind the limitations, this research has interesting implications on the impact that migration has on female labor force participation. Emigration and

outmigration have a negative effect on female labor force participation outcomes, with the presence of an emigrant having a larger negative impact.

The state economy of Kerala has historically high rates of unemployment, especially for women due to discriminatory hiring practices (Rasheeja & Krishnan, 2013). Considering the barriers for women in Kerala to get employed, women may be more sensitive to increases in household income when considering labor force participation. Due to the difficulty for women to find work, their labor force participation decisions are largely sensitive to changes in remittances.

A woman's relation to her household and the emigrant member could have a significant effect on her labor force participation, and further research is required to truly understand the differing effects of having certain household members abroad. Especially in patriarchal societies, a woman's financial freedom and labor force participation decisions may be impacted by this nuance. This could mean further delving into a woman's relationship with her household beyond her in-law status, or further research breaking down left-behind women's relationships with migrants and

seeing how labor force participation responds differently to these conditions.

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Unsustainable Practices: How China and America Caused the Scrap Trade Panic

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Abstract

After the Chinese government banned imports of *yanglaji*, or “foreign waste” in 2018, the international scrap market—where scrap commodities like recyclable paper, plastic, and metals are bought and sold—was abruptly destabilized, leaving many countries, especially the United States, unsure of where their scrap was going to go. This policy of China, known as the National Sword Policy, ushered in a new and uncertain era in the global trade of scrap commodities. The question remains: why did the Chinese Communist Party (CCP) implement the National Sword Policy in the first place? Why is it so much stricter than previous policies?

To receive higher quality scrap imports, the central government decided to ban various types of scrap.¹ This focus on the quality of scrap stemmed from the fact that some Western waste and recycling companies were sending Chinese facilities contaminated materials.² China no longer wanted to be treated as the West’s dumping ground, and the government decided to take serious measures by implementing the National Sword Policy. While the United States has made efforts to discuss the ban with Chinese officials, China has been slow to respond. This has since left the global scrap market in a panic.³

I argue that U.S.-China scrap policies and practices are unsustainable because they negatively impact the environment by increasing the amount of greenhouse gasses emitted by not utilizing recyclables as a more environmentally friendly option. Furthermore, they result in unsustainable practices in the global market by interfering with the flow of commercial goods. Some U.S. recycling facilities knowingly send contaminated bails to China, American

¹ Center for EcoTechnology. “What Is the National Sword?” *Center for EcoTechnology*, 6 May 2020, <https://www.centerforecotechnology.org/what-is-the-national-sword/>.

²Katz, Cheryl. “Piling up: How China’s Ban on Importing Waste Has Stalled Global Recycling.” *Yale*

E360, Yale School of the Environment, 7 Mar. 2019, <https://e360.yale.edu/features/piling-up-how-chinas-ban-on-importing-waste-has-stalled-global-recycling>.

³*ibid.*

companies use excessive amounts of plastic in their packaging, and the U.S. recycling industry is over-dependent on Chinese markets to alleviate America's overconsumption, China felt it needed to put its foot down.

The Chinese government, on the other hand, is also responsible in part for the current state of the global scrap trade. With the ban forcing Chinese manufacturers to source resources from raw materials as opposed to importing scrap commodities, the entire global scrap trade has been left without an appropriate amount of time to adapt to changes. Moreover, with the CCP not being receptive to U.S. efforts to discuss China's scrap policies, China is also responsible for the instability of the global scrap trade and the environmental damage occurring around the globe because of it.

Introduction and Purpose of Research

This research paper seeks to show how *both* the United States *and* China are responsible for the global scrap panic of 2019. Decisions made by *both* sides created a domino effect that not only strained Sino-American relations, but also directly and

negatively impacted the entire global trade of scrap goods and the wellbeing of the environment at large.

A problematic misunderstanding between the United States and China is how "waste" is defined. This misunderstanding is in many ways responsible for both countries relying on more environmentally unsustainable practices since the ban was implemented. Environmental sustainability is defined as "the quality of not being harmful to the environment or depleting natural resources and thereby supporting long-term ecological balance."⁴ This misunderstanding is detrimental to developing sustainable practices for both countries.

Since the implementation of the National Sword policy, Chinese manufacturers no longer have access to massive amounts of foreign scrap and thus require new materials to create products. This has resulted in the extraction of raw materials, which is a highly energy-intensive process that emits greenhouse gases.⁵ Since the implementation of the ban, countries like the United States have not had enough time to find new long-term markets, which has resulted in more

⁴ Adler, Adina R. "China's Sustainability Challenge." Scrap Magazine. March, 2018. 13 and Columbia University: Earth Institute. "The Aftermath of China's Waste Ban." State of the Planet, March 7,

2019. blogs.ei.columbia.edu/2019/03/11/chinas-waste-ban-aftermath/.

⁵ Adler, Adina R. "China's Sustainability Challenge." Scrap Magazine, March, 2018. 13

recyclables going to landfills, increasing greenhouse gas emissions.⁶

By addressing these current unsustainable practices in the context of commerce and environmentalism, my research will shed light on the faults made by both China and the U.S. and raise some suggestions on what both need to do next. It is essential for the public and policymakers to understand this topic better so that effective changes can be made that ensure a more sustainable trade system, as well as a cleaner global community.

Structure of Research Paper

This research paper has four sections. The first section focuses on what recycling operations in the United States look like. I explain why Chinese manufacturers started importing foreign scrap in the 1990s. This section is essential to this research because it highlights the purpose of recycling and the vital role it plays in our consumer-driven society, as well as how the U.S. and China developed this commercial relationship.

Section two directly addresses the Chinese government's National Sword policy. The Chinese government abruptly implemented this ban in early 2018, which

only allows specific scrap materials that meet unprecedentedly high standards to enter the country. This reduced the amount of foreign scrap allowed to enter China significantly, leaving countries around the world unsure of where their scrap can go. Since the consequences of this ban are a crucial part of my research, having a deep understanding of what it is is critical to my main argument.

Section three conducts a case study on a local waste and recycling facility located in Massachusetts, which we will refer to as ELH. I interviewed the vice president and president of ELH and toured the facility to see how scrap is collected, segregated, and transported to and from the facilities. By having a qualitative approach to this case study, I was able to contextualize the disruption of the global scrap trade by focusing on one specific recycling facility. The first-hand accounts of their thoughts and opinions on the ban and its impact on ELH provided rich insights into what has been occurring. I compare ELH's compliance with China's regulations to other U.S. scrap companies that took advantage of these previously lax regulations for decades, and how this directly led to the central

⁶ ISWA, "China's Ban on Recyclables: Beyond the Obvious..." ISWA, January, 2018.

www.iswa.org/home/news/news-detail/article/chinas-ban-on-recyclables-beyond-the-obvious/109/.

government implementing this unprecedented ban. It is important to have these two contrasting stories side by side in this section because it highlights a major contention with the National Sword policy: China has the right to refuse contaminated waste, but the suddenness of the ban and implementation of a contamination rate that is unprecedentedly high makes it difficult for companies to even meet China's new standards.

Section four details why the various practices used by the U.S. and China resulted in the scrap trade panic described earlier. I then propose several solutions that both sides should implement to help solve this issue.

Literature Review

I have included academic articles and research from NGOs and media sources that cover three main topics that my research discusses: (1) how the United States and China have contributed to unsustainability in the scrap market and environment, (2) how misunderstandings over the difference between the terms "waste" and "scrap" have hindered proactive discussions, and (3) how

the ban has impacted U.S. and Chinese businesses.

Many organizations in the United States that are directly associated with the scrap industry such as the Institute of Scrap Recycling Industries (ISRI) and the International Solid Waste Association (ISWA) have been regularly releasing articles to educate and inform the U.S. scrap industry on recent Chinese policies and the ramifications of said policies. For instance, in ISRI's monthly Scrap Magazine, several articles discuss the hypocrisy of China's dedication to creating a more environmentally aware society while also extracting raw materials (which again, emits greenhouse gasses) as well as criticizing China for changing policies so abruptly and without giving the market adequate time to adapt.⁷ This is a central part of my argument in section four, where I lay out the several ways in which China is partially responsible for the current instability of the scrap trade.

In 2018, Amy L. Brooks wrote an academic article entitled *The Chinese Import Ban and its Impact on Global Plastic Waste Trade*. Brooks compares business-as-usual trade data from before the ban with trade

⁷ Adler, Adina R. "China's Sustainability Challenge." Scrap Magazine. March, 2018. 13 and Columbia University: Earth Institute. "The Aftermath

of China's Waste Ban." State of the Planet. March 7, 2019. blogs.ei.columbia.edu/2019/03/11/chinas-waste-ban-aftermath/.

data after the ban's implementation. Brooks' work reveals the ban's massive impact on the scrap trade, as well as how it will hurt the environment by having large amounts of displaced plastic not be recycled. This again directly contributes to my research in section four, where I discuss the unsustainability of Chinese practices regarding environmental maintenance.

The Earth Institute at Columbia University recently wrote about Beijing's extensions of the initial 2018 ban and was highly critical of U.S. businesses and their role in America's excessive consumption of plastic packaging.⁸ This research reveals how both China and the U.S. are responsible for the current scrap trade dilemma. This specific research will contribute to my claims that U.S. businesses using excessive amounts of plastic in consumer packaging played a role in this ban's implementation.

In addition to talking about general issues regarding the waste ban, the Yale School of Forestry and Environmental Studies goes into greater detail about how the ban

has negatively impacted recycling processors throughout the United States, with many recycling operations no longer accepting scrap since they cannot handle the amount staying in their facilities. The article discusses how China's ban will exacerbate pre-existing environmental issues as well as what steps businesses need to take to reduce the amount of plastic produced, which will again contribute to section four.⁹

Lastly, NPR did a recent radio interview in September of 2019 with scientist Kate O'Neil about several important issues this research paper aims to address, including why China has banned the importation of plastics, how the U.S. recycling industry has contributed to this issue and the environmentally unfriendly practices of everyday Americans.¹⁰ One of the main issues O'Neil touches on is the contamination of plastic.¹¹ She states that this contamination has played a direct role in China's decision to implement this ban.¹² China knows it has been taken advantage of by many U.S. recycling companies, and is hyper-aware of

⁸ "The Aftermath of China's Waste Ban." State of the Planet, March 7, 2019. blogs.ei.columbia.edu/2019/03/11/chinas-waste-ban-aftermath/.

⁹ Katz, Cheryl. "Piling Up: How China's Ban on Importing Waste Has Stalled Global Recycling." Yale Environment 360. March 7,

2019. e360.yale.edu/features/piling-up-how-chinas-ban-on-importing-waste-has-stalled-global-recycling.

¹⁰ O'Neill, Kate. "Where Does Our Recycling Go?" NPR. September 12, 2019. <https://www.npr.org/2019/09/12/760181337/where-does-our-recycling-go>

¹¹ Ibid.

¹² Ibid.

its environmental reputation by wanting to show the world how dedicated China is to cleaning up the environment.¹³

Scrap vs. Waste: ISRI and ISWA also emphasize the difference between “waste” and “scrap” and criticize China for conflating the two.¹⁴ Throughout my research, I continue to see this mistake, most notably in a short documentary created by VICE about China’s ban. VICE specifically interviewed and visited ELH (as well as other businesses in the United States) to gauge how American companies were being impacted by the ban. In the video, VICE specifically refers to the scrap trade as “the trash trade.”¹⁵ While this video explained the ban and its impact on American companies well, I would argue it had a detrimental effect by referring to scrap commodities as trash. This video, which has just under 2 million views, reached a massive audience and thus further confused the masses about what the difference is between

the two. After visiting ELH, people frequently referred to scrap materials as wastepaper, waste plastics, and so on.¹⁶ While they of course understand the difference between what is waste (meaning trash) and what is scrap (meaning a commodity that can be bought and sold in markets), using this language further confuses the public on this issue and may hinder productive talks with China. By making this distinction an important part of my research, I plan on working to solve this issue.

Ban’s Impact on U.S. and Chinese Businesses: The Solid Waste Association of North America (SWANA) has also researched how it believes U.S. recycling facilities will handle shifts in the market and fears that many facilities will not be able to remain open.¹⁷ This is important because my case study in section three outlines the different methods and strategies used by ELH to adapt to a changing market structure. I also focus

¹³ Ibid.

¹⁴ Adler, Adina R. “China’s Sustainability Challenge.” *Scrap Magazine*. March, 2018. 13 and “The Aftermath of China’s Waste Ban.” *State of the Planet*. March 7, 2019.

blogs.ei.columbia.edu/2019/03/11/chinas-waste-ban-aftermath/ and ISWA “China’s Ban on Recyclables: Beyond the Obvious...” ISWA.. www.iswa.org/home/news/news-detail/article/chinas-ban-on-recyclables-beyond-the-obvious/109/

¹⁵ VICE News. “China’s Waste Ban is Causing a Trash Crisis in the U.S. (HBO).” August 31, 2018.

<https://www.youtube.com/watch?v=NK20t11He14&t=86s>.

¹⁶ Harvey, Douglas. Benjamin Harvey. Interview with Julia Harvey. Personal Interview. Westborough, MA, September 27, 2019.

¹⁷ Biderman, David. “Catalogue of Solid Wastes Forbidden to Import into China by the End of 2017 (4 Classes, 24 Kinds) (2 Page(s), in Chinese).” Solid Waste Association of North America. August 31, 2017. http://swana.org/Portals/0/Advocacy/SWANA_Comments_on_CHN1211.pdf

on how the ban is now impacting the business model of companies who took advantage of lax regulations, which will be an interesting way to compare how companies are or are not keeping their business viable.¹⁸

On the Chinese side, many businesses were also quickly and deeply impacted by the ban. Most notably, the Nine Dragons paper company, which relied on U.S. imports of scrap paper for decades, and has invested 500 million dollars in paper mills throughout the United States in the past year.¹⁹ Other Chinese companies are also investing in scrap plastic and metal recycling plants throughout the United States and the globe to later send to manufacturers in China.²⁰ This information is important because it will further contribute to section III, where I discuss different strategies that businesses can use to stay viable.

Contributions

Before discussing specific contributions, it is important to realize that the waste ban was implemented at the beginning of 2018,

meaning it has been in effect for about two years with other policy changes being added since then, such as additional scrap products being added to the ban.²¹ As a result, this topic of study is fairly new, meaning there is limited research available, confusion on what the ban is, what the possible ramifications of it are, and what changes could be made to ensure a better future for recycling. My research paper strives to help define and clarify the policies of the Chinese government as well as lay out the various effects this ban has had and will continue to have on the global scrap trade and environment, specifically for the U.S. and China. Helping to establish a clear and common ground for this ongoing issue is crucial.

*Sino-American Relations: My research analyzes the ban in the context of Sino-American relations, which is a unique perspective since research usually looks at commerce, diplomacy, and environmental concerns as separate issues. For example, sources like the *China Journal* tend to focus on environmental issues in China such as*

¹⁸Ibid.

¹⁹ Esch, Mary. "China's Ban on Scrap Imports a Boon to U.S. Recycling Plants." NBC Los Angeles. May 18, 2019. <https://www.nbclosangeles.com/news/green/Chinas-Scrap-Imports-Ban-Recycling-Investments-510118141.html>

²⁰ Ibid.

²¹ "Update 1-China Bans Imports of 16 More Scrap, Waste Products from End-2018 - Ministry." *Reuters*, Thomson Reuters, 19 Apr. 2018, <https://www.reuters.com/article/china-waste-imports/update-1-china-bans-imports-of-16-more-scrap-waste-products-from-end-2018-ministry-idUSL3N1RW1UK>.

environmental protests, the impact of economic development on the environment, population pressure on the environment, and so on.²² As for the United States, the main environmental issues discussed are usually climate change, overconsumption within the United States and how it affects the environment, and so forth.²³ In regards to recycling specifically, both China and the United States tend to either have a localized view or a very global perspective on recycling whether it be reducing E-waste in China specifically or Asia in general or how laws impact recycling operations in the United States or the Western world at large such as in the EU.²⁴ What this research project focuses on is bringing various fields and

analyzing them together in one research paper. This paper addresses environmentalism, recycling, commerce, and diplomacy in the context of Sino-American relations. Through intersecting various fields under this scope, this research serves a unique purpose by bringing attention to an overlooked but crucial aspect of Sino-American relations.

This research brings more attention to the specific mistakes made by *both* the U.S. and China regarding the ban. There has been miscommunication on both sides, resulting in the hindrance of progress and mutual understanding. While I believe scholars understand the difference between “waste” and “scrap,” by using them interchangeably,

²² Edmonds, Richard Louis. "Studies on China's Environment." *The China Quarterly*, no. 156 (1998): 725-32. www.jstor.org/stable/656122.

²³ "Climate Change Evidence: How Do We Know?" NASA, NASA, 30 Sept. 2019, climate.nasa.gov/evidence/ and Fankhauser, S. (2012). (Rep.). Copenhagen Consensus Center. Retrieved from www.jstor.org/stable/resrep16372 and Biswas, A., Licata, J., McKee, D., Pullig, C., & Daughtridge, C. (2000). The Recycling Cycle: An Empirical Examination of Consumer Waste Recycling and Recycling Shopping Behaviors. *Journal of Public Policy & Marketing*, 19(1), 93-105. Retrieved from www.jstor.org/stable/30000490 and "Climate Change." *United Nations*, United Nations, www.un.org/en/sections/issues-depth/climate-change/ and Cohen, Roger. "Incurable American Excess." *The New York Times*, The New York Times, 6 Aug. 2015, www.nytimes.com/2015/08/07/opinion/roger-cohen-incurable-american-excess.html.

²⁴ Hopewell, J., Dvorak, R., & Kosior, E. (2009). Plastics Recycling: Challenges and Opportunities. *Philosophical*

Transactions: Biological Sciences, 364(1526), 2115-2126. Retrieved from www.jstor.org/stable/40485985 and Viscusi, W., Huber, J., Bell, J., & Cecot, C. (2013). Discontinuous Behavioral Responses to Recycling Laws and Plastic Water Bottle Deposits. *American Law and Economics Review*, 15(1), 110-155. Retrieved from www.jstor.org/stable/42705632 and Viscusi, W., Huber, J., & Bell, J. (2014). Private Recycling Values, Social Norms, and Legal Rules. *Revue D'économie Politique*, 124(2), 159-178. Retrieved from www.jstor.org/stable/43860156 and Institute for Global Environmental Strategies. Report. Institute for Global Environmental Strategies, 2015. www.jstor.org/stable/resrep00714 and Lines, K., Garside, B., Sinha, S., & Fedorenko, I. (2016). *Clean and inclusive?: Recycling e-waste in China and India* (pp. 26-31, Rep.). International Institute for Environment and Development. Retrieved from www.jstor.org/stable/resrep02681.7

the two will likely be conflated. One of the main issues that U.S. and Chinese diplomats are debating is whether the ban should include scrap since the U.S. views it as a valuable commodity and not a threat to China's environment. Therefore, in my research, I will consistently emphasize how these two phrases have very different meanings.

Global and Local Levels of Scrap Trade:

Another aspect that my research contributes to is a better understanding of the scrap trade on both a local and global scale. While there is research available that discusses the impact of the ban on recycling facilities throughout the U.S., I believe my case study on ELH provides an in-depth look at how the ban is affecting facilities on an individual level while also seeing the on-the-ground methods ELH uses to survive and keep business viable in a global trade that is shifting greatly. By focusing on only one facility and then comparing its experience with companies that sent contaminated bail to China, my readers will have a more thorough understanding of the ban's impact as well as why it was implemented in the first place.

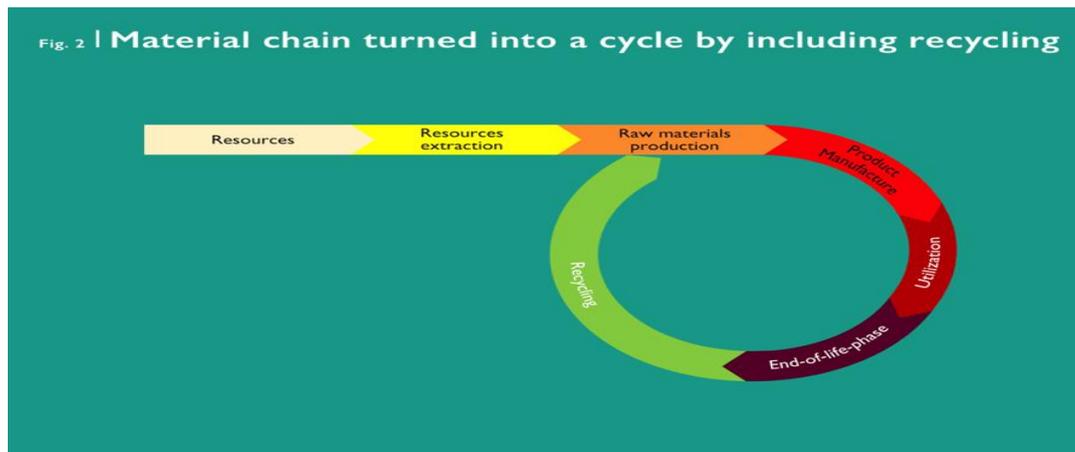
This research asserts that *both* the United States and China created these current conditions through unsustainable

environmental and commercial practices. With this ban in place, *both* of these issues will be further exacerbated. Both parties need to understand their role in creating current conditions for any real progress to be made. Instead of blaming one another as the primary cause, I hope to show mistakes made by both sides and suggest the next steps China and the United States can take to protect their environments and establish a better and more fair scrap trade system. It is also crucial for a broader audience to understand this topic in-depth because it has and will continue to affect the daily lives of Chinese and American citizens and businesses alike. It has and will continue to have a direct impact on our economies, production lines, markets, environment, and many other aspects of our lives.

Section I: Recycling

What is Recycling: According to the EPA, "recycling is the process of collecting and processing materials that would otherwise be thrown away as trash and turning them into

new products.”²⁵ In the images below, we can see recycling's role as a feedback loop²⁶:



Figures I and II show how recycling operates as a feedback loop.²⁷

For this feedback loop to happen, however, recyclable materials must be collected and categorized. After this step, recyclables are transported to another facility where they are cleaned and

processed into materials that can be sold to manufacturers, which will use them to make new products.²⁸ Therefore, recyclables are valuable commodities that

²⁵ EPA. “Recycling Basics.” Environmental Protection Agency, August 1, 2018.

<https://www.epa.gov/recycle/recycling-basics>.

²⁶ Bartl, Andreas. “Circular Economy: Cycles, Loops, and Cascades.” International Solid Waste Association. 17.

www.iswa.org/fileadmin/galleries/Task_Forces/Task_Force_Report_2.pdf.

²⁷ Ibid.

²⁸ EPA “Recycling Basics.” Environmental Protection Agency. August 1, 2018.

www.epa.gov/recycle/recycling-basics.

can be bought and sold on domestic and international markets.²⁹

What are the Benefits of Recycling?

Recycling is desirable because it benefits society and the environment in a variety of ways. For example, recycling helps reduce the amount of waste transported to landfills, conserves natural resources, reduces greenhouse gasses, and so on.³⁰

Reduces the Amount of Waste

Transported to Landfills: By reusing materials through the recycling feedback loop, less material is being sent to large and environmentally dangerous landfills. Landfills are harmful to the environment because they emit methane, which is a highly potent greenhouse gas.³¹ Greenhouse gases have a direct impact on the warming of the earth and thus play a major role in the climate crisis the world is facing today.³² By recycling, the quantity of greenhouse gasses being emitted is reduced.³³

Conserves Natural Resources: By reusing materials, recycling reduces the frequency of industries sourcing raw materials to create their products. Extracting virgin materials is detrimental to the environment because it also creates greenhouse gasses and pollutants.³⁴ Furthermore, extracting virgin materials is extremely energy intensive.³⁵ Therefore, recycling is seen as both a more environmentally friendly and energy-efficient option.

What are the Disadvantages of Recycling? Cost. Recyclables need to be collected, sorted, processed, transported, and so on. This requires a great deal of machinery and manpower.³⁶ For recycling to be cost-effective, each step in the process must be highly efficient, which means that access to state-of-the-art technology is a crucial aspect of recycling operations.³⁷ Recycling is profitable so long as technology is being used and there

²⁹ Ibid.

³⁰ Ibid.

³¹ The Economist. "The Truth about Recycling." The Economist. June 9, 2007. www.economist.com/technology-quarterly/2007/06/09/the-truth-about-recycling.

³² Department of the Environment and Energy "Greenhouse Effect." Australian Government. <https://www.environment.gov.au/climate-change/climate-science-data/climate-science/greenhouse-effect>.

³³ "The Truth about Recycling." www.economist.com/technology-quarterly/2007/06/09/the-truth-about-recycling.

³⁴ Ibid.

³⁵ Ibid.

³⁶ Micks, Ashley. "The Costs of Recycling." December 12, 2012.

large.stanford.edu/courses/2012/ph240/micks2/

³⁷ Ibid.

is a constant high volume of materials being recycled, meaning that the more we recycle, the more lucrative recycling can become.³⁸

Recycling in the U.S.: Who, What, and Where?

Who: In America, as opposed to other countries around the world, there is a decentralized recycling system, which is regulated by the state and localities.³⁹ Since they are responsible for setting environmental goals, how each deals with recycling and how much of a priority it is varies from state to state and town to town.⁴⁰ For the most part, recycling companies are the ones who collect materials and bring them back to their facilities where they are later sorted.

What: Since the recycling process is so decentralized, what materials each facility can process varies.⁴¹ However, with technological developments, recyclable materials are continuously

expanding. Various types of metals, plastics, paper/cardboard, glass, batteries, and electronics can be recycled.⁴²

Where: While the United States has markets in multiple parts of the world, China has been the main importer of American scrap for several decades, which will be discussed further in the next section. Scrap has also played an important role in China's economy by being a major source for Chinese manufacturers to create new products that they can sell on the market.⁴³

The History of the United States and China Trading Scrap

Since the 1990s, the scrap trade between the United States and China has been increasingly lucrative until the Chinese government's ban on *yanglaji* was implemented in 2018.⁴⁴ Before that ban, the world was sending large amounts of shipments filled with scrap

³⁸ Ibid.

³⁹ Bidernman, David. "Catalogue of Solid Wastes Forbidden to Import into China by the End of 2017 (4 Classes, 24 Kinds) (2 Page(s), in Chinese)." Solid Waste Association of North America. August 31, 2017. swana.org/Portals/0/Advocacy/SWANA_Comments_on_CHN1211.pdf.

⁴⁰ Ibid.

⁴¹ Harvey, Douglas. Interview with Julia Harvey. Personal Interview. Westborough, MA, September 27, 2019.

⁴² Waste Management. "What Can I Recycle?" <https://advances.sciencemag.org/content/4/6/ea0131.abstract>

⁴³ Brooks, Amy L., et al. "The Chinese Import Ban and Its Impact on Global Plastic Waste Trade." Science Advances. American Association for the Advancement of Science June 1, 2018. <https://advances.sciencemag.org/content/4/6/ea0131>.

⁴⁴ Ibid.

commodities to China. To put this into perspective, about 70% of the world's plastic was being sent to China each year, which is about 7 million tons of scrap plastic.⁴⁵ To the rest of the world, China was a logical solution to alleviate their massive overload of plastic scrap. "China had plenty of capacity to handle plastics and lots of cheap laborers to sort recyclable materials from the non-recyclable."⁴⁶ Furthermore, this system gave Chinese manufacturers resources to make their exportable goods as China's manufacturing sector was booming.⁴⁷ The United States was sending a large portion to China with 700,000 tons a year by 2016.⁴⁸ In the same year, \$5.6 billion in scrap commodities were exported from the United States to China.⁴⁹ For both

parties, the scrap trade was a lucrative endeavor.

Chinese Attitudes Begin to Shift: While the scrap trade was lucrative for both countries, China had not developed proper systems to oversee it, which resulted in a slew of health and environmental problems developing.⁵⁰ By the early 2010s, attitudes around importing recyclables began to change. This change became extremely apparent in 2013 with the introduction of China's Green Fence policy. The Green Fence was a temporary ban on plastic imports that were not meeting new standards enforced by Chinese inspectors and officials.⁵¹ The goal of this ban was to ensure higher-quality imports entering China.⁵² This ban resulted in a "USD 446 million and USD 298 million reduction in export and

⁴⁵ Joyce, Christopher. "Where Will Your Plastic Trash Go Now That China Doesn't Want It?" NPR. March 13, 2019. www.npr.org/sections/goatsandsoda/2019/03/13/702501726/where-will-your-plastic-trash-go-now-that-china-doesnt-want-it.

⁴⁶ Ibid.

⁴⁷ Brooks, Amy L., et al. "The Chinese Import Ban and Its Impact on Global Plastic Waste Trade." *Science Advances*, American Association for the Advancement of Science, June 1, 2018. <https://advances.sciencemag.org/content/4/6/ea0131>.

⁴⁸ Ibid.

⁴⁹ Columbia University: Earth Institute. "The Aftermath of China's Waste Ban." *State of the Planet*. March 7, 2019.

blogs.ei.columbia.edu/2019/03/11/chinas-waste-ban-aftermath/.

⁵⁰ Baxter, Tom. "24 Reasons Why China's Ban on Foreign Trash is a Wake-up Call for Global Waste Exporters." *South China Morning Post*. December 31, 2017.

<https://www.scmp.com/comment/insight-opinion/article/2126098/24-reasons-why-chinas-ban-foreign-trash-wake-call-global>.

⁵¹ Brooks, Amy. "The Chinese Import Ban and Its Impact on Global Plastic Waste Trade." *Science Advances*. American Association for the Advancement of Science. June 1, 2018.

<https://advances.sciencemag.org/content/4/6/ea0131>.

⁵² Ibid.

import trade values.”⁵³ While this ban was only temporary, it sent a clear message to the West that China’s attitude was shifting.

With the National Sword policy, Chinese importers were not receiving new import quotas and permits for months at a time, which significantly slowed down shipments to China.⁵⁴ Simultaneously, because inspections conducted by Chinese authorities were ramping up and authorities were demanding higher quality imports, shipments were struggling to enter China at all.⁵⁵ With the recent ban on *yanglaji*, the Chinese have taken a much stronger stance against the quality of foreign scrap imports and are in the process of creating “long-term mechanisms” to enforce the

waste ban.⁵⁶ Currently, the U.S. and other countries are trying to negotiate with China while also trying to find new and reliable markets in mostly Southeast Asia.

Despite some bumps in the road, China and the United States were able to maintain a mutually lucrative commercial relationship for decades. Once the National Sword policy was implemented, however, the West was in for a rude awakening.

Section II: The National Sword: China’s Ban on *Yanglaji*

History of Chinese Authorities

Regulating Imports: Before discussing the National Sword policy in detail, here is a table laying out the history of Chinese authorities regulating scrap imports:

Policies and Shifts in Attitude	Dates	Purpose	Effects
The Chinese Government begins reassessing the importance of environmentalism as a national concern.	1970’s	Chinese officials began acknowledging that efforts needed to be made to prevent	Political stability and economic growth were prioritized by the CCP, which meant environmental efforts were not given enough

⁵³ Ibid.

⁵⁴ Resource Recycling “From Green Fence to Red Alert: A China Timeline.” Resource Recycling News. July 3, 2019. <https://resource-recycling.com/recycling/2018/02/13/green-fence-red-alert-china-timeline/>.

⁵⁵ Ibid.

⁵⁶ “The Inter-Department Coordination Group for Banning Foreign Wastes and Promoting the Institutional Reform on Solid Waste Imports Holds its 1st Plenary Session.” The Ministry of Ecology and Environment. December 12, 2018. http://english.mee.gov.cn/News_service/Photo/201812/t20181212_684343.shtml

		environmental degradation. ⁵⁷	attention. ⁵⁸ This still shows a shifting attitude among senior Chinese officials.
Environmental protection becomes state policy.	1983	To give environmental protection more attention. ⁵⁹	China still lacks administrative bodies knowledgeable on environmentalism. ⁶⁰ As a result, it was difficult to effectively enforce new laws. ⁶¹
Operation Green Fence	2013 (Efforts to enforce import regulations had been going on since 2006). ⁶²	Enhanced inspections to see if there were contaminants in scrap imports. ⁶³	Some containers deemed contaminated by Chinese inspectors were rejected. ⁶⁴ Some U.S. companies began implementing inspections before sending shipments to China to ensure higher quality. This policy became lenient again, which resulted in some U.S. companies reverting to sending contaminated products to China.
Crackdown on Customs	11/1/2015-12/31/2015	Inspecting importers to make	Scrap flows are disrupted again

⁵⁷ Edmonds, Richard Louis. "Studies on China's Environment." *The China Quarterly*, no. 156 (1998): 725-32. www.jstor.org/stable/656122.

⁵⁸ Ibid.

⁵⁹ Wang, Lijun. "The Changes of China's Environmental Policies in the Latest 30 Years." *Procedia Environmental Sciences*, 2010, core.ac.uk/download/pdf/82319880.pdf. pg 1207

⁶⁰ Ibid.

⁶¹ Ibid.

⁶² Powell, Jerry. "Operation Green Fence Is Deeply Affecting Export Markets." *Resource Recycling News*, Resource Recycling, 5 Dec. 2016, resource-recycling.com/recycling/2013/04/12/operation-green-fence-is-deeply-affecting-export-markets/.

⁶³ Paben, Jared. "China Announces 'Sword' Crackdown on Illegal Recyclable Material Imports." *Resource Recycling News*, Resource Recycling, 10 July 2017, resource-recycling.com/recycling/2017/02/21/china-announces-sword-crackdown-illegal-recyclable-material-imports/.

⁶⁴ Ibid.

		sure import regulations are being enforced ⁶⁵	
National Sword: The Waste Ban	2018-Present	Imports of certain “solid waste” are banned. ⁶⁶ Import licenses were significantly reduced. ⁶⁷	Massive reduction in scrap exports from the U.S. (and other Western countries) to China. ⁶⁸ Severe backup at U.S. recycling facilities. ⁶⁹ Some materials were sent to landfills to alleviate the backup. ⁷⁰

Table I shows that China has become increasingly more proactive in regulating scrap imports and enforcing widespread standards and regulations on trade to meet environmental goals made by the government.

Despite signs of China’s attitude shifting throughout the years, regulations and crackdowns always seemed to relax after a while. This made the shock of the National Sword policy all the more intense and unsettling for the West; no one could have predicted the policy shift that was to come in 2018.

What is the National Sword Policy?: At the start of 2018, the Chinese government formally declared that imports of *yanglaji* (literally foreign waste) would not be allowed to enter the country.⁷¹ The ban is composed of five parts, with eighteen subsections that discuss a variety of subtopics such as reducing the amount of solid waste allowed to enter the country,

⁶⁵ Elliott, Bobby. “China Again Cracks down on Scrap Plastic Imports.” *Resource Recycling News*, Resource Recycling, 14 Feb. 2017, resource-recycling.com/recycling/2015/11/11/china-cracks-scrap-plastic-imports/.

⁶⁶ Pink, Kevin. “What Is the National Sword?” *Center for EcoTechnology*, 3 July 2018, www.centerforecotchnology.org/what-is-the-national-sword/.

⁶⁷ Ibid.

⁶⁸ Ibid.

⁶⁹ Ibid.

⁷⁰ Ibid.

⁷¹ “国务院办公厅关于印发禁止洋垃圾入境 推进固体废物进口管理制度改革 实施方案的通知。” 国务院办公厅. July 27, 2017. www.gov.cn/zhengce/content/2017-07/27/content_5213738.htm and Zhang, Laney. “Global Legal Monitor.” China: National Plan on Banning “Foreign Garbage” and Reducing Solid Waste Imports / *Global Legal Monitor*, The Law Library of Congress, 8 Aug. 2017, www.loc.gov/law/foreign-news/article/china-national-plan-on-banning-foreign-garbage-and-reducing-solid-waste-imports/.

learning how to deal with smuggling, creating a domestic and international system to discuss trade, and smuggling, and more.⁷² Throughout the ban, deadlines are projected for specific government goals to be met throughout the years of late 2017, 2018, 2019, and even 2020.

In July 2017, The General Office of the State Council released the *Implementation Plan for Banning Foreign Solid Wastes and Promoting the Institutional Reform on Solid Waste Importation*.⁷³ Since then, The Ministry of Ecology and Environment (MEE) in China has been taking a leading role in bringing this plan to fruition. The MEE was met with its fair share of challenges, however. When these changes were announced in 2017, smuggling scrap into China became more of a problem.⁷⁴ MEE has been working with local governments to reduce the amount of *yanglaji* imports entering China by

orchestrating crackdowns on smuggling, enforcing environmental inspections, giving fewer permits to importers, banning specific types of recyclables, and more.⁷⁵ All of these enforcements by the MEE give the government greater control over what materials can enter the country. By November 15th, 2018, not even a year after the ban's full implementation, China successfully reduced its *yanglaji* imports. The imports were 52.8% less than what was imported at the same time the year before.⁷⁶

Purpose of the Ban

Social Order and the Chinese People: The Chinese government emphasizes that the primary purpose of the ban is to protect the health of its citizens. One way of doing this is by focusing on reducing pollution, which the Chinese government believes *yanglaji* imports are contributing to.⁷⁷ Pollution has been a concern of the Chinese public for decades, with Chinese

⁷² Ibid.

⁷³ "MEP Holds a Video Conference on Banning Foreign Wastes and Promoting the Institutional Reform on Solid Waste Importation." The Ministry of Ecology and Environment. November 22, 2017. http://english.mee.gov.cn/About_MEE/leaders_of_mee/liganjie/Activities_lgj/201711/t20171122_426741.shtml.

⁷⁴ "China Is Getting Tough on Smuggled Waste." *World Economic Forum*, <https://www.weforum.org/agenda/2018/04/chi>

<na-customs-seizes-110-000-t-of-smuggled-waste-in-2018-paper>.

⁷⁵ Ibid.

⁷⁶ "The Inter-Department Coordination Group for Banning Foreign Wastes and Promoting the Institutional Reform on Solid Waste Imports Holds its 1st Plenary Session." The Ministry of Ecology and Environment. December 12, 2018. http://english.mee.gov.cn/News_service/Photo/201812/t20181212_684343.shtml.

⁷⁷ Adler, Adina R. "China's Sustainability Challenge." *Scrap Magazine*. March, 2018. 13.

people organizing and holding protests to bring attention to their growing concerns regarding pollution and its effects on their health.⁷⁸ By reducing pollutants, the Chinese government is not only ensuring a healthier populace but is reducing the potential for social disorder as well. In addition, the Chinese government plans on incorporating Chinese citizens into the daily duties necessary to create a cleaner China. The Chinese government projects that by 2020, China will recycle 350 million tons of scrap, which was just 246 million tons five years earlier.⁷⁹ To achieve this goal, however, the Chinese people must become more proactive by recycling. By not only emphasizing the importance of the Chinese people's health but also mentioning their role in creating a cleaner society, the Chinese government is taking a strong stance in improving the quality of life for the Chinese people and thus reducing the risk of social unrest.

⁷⁸ Zhang, Amy. "Rational Resistance: Homeowner Contention Against Waste Incineration in Guangzhou." *China Perspectives*. 2014; Vol. 2014, No. 2. 45-52.

⁷⁹ "国务院办公厅关于印发禁止洋垃圾入境 推进固体废物进口管理制度改革 实施方案的通知." 国务院办公厅. July 27, 2017. www.gov.cn/zhengce/content/2017-07/27/content_5213738.htm

⁸⁰ "China Customs Seizes 110,000 Tonnes of Smuggled Waste This Year." *South China Morning Post*, Reuters, 3 Apr. 2018,

Smuggling: In addition to creating a cleaner China, another purpose of the ban is to reduce the number of imports being smuggled into the country. By April 2018, just three months after the ban's implementation, Chinese authorities were able to seize 110,000 tons of smuggled scrap and crack down on 25 smuggling organizations.⁸⁰ Through reforming administrative bodies and enforcing stricter inspections, the Chinese government plans on preventing illegal imports from entering China.⁸¹

Improving China's Environment:

Another goal of the CCP is to create an "ecological society": 严重危害人民群众身体健康和我国生态环境安全...国务院关于推进生态文明建设和生态文明体制改革的决策部署. *This severely hurts the health of the people and the safety of China's ecological environment...the State Council thus promotes the establishment of an*

www.scmp.com/news/china/society/article/2140017/china-customs-seizes-110000-tonnes-smuggled-waste-year.

⁸¹ Zhang, Laney. "Global Legal Monitor." *China: National Plan on Banning "Foreign Garbage" and Reducing Solid Waste Imports* | *Global Legal Monitor*, The Law Library of Congress, 8 Aug. 2017. www.loc.gov/law/foreign-news/article/china-national-plan-on-banning-foreign-garbage-and-reducing-solid-waste-imports/

ecological society. Many government documents are littered (no pun intended) with the phrase “ecological society.” To achieve this ambitious goal, the Chinese government plans on realizing this “ecological civilization” by 2035 by making pollution more or less a thing of the past.⁸² The main goal of this, which President Xi Jinping laid out in his speech at the National Conference in 2018, is to rapidly improve the environment by “prioritizing resource conservation and environmental protection and letting nature restore itself [as well as promoting] ways of work and life that help conserve resources and protect the environment.”⁸³ Xi Jinping has put environmental protection at the forefront of his administration and has already had notable success.⁸⁴

China Realizing Its Environmental Goals

To realize all of these goals, however, the Chinese government has set its sights

on reforming and creating new systems to deal with these issues in both national and international spheres:

National: The Chinese government plans on establishing a comprehensive recycling system by improving sorting capabilities and infrastructure as well as updating environmental standards.⁸⁵ Furthermore, administrative bodies will be reformed to ensure that major concerns such as smuggling do not occur and that the national (and international) industry is respecting China’s new regulations.⁸⁶ To ensure this, the Chinese government has created an information mechanism so that Chinese industries would be able to adequately abide by the new reforms and laws.⁸⁷

International: The Chinese government wants to bring this system to the international stage by creating mechanisms that ensure legal trade through strengthening customs,

⁸² Bosu, Rabi Sankar. “China Redoubles Efforts toward ‘Beautiful China’ by 2035.” *China Plus*. May 22, 2018. chinaplus.cri.cn/opinion/opedblog/23/20180522/134276.html.

⁸³ *Ibid.*

⁸⁴ *Ibid.*

⁸⁵ “The Inter-Department Coordination Group for Banning Foreign Wastes and Promoting the

Institutional Reform on Solid Waste Imports Holds its 1st Plenary Session.” The Ministry of Ecology and Environment. December 12, 2018.

http://english.mee.gov.cn/News_service/Photo/201812/t20181212_684343.shtml

Adler, Adina R. “China’s Sustainability Challenge.” *Scrap Magazine*. March, 2018, p. 13.

⁸⁶ *Ibid.*

⁸⁷ *Ibid.*

international policing, and getting the United Nations to collaborate.⁸⁸

By following these new reforms, the Chinese government hopes to achieve its ambitious environmental goals through reforms on both the national and international stages.

Ban's Impact on the U.S. and International Trade

Effects: While China's efforts to protect the environment are certainly admirable, the world was shocked by the suddenness of the ban since many countries around the globe heavily relied on their trade with China.⁸⁹ To help illustrate the effects of this ban, in 2018 China only accepted 1% of what it accepted in 2016.⁹⁰ When the ban went into effect, recycling facilities around the United States were in a state of uncertainty over where their shipments

would go. Essentially, "all recyclable plastics from municipal recycling programs" were banned.⁹¹ Also, recycling became more costly while the profits of recycling were simultaneously diminishing.⁹²

U.S. Efforts to Open Discussions with China: One of the biggest contentions with this ban is the term "waste" and what is and is not considered waste. Currently, the director of the MEE's solid waste division, Qiu Qiwen, considers anything that is below the contamination level to not be a regular commodity and thus is viewed as waste.⁹³ Staff at the Institute of Scrap Recycling Industries (ISRI) have met with Chinese officials to emphasize that its members in the U.S. recycling industry do not export waste, but "specification-grade recycled commodities."⁹⁴ Despite these efforts, the

⁸⁸ Ibid.

⁸⁹ Joyce, Christopher. "Where Will Your Plastic Trash Go Now That China Doesn't Want It?" NPR. March 13, 2019. <https://www.npr.org/sections/goatsandsoda/2019/03/13/702501726/where-will-your-plastic-trash-go-now-that-china-doesnt-want-it>

⁹⁰ Ibid.

⁹¹ Katz, Cheryl. "Piling Up: How China's Ban on Importing Waste Has Stalled Global Recycling." Yale School of Forestry and Environmental Studies. March 7, 2019. e360.yale.edu/features/piling-up-how-chinas-ban-on-importing-waste-has-stalled-global-recycling.

⁹² Ibid.

⁹³ Xu, Muyu. "China Plans to Cut Waste Imports to Zero by next Year: Official." *Reuters*, Thomson Reuters, 28 Mar. 2019, www.reuters.com/article/us-china-waste-imports/china-plans-to-cut-waste-imports-to-zero-by-next-year-official-idUSKCN1R90AQ.

⁹⁴ Lewon, Mark. "Advocating for Our Industry." *Scrap Magazine*. March, 2018. 9 and 人民日报. "禁入洋垃圾活用土垃圾." 禁入洋垃圾活用土垃圾-新华网, December 10, 2018. www.xinhuanet.com/local/2018-12/10/c_1123828406.htm.

discussions have not yet been fruitful. The consequences of this conflation are that China is defining the global scrap trade in its terms by implementing a contamination standard that is higher than what the industry finds to be tolerable, which is 3%.⁹⁵ Furthermore, if China wants to play a role in standardizing global scrap trade through the development of international organizations and mechanisms, China *must* be open to productive discussions with other countries. Without mutual understanding and open discussions, it is

extremely unlikely that the current situation will improve at all.

Ban’s Impact on China:

Despite scrap being an essential part of China’s economy, the CCP followed through with their plans, which had a sudden and massive impact on Chinese manufacturers who were reliant on imports for decades to create various products.⁹⁶

One of the most impacted businesses in China has been the massive paper company known as 9 Dragons.



⁹⁵ Phelps, Jonathan. “Mountains of Paper Stacks up at E.L. Harvey after China Says No More.” *MetroWest Daily News, Framingham, MA*, MetroWest Daily News, Framingham, MA, 10 Jan. 2018,

www.metrowestdailynews.com/news/20180104/mountains-of-paper-stacks-up-at-el-harvey-after-china-says-no-more.

⁹⁶ Ibid.

Figure III shows Zhang Yin, the owner of the Chinese paper company 9 Dragons.⁹⁷

Zhang Yin, who started paper recycling in 1995, became the first Chinese female billionaire from her lucrative recycling business.⁹⁸ Companies like 9 Dragons relied on imports of recycled fiber to make their products.⁹⁹ As a result of the ban, 9 Dragons had to shut down several mills that were using recycled fiber to create their paper products.¹⁰⁰ This shutdown was then followed up by an announcement that 9 Dragons would be purchasing two virgin pulp mills in the United States, which gave the company access to new resources since the recycled fiber is no longer allowed to enter China.¹⁰¹ To better illustrate the ban's effects, 2018 paper imports were at only 68% of what they

were at the same time in 2017, showing the clear negative impact the ban had on 9 Dragons' business.¹⁰²

What is crucial to understand is that the ban served as a starting point for further restrictions to be added and enforced. For instance, on January 1st, 2018, when the ban was formally put into effect, China banned 24 categories of recyclable materials such as scrap plastics, unsorted scrap paper, scrap textiles, and more.¹⁰³ By March 1st, 2018, China only accepted materials of the highest quality by implementing "a 99.5% purity standard" for plastics and fibers, which many exporters found impossible

⁹⁷ Vanburen, Andrew. "ZHANG YIN Was First Woman to Be Richest Person in China." *NextInsight*, 10 Aug. 2013, www.nextinsight.net/story-archive-mainmenu-60/921-2013-chinahk/7230-zhang-yin-self-made-paper-tycoon-topped-chinas-rich-list.

⁹⁸ Joyce, Christopher. "Where Will Your Plastic Trash Go Now That China Doesn't Want It?" NPR, March 13, 2019. <https://www.npr.org/sections/goatsandsoda/2019/03/13/702501726/where-will-your-plastic-trash-go-now-that-china-doesnt-want-it>

⁹⁹ Staub, Colin. "China Roundup: CCIC Update, Intense Inspections and More." *Resource Recycling*, June 12, 2018. <https://resource-recycling.com/recycling/2018/06/12/china-roundup-ccic-update-intense-inspections-and-more/>

¹⁰⁰ Ibid.

¹⁰¹ Ibid.

¹⁰² Ibid.

¹⁰³ Katz, Cheryl. "Piling Up: How China's Ban on Importing Waste Has Stalled Global Recycling." *Yale School of Forestry and Environmental Studies*. March 7, 2019. e360.yale.edu/features/piling-up-how-chinas-ban-on-importing-waste-has-stalled-global-recycling and "China Announces Import Ban on 24 Types of Solid Waste." *China Daily*. July 21, 2017. www.chinadaily.com.cn/china/2017-07/21/content_30194081.htm.

to achieve.¹⁰⁴ By December 31st, 2018, 16 more recyclable groups were banned.¹⁰⁵ The ban was not a single legislative decision, but rather a catalyst for a sudden and drastic shift in Chinese government attitudes toward the current scrap trade system and its effects on the environment.

The ban has had an immense impact on the American, Chinese, and global scrap trade. With China– the crux of the global recycling trade system– deciding to implement this ban, there has been a significant shift in international

trade and the way countries deal with their scrap.

Section III: The Ban’s Impact on ELH

Introduction to ELH

To get a better idea of how this ban has impacted recycling capabilities in the U.S., I decided to use a local waste and recycling facility in Massachusetts as a case study to get an on-the-ground look at how individual players in the industry are being affected, and what they are doing to make a less lucrative scrap market still viable for their business. From now on, we will refer to this facility as ELH.



¹⁰⁴ Xinhua. “China Announces Import Ban on 24 Types of Solid Waste.” China Daily. July 21, 2017.

www.chinadaily.com.cn/china/2017-07/21/content_30194081.htm.

¹⁰⁵ Ibid

Figure IV shows the main office building at the Westborough, MA facility¹⁰⁶

ELH was founded in 1911 by Emory Larkin Harvey and served as a waste management center.¹⁰⁷ By the 1940's it began providing recycling services.¹⁰⁸ Now, over 100 years later, ELH "is a full-service waste hauling, transfer, and recycling operation, offering residential and commercial waste management services."¹⁰⁹ ELH deals mostly with commercial and industrial customers but has seen its residential sector grow over the past few years.¹¹⁰ Currently, about 70% is commercial/industrial and the remaining 30% is residential.¹¹¹ In the past few years, ELH has purchased smaller recycling facilities, resulting in a growing customer base.¹¹² In addition, ELH decided to expand several years ago by building a new facility that solely deals

with single-stream recyclables (this will be discussed further).¹¹³

As mentioned in a previous section, scrap, and waste are two entirely different things, and as a result, ELH deals with them in two entirely different ways. Before getting into the specifics, it is important to remember that the scope of recycling varies from company to company. For example, recycling is a much bigger part of ELH than waste, whereas other companies might be the exact opposite.¹¹⁴

Scrap: The basic process of recycling is that companies like ELH will pick up scrap, bring it to their facilities, segregate the plastics from the metals, papers, and so on, and then transport these materials to mills for a profit.¹¹⁵ Once at the mills, materials will be turned into, for example,

¹⁰⁶ "Truck / Vehicle - E.L. Harvey & Sons." *Waste and Recycling Workers Week*, 17 Sept. 2016, www.wasterecyclingworkersweek.org/truck-vehicle-e-l-harvey-sons/.

¹⁰⁷ E.L. Harvey and Sons. "Since 1911: Waste and Recycling Services in Westborough, MA." <http://www.elharvey.com/about>.

¹⁰⁸ Ibid.

¹⁰⁹ Ibid.

¹¹⁰ Harvey, Douglas. Interview with Julia Harvey. Personal Interview. Westborough, MA, September 27, 2019.

¹¹¹ Ibid.

¹¹² Ibid.

¹¹³ Ibid.

¹¹⁴ Ibid.

¹¹⁵ Ibid.

the mixed paper that then goes to another business that will clean and sanitize it. From there it is sent to manufacturers who will use it to create new products.¹¹⁶

It is important to understand that in recent years recycling in the U.S. has undergone a massive change in operations. Before, recycling was a **dual-stream system**. What this means is that

recyclables were pre-segregated *before* companies like ELH even picked them up to bring to their facilities.¹¹⁷ The paper would go in one recycling container and bottles and cans went in another, and so on.¹¹⁸



¹¹⁶ Ibid.

¹¹⁷ Ibid.

¹¹⁸ Ibid.

Figure V shows an example of dual-stream recycling ¹¹⁹

Recently, however, recycling has switched over to a **single stream**. Now, all recyclables are put in the same container to make the process of recycling more convenient for everyday people.¹²⁰ This new way of recycling spread like wildfire, which essentially forced ELH to adopt the single-stream system to

meet the new expectations of their customers.¹²¹ As a result, not only is the risk of recyclables being contaminated higher, but companies like ELH needed to invest millions of dollars in new machinery to meet the new demands from customers to make recycling more convenient.¹²²



¹¹⁹ Seldman, Neil. "More Communities Switch to Dual Stream." *Institute for Local Self-Reliance*. October 4, 2018. <https://ilsr.org/more-communities-switch-to-dual-stream/>

¹²⁰ Harvey, Douglas. Interview with Julia Harvey. Personal Interview. Westborough, MA, September 27, 2019.

¹²¹ Ibid.

¹²² Ibid.

Figure VI shows the new machinery that was installed at ELH's single-stream recycling facility¹²³

Figure VI shows the type of machinery that ELH had to buy for their new single-stream system. Before installing this advanced machinery, however, ELH had to first build an 80,000-square-foot building (the one mentioned earlier) for the single-stream recycling

machinery to be housed in. In total, the cost of the new building, the machinery, and the manual labor for a single stream at ELH was about 25 million dollars.¹²⁴ This building alone processes about "600 tons of residential recyclables per day."¹²⁵



¹²³ "E.L. Harvey & Sons Opens New Recycling Facility." *Bulk Handling Systems*, 22 July 2014, www.bulkhandlingsystems.com/e-l-harvey-sons-opens-new-recycling-facility/.

¹²⁴ Phelps, Jonathan. "Mountains of Paper Stacks up at E.L. Harvey after China Says No More." *MetroWest Daily News, Framingham, MA*, MetroWest Daily News, Framingham, MA, 10 Jan. 2018, www.metrowestdailynews.com/news/20180104/mountains-of-paper-stacks-up-at-el-harvey-after-china-says-no-more.

¹²⁵ "E.L. Harvey & Sons Opens New Recycling Facility." *Bulk Handling Systems*, 22 July 2014, www.bulkhandlingsystems.com/e-l-harvey-sons-opens-new-recycling-facility/.

Figure VII shows the single-stream recycling machinery in action¹²⁶

Waste: ELH also collects waste from residents as well as businesses. Waste is essentially anything that cannot be recycled.¹²⁷ When waste arrives at ELH, it is transported to either landfills or waste-to-energy facilities where it is incinerated and turned into energy.¹²⁸

Scrap Trade Before the Ban

To gauge how the ban has impacted ELH, I sat down and interviewed Douglas Harvey, who is the previous Vice

President, as well as Benjamin Harvey, who is the previous President of the company. Before the ban, about 50% of scrap was going abroad and 50% was being sent to domestic mills.¹²⁹ Of the 50% going abroad, over 90% of that was going to China.¹³⁰ ELH's main scrap export to China was by far mixed paper.¹³¹ Before the ban was implemented, ELH was sending about 35,000 tons of mixed paper to China every year.¹³²



¹²⁶ Phelps, Jonathan. "Mountains of Paper Stacks up at E.L. Harvey after China Says No More." *MetroWest Daily News, Framingham, MA*, MetroWest Daily News, Framingham, MA, 10 Jan. 2018, www.metrowestdailynews.com/news/20180104/mountains-of-paper-stacks-up-at-el-harvey-after-china-says-no-more.

¹²⁷ Ibid.

¹²⁸ Ibid.

¹²⁹ Ibid.

¹³⁰ Harvey, Douglas. Benjamin Harvey. Interview with Julia Harvey. Personal Interview. Westborough, MA, September 27, 2019.

¹³¹ Ibid.

¹³² Harvey, Benjamin. Interview with Julia Harvey. Personal Interview. Westborough, MA, September 27, 2019.

Figure VIII shows Douglas Harvey (on the left) and Figure VI shows Benjamin Harvey¹³³

While talking to Douglas and Benjamin, I asked how they felt about other U.S. companies and their possible role in China's decision to implement this ban. They both said that although there were companies like ELH that were sending quality scrap to China, there were others that took advantage of China by sending highly contaminated bail to Chinese ports.¹³⁴ When Benjamin exclaimed that "a few can ruin it for all," I decided that it was necessary to look further into the abuses of some of these American companies. Before the ban was implemented, when the Chinese received contaminated scrap, they would usually either accept it without paying the companies or send it back, which would cost companies hundreds of thousands of

dollars.¹³⁵ Either way, American companies were willingly ignoring Chinese environmental regulations and sending literal *trash* to China.

Since U.S. scrap was in such high demand in China, however, U.S. recycling companies "had the luxury of being able to sell the mixed rigid plastics [and] mixed paper without a lot of sorting and quality control."¹³⁶ U.S. Companies wanted to get their desired scrap products to China as quickly as possible, which, as a result, made them less attentive when managing their QC systems.¹³⁷ With the National Sword policy in place, however, companies now *have to* slow down their QC processes to even attempt to satisfy

¹³³ McGagh, Ken. "PHOTOS: Westborough Firm Celebrates 100 Years." *MetroWest Daily News, Framingham, MA*, MetroWest Daily News, Framingham, MA, 23 Sept. 2011, www.metrowestdailynews.com/x110335865/PHOTOS-Westborough-firm-celebrates-100-years. And Phelps, Jonathan. "Mountains of Paper Stacks up at E.L. Harvey after China Says No More." *MetroWest Daily News, Framingham, MA*, MetroWest Daily News, Framingham, MA, 10 Jan. 2018, www.metrowestdailynews.com/news/20180104/mountains-of-paper-stacks-up-at-el-harvey-after-china-says-no-more.

¹³⁴ O'Neill, Kate. "Where Does Our Recycling Go?" NPR. September, 12, 2019. <https://www.npr.org/2019/09/12/760181337/where-does-our-recycling-go> and Harvey, Benjamin. Interview with Julia Harvey. Personal Interview. Westborough, MA, September 27, 2019.

¹³⁵ Harvey, Benjamin. Interview with Julia Harvey. Personal Interview. Westborough, MA, September 27, 2019.

¹³⁶ Pyzyk, Katie. "With China's 'Nearly Impossible' Contamination Standard, Where Are MRFs Looking Now?" *Waste Dive*, 4 Apr. 2018, www.wastedive.com/news/china-contamination-standard-MRFs/519659/.

¹³⁷ Ibid.

China's new quality standards.¹³⁸ And with the recent shift from dual to single stream in the U.S., any efforts to meet the new requirements are significantly hindered. For instance, an issue companies like ELH have with residential pick-ups is that the degree of contamination can vary drastically with levels ranging from 15% to 25% contamination.¹³⁹ When I asked Douglas about this, he stated that the building dedicated to single-stream recycling is about 90% residential curbside with the remaining 10% coming from commercial/industrial sources.¹⁴⁰ Although ELH has invested millions in state-of-the-art machinery that significantly reduces contamination, with single-stream recycling being the new norm in the U.S., it is difficult to meet China's new standards even with the machinery that ELH has, let alone for companies that do not have this type of machinery. These companies will have to invest in similar technology to even

attempt to meet these new demands. Before, "China would accept scrap knowing it was 40-50% trash."¹⁴¹ Because companies became accustomed to this way of business, they never invested in the infrastructure that ELH did, which now means these companies have to face the expensive transition from exporting commingled bail to segregated bail that can comply with Chinese standards.¹⁴² With the adoption of single-stream recycling, the implementation of China's National Sword policy, and the fact that many of these U.S. companies lack the proper infrastructure, the degree of contamination is higher than ever with the ability to reduce it being non-existent for many companies.

Scrap Trade After the Ban:

After the ban was implemented, business for ELH changed drastically. Immediately afterward, the scrap trade was not nearly as profitable as it was before.¹⁴³ With prices dropping dramatically, it has been difficult for ELH

¹³⁸ Ibid.

¹³⁹ Ibid.

¹⁴⁰ Harvey, Douglas. Interview with Julia Harvey. Personal Interview. Westborough, MA, September 27, 2019.

¹⁴¹ Pyzyk, Katie. "With China's 'Nearly Impossible' Contamination Standard, Where Are MRFs

Looking Now?" *Waste Dive*, 4 Apr. 2018, www.wastedive.com/news/china-contamination-standard-MRFs/519659/.

¹⁴² Ibid.

¹⁴³ Harvey, Douglas. Benjamin Harvey. Interview with Julia Harvey. Personal Interview. Westborough, MA, September 27, 2019.

to even get rid of scrap, let alone sell it for a profit.¹⁴⁴ Many companies in the U.S. were becoming so desperate that they had to pay landfills to take their scrap away.¹⁴⁵ ELH, however, decided to stockpile bails of scraps to avoid sending valuable commodities to landfills.¹⁴⁶ This stockpiling began in December 2017.¹⁴⁷ In total, 6,000 tons of scrap were stockpiled at ELH's facilities.¹⁴⁸ Only a small amount of their scrap was able to enter China starting just around April to June of 2019.¹⁴⁹ Benjamin explained that before the ban, pricing on scrap fluctuated month-by-month depending on supply and demand.¹⁵⁰ With the new ban in place, however, prices have remained at an all-time low.

Right after the ban was implemented, ELH went from sending China 35,000 tons

of scrap paper in a year to 0.¹⁵¹ Currently, with China now accepting only the *highest* quality scrap, ELH is sending about 6,500 tons of scrap to China yearly.¹⁵² What is important to note is that although ELH is now sending at least some scrap to China, it is no longer mixed paper, which was the vast majority of scrap going to China before the ban.¹⁵³ As a result, ELH is making about 4 million dollars *less* than it was before the ban.¹⁵⁴ Before the National Sword policy was implemented, ELH was making somewhere between \$75 to \$100 per ton.¹⁵⁵ Now, they are barely breaking even.¹⁵⁶ What ELH is now doing with scrap paper is sending it to, as mentioned previously, the paper mills being purchased by Chinese companies like 9

¹⁴⁴ Harvey, Benjamin. Interview with Julia Harvey. Personal Interview. Westborough, MA, September 27, 2019.

¹⁴⁵ Ibid.

¹⁴⁶ Welker, Grant. "E.L. Harvey & Sons Scrambling amid New Chinese Recycling Standards." *Worcester Business Journal*, 13 May 2019, www.wbjournal.com/article/el-harvey-sons-scrambling-amid-new-chinese-recycling-standards.

¹⁴⁷ Harvey, Benjamin. Interview with Julia Harvey. Personal Interview. Westborough, MA, September 27, 2019.

¹⁴⁸ Welker, Grant. "E.L. Harvey & Sons Scrambling amid New Chinese Recycling Standards." *Worcester Business Journal*, 13 May 2019, www.wbjournal.com/article/el-harvey-sons-scrambling-amid-new-chinese-recycling-standards.

harvey-sons-scrambling-amid-new-chinese-recycling-standards.

¹⁴⁹ Harvey, Benjamin. Interview with Julia Harvey. Personal Interview. Westborough, MA, September 27, 2019.

¹⁵⁰ Ibid.

¹⁵¹ Ibid.

¹⁵² Ibid.

¹⁵³ Ibid.

¹⁵⁴ Ibid.

¹⁵⁵ Welker, Grant. "E.L. Harvey & Sons Scrambling amid New Chinese Recycling Standards." *Worcester Business Journal*, 13 May 2019, www.wbjournal.com/article/el-harvey-sons-scrambling-amid-new-chinese-recycling-standards.

¹⁵⁶ Ibid.

Dragons who are then sending it to China once it has been processed.¹⁵⁷

Are other Countries Following China?

ELH is not the only one suffering. The entire scrap industry is.¹⁵⁸ With China no longer being a feasible market, ELH as well as other companies have started looking elsewhere in Asia, specifically India, Vietnam, and Indonesia.¹⁵⁹ However, these countries lack the facilities and machinery to properly handle the massive amount of scrap they are being sent.¹⁶⁰ Perhaps more importantly, some of these Asian countries are just flat-out rejecting Western scrap imports because they do not want to become the “new China.” For example, the Malaysian government imported 456,000 tons of scrap plastic during the first half of 2018.¹⁶¹ In just seven months, the amount of scrap

imported already exceeded the total scrap imported for the entire year of 2017, which was 316,000, as well as 2016, which was 168,500.¹⁶² By October, the Malaysian government banned the importation of plastic scrap and stated its intention to start cracking down on smuggling.¹⁶³ Malaysia is not alone; Thailand also plans to prohibit the importation of *all* foreign scrap by the year 2021.¹⁶⁴ Similar to China, Thai authorities are gradually reducing the number of licenses issued to importers who would normally import scrap products.¹⁶⁵ Thai authorities stated that they needed “to keep the country from becoming a dumping site.”¹⁶⁶

While ELH has found viable markets throughout Asia, they are accepting scrap at a much lower rate than China normally did before the ban. Since ELH is struggling

¹⁵⁷ Ibid

¹⁵⁸ Ibid.

¹⁵⁹ Harvey, Douglas. Interview with Julia Harvey. Personal Interview. Westborough, MA, September 27, 2019.

¹⁶⁰ Phelps, Jonathan. “Mountains of Paper Stacks up at E.L. Harvey after China Says No More.” *MetroWest Daily News, Framingham, MA*, MetroWest Daily News, Framingham, MA, 10 Jan. 2018, www.metrowestdailynews.com/news/20180104/mountains-of-paper-stacks-up-at-el-harvey-after-china-says-no-more.

¹⁶¹ Lee, Yen Nee. “Malaysia, Following in China's Footsteps, Bans Imports of Plastic

Waste.” *CNBC*, CNBC, 25 Jan. 2019, www.cnbc.com/2019/01/25/climate-change-malaysia-following-china-bans-plastic-waste-imports.html.

¹⁶² Ibid.

¹⁶³ Ibid.

¹⁶⁴ Reed, John. “Thailand to Ban Foreign Plastic Waste from 2021.” *Subscribe to Read | Financial Times*, Financial Times, 14 Oct. 2018, www.ft.com/content/06b5a136-ce09-11e8-b276-b9069bde0956.

¹⁶⁵ Ibid.

¹⁶⁶ Ibid.

to cover its costs, they have added charges to residential pick-ups, businesses, and municipal contracts to help pay for the new costs of recycling.¹⁶⁷

ELH and their Thoughts on the Future:

I asked both Douglas and Benjamin if they saw the situation with China changing anytime soon. Both gave a resounding no. Previously, when Chinese authorities suddenly increased restrictions such as with the Green Fence policy, China ended up loosening up regulations.¹⁶⁸ With this ban, however, there are no signs of this happening again. Many Chinese companies such as the 9 Dragons paper company have invested hundreds of millions of dollars in mills located in the U.S.¹⁶⁹ Ben said that there is simply no way these companies would invest such large amounts of money in purchasing and developing mills in the U.S. and in other parts of the globe if

policies were expected to change in China.¹⁷⁰

I then asked if ELH would be making any future efforts to meet China's new contamination standards. Benjamin expressed that it is simply not economically feasible to do so. He emphasized that it is precisely the economic impact of the ban that makes these efforts pointless; ELH would not make much money trying to meet these new standards.¹⁷¹ At best, ELH can reduce contamination levels to about one or two percent, which is still too high for China's 0.5% cut-off.¹⁷² Benjamin argues that what China should do is follow the standards set up by the industry, which allows for 3% contamination.¹⁷³

From taking an on-the-ground look at ELH as well as delving deeper into the abuses of the U.S. recycling industry at large, how the ban has impacted the U.S.

¹⁶⁷ Harvey, Benjamin. Interview with Julia Harvey. Personal Interview. Westborough, MA, September 27, 2019.

¹⁶⁸ Ibid.

¹⁶⁹ Esch, Mary. "China's Ban on Scrap Imports a Boon to U.S. Recycling Plants." NBC Los Angeles. May 18, 2019. <https://www.nbclosangeles.com/news/green/China-Scrap-Imports-Ban-Recycling-Investments-510118141.html>

¹⁷⁰ Harvey, Benjamin. Interview with Julia Harvey. Personal Interview. Westborough, MA, September 27, 2019.

¹⁷¹ Ibid.

¹⁷² Phelps, Jonathan. "Mountains of Paper Stacks up at E.L. Harvey after China Says No More." *MetroWest Daily News, Framingham, MA*, MetroWest Daily News, Framingham, MA, 10 Jan. 2018, www.metrowestdailynews.com/news/20180104/mountains-of-paper-stacks-up-at-el-harvey-after-china-says-no-more.

¹⁷³ Ibid.

recycling industry on both a financial and business-model level can be seen. The National Sword policy seemed to also inspire other countries throughout Asia on how they should respond to new demands from the West to import their scrap. It will be interesting to see how the U.S. recycling industry responds to an increasing number of markets rejecting their scrap or possibly raising standards to where China currently is.

Section IV: Who is at Fault and How Do We Move Forward?

U.S. Mistakes: “A Few Can Ruin it for All”

Over-Reliance: A long-term mistake made by the United States and many other countries around the world was seeing “China [as] the convenient answer to an inconvenient problem.”¹⁷⁴ I have always found it very ironic how the U.S. (in part rightfully) criticizes the Chinese for unsustainable practices while at the same time relying on one country to be

the answer to their over-consumption issues; essentially, the U.S. scrap industry put all of their eggs in one basket. Furthermore, not only was the U.S. over-reliant on one country but took advantage of and damaged the trust of that country frequently.

Contamination: When I interviewed Douglas and Benjamin, both agreed that the U.S. scrap industry is in many ways to blame for this ban.¹⁷⁵ While there were companies throughout North America like ELH that were sending valuable scrap products to China, there were also many U.S. companies sending contaminated shipments to China.¹⁷⁶ When Douglas and Benjamin visited other waste and recycling facilities around the U.S., they emphasized how shocked they were when they saw what these companies were sending to China: “I can’t believe they were getting away with this. It was *trash*.”¹⁷⁷ Benjamin emphasized that “this country took advantage of China,” which

¹⁷⁴ ISWA. “China’s Ban on Recyclables: Beyond the Obvious...” ISWA, January, 2018. www.iswa.org/home/news/news-detail/article/chinas-ban-on-recyclables-beyond-the-obvious/109/.

¹⁷⁵ Harvey, Douglas. Benjamin Harvey. Interview with Julia Harvey. Personal Interview. Westborough, MA, September 27, 2019.

¹⁷⁶ O’Neill, Kate. “Where Does Our Recycling Go?” NPR. September, 12, 2019.

<https://www.npr.org/2019/09/12/760181337/where-does-our-recycling-go> and Harvey, Benjamin. Interview with Julia Harvey. Personal Interview. Westborough, MA, September 27, 2019.

¹⁷⁷ Harvey, Benjamin. Interview with Julia Harvey. Personal Interview. Westborough, MA, September 27, 2019.

ultimately resulted in China saying “Enough is enough” and decided to implement a much stricter ban that shows no signs of wavering.

Additionally, the move from dual to single-stream recycling has exacerbated this issue by increasing contamination levels.

Packaging: Another issue is the overuse of plastic and other products in consumer packaging. Since recycling companies have already been struggling to manage the increasing amount of plastic entering their facilities, with China’s ban now in full effect it is becoming even more difficult for them, resulting in more plastic being sent to landfills.¹⁷⁸ What companies need to do is use less plastic in their packaging to help reduce the amount of plastic going to landfills.¹⁷⁹ While I do not find consumers to be at fault with this specific issue, I do think consumers should hold these

companies accountable for being wasteful and should encourage more environmentally-friendly packaging. In addition to consumers, the government should get involved in reducing how much non-recyclable plastic is being used. For instance, the British are planning to add a tax on manufacturers with plastics that have “less than 30 percent recycled materials.”¹⁸⁰ In addition, Norway is implementing a system that will tax single-use plastic bottle manufacturers to encourage these businesses to create bottles that are easier to recycle.¹⁸¹ What the United States needs to do is learn from what these other countries are doing and emulate these new policies to reduce the amount of unneeded plastic being produced. Americans and other Western countries need to end this “out of sight, out of mind” mentality when it comes to dealing with *our* consumption.¹⁸²

¹⁷⁸ Brooks, Amy L., et al. “The Chinese Import Ban and Its Impact on Global Plastic Waste Trade.” *Science Advances*. American Association for the Advancement of Science June 1, 2018. <https://advances.sciencemag.org/content/4/6/eaat0131>.

¹⁷⁹ Ibid.

¹⁸⁰ Katz, Cheryl. “Piling Up: How China’s Ban on Importing Waste Has Stalled Global Recycling.” *Yale School of Forestry and Environmental Studies*. March 7, 2019.

e360.yale.edu/features/piling-up-how-chinas-ban-on-importing-waste-has-stalled-global-recycling.

¹⁸¹ Ibid.

¹⁸² Baxter, Tom. “24 Reasons Why China’s Ban on Foreign Trash is a Wake-up Call for Global Waste Exporters.” *South China Morning Post*. December 31, 2017.

<https://www.scmp.com/comment/insight-opinion/article/2126098/24-reasons-why-chinas-ban-foreign-trash-wake-call-global>

The American People: American citizens are a fundamental part of this problem as well, especially in the context of over-consumption, ignorance of recycling, and preferring a single-stream system of recycling. Firstly, a major issue that has received more attention from the public in recent years is the normalization of over-consumption in the United States. To put this into perspective, “Americans make up just 4 percent of the world’s population, but we account for 12 percent of the planet’s yearly waste.”¹⁸³

Americans need to start understanding that throwing away or recycling something does not simply make that item disappear.

What many Americans also struggle with is something that is called “wishful recycling.”¹⁸⁴ While it is great to want to recycle and care for our environment, it is important to use the plethora of online resources to learn what is and is not

recyclable. By assuming something *can* be recycled, Americans are playing a major role in the contamination of recyclables, resulting in more recyclables going to landfills instead of being recycled.¹⁸⁵ Here are some common items that people recycle by mistake: pizza boxes (or any containers soiled by food), plastic shopping bags, and more.¹⁸⁶ In addition to “wishful recycling,” Americans need to take a proactive role in the recycling process. While the convenience of single-stream recycling can be understood, dual-stream recycling is a far more efficient system precisely because it reduces the chances of contamination.

China’s Mistakes

Suddenness of Ban: The Chinese government informed the World Trade Organization (WTO) in July 2017 that it would be banning 24 types of solid waste by the end of the year.¹⁸⁷ This gave the entire world scrap trade system less than

¹⁸³ Cohen, Steve. “Consumption, Waste and Our Changing Lifestyle.” *State of the Planet*, 26 Aug. 2019, blogs.ei.columbia.edu/2019/08/26/consumption-waste-changing-lifestyle/.

¹⁸⁴ Baechler, Nyssa. “‘Wishful Recycling’: More Harm than Good.” *School of Marine and Environmental Affairs*, University of Washington, 12 Feb. 2018, smea.uw.edu/currents/wishful-recycling-more-harm-than-good/.

¹⁸⁵ Ibid.

¹⁸⁶ ecoscraps staff. “A Simple List of What Can and Cannot Be Recycled.” *EcoScraps*, www.ecoscraps.com/blogs/sustainable-living/76411652-a-simple-list-of-what-can-and-cannot-be-recycled.

¹⁸⁷ Zhong, Nan. “Nation Calls Time on Solid Waste Imports.” The Ministry of Ecology and Environment. July 20, 2017. http://english.mee.gov.cn/News_service/media_news/201707/t20170720_418174.shtml.

six months to adapt to these changes. Furthermore, there was a trend of China implementing strict regulations, but ultimately returning to leniency, which probably made companies less worried about the ban's long-term effects on business.¹⁸⁸ China should have given the global scrap trade at *least* a year to decide how to maintain stability in the global market by ensuring a steady flow of commercial scrap.

Lack of Communication: One of the main issues ISRI had with China is their unwillingness to further discuss the ban with the United States. One of the most fundamental errors with this ban is how China's definition of the word "waste" can exclude certain scrap material. For a nation that is well aware of the world's overreliance on them importing these materials to just suddenly turn off streamlining and then refuse to even have discussions is incredibly irresponsible of the Chinese government

Harming the Environment: China's national goal to protect and improve China's environment by, in part,

implementing this ban has resulted in the adoption of unsustainable and environmentally-damaging practices.¹⁸⁹ Since manufacturers can no longer rely on scrap imports as necessary materials needed for production, some have instead moved to raw materials.¹⁹⁰ This is fundamentally worse for the environment and by definition goes against the entire concept of environmental sustainability. One of the many reasons why scrap is more environmentally friendly is because using "scrap instead of virgin materials is one of the best ways to conserve natural resources," which, as was discussed in section II, is a national goal of China.¹⁹¹ Furthermore, by China suddenly implementing this ban, the flow of scrap from the U.S. (and other countries) to China was completely shut off, which, as stated previously, resulted in vast amounts of scrap being sent to landfills. How can China espouse the importance of protecting the environment when it is single-handedly contributing to vast amounts of scrap being sent to landfills?

¹⁸⁸ Harvey, Benjamin. Interview with Julia Harvey. Personal Interview. Westborough, MA, September 27, 2019.

¹⁸⁹ Adler, Adina R. "China's Sustainability Challenge." *Scrap Magazine*, March, 2018. 13.

¹⁹⁰ *Ibid.*

¹⁹¹ *Ibid.*

Expectations: Finally, another issue that Benjamin describes as unfair and economically infeasible is the new contamination standard. The 0.5% contamination standard implemented by Chinese authorities is considered by many to be far too high, even for companies like ELH which have state-of-the-art machinery. As Benjamin stated in Section III, if China does not slightly raise the percentage of contamination allowed, then trading with China will no longer be economical for most companies.

Recommendations

While I do not agree with how China has implemented this ban, it certainly served as a wake-up call for the United States scrap industry. The Green Fence and other policies should have been signs to the U.S. recycling industry that China was getting more serious about protecting its environment. However, as Benjamin said, they would always end up loosening these regulations, which resulted in these American companies going back to their old habits.¹⁹² With this long-term pattern in place, it certainly came as a shock when they not only

implemented its strictest policy yet but continued to enforce it as well.

What Benjamin suggests, and what I agree with as well, is that the U.S. and China should come together and write feasible guidelines for the scrap trade that will be internationally recognized and enforced. With this, China can voice its concerns clearly and have an instrumental role in creating these guidelines; furthermore, all companies that want to partake in the scrap trade will be forced to comply with these guidelines. For this or any other kind of progress to occur, however, China *must* be willing to talk to organizations like ISRI who have and will continue to make efforts to speak to Chinese officials and stabilize the scrap trade.

Conclusion

Through taking a closer look at the recycling process, better understanding the ban on *yanglaji*, comparing and contrasting ELH to those who have taken advantage of lax Chinese regulations, and the faults made by both sides, the complexity of the scrap trade dilemma can be understood as a fundamental issue

¹⁹² Harvey, Benjamin. Interview with Julia Harvey. Personal Interview. Westborough, MA, September 27, 2019.

in Sino-American relations. Both the United States and China have contributed to the environmental and commercial instability before and after the ban was implemented. Through understanding the scrap trade panic in this context, the responsibility both sides have in resolving this issue can be seen. Chinese officials need to be more proactive in meeting with American representatives of the scrap industry to create scrap guidelines that protect China's environment while also ensuring stability in the scrap trade. There needs to be a global standard that is implemented that all companies must abide by when selling, buying, and transporting scrap. By creating an internationally recognized common ground, restrictions will be easier to

enforce, and the environments of other countries will not be compromised. However, while China has laid out this international system as a personal goal, not communicating with the U.S. shows China's unwillingness to collaborate with others, which is necessary for this system to work.

For now, the United States will have to internally implement stricter contamination requirements if the U.S. wants other Asian countries to continue accepting their scrap. These countries have already shown signs of racking up regulations. Therefore, the United States must respect the environments of these other countries if they want to continue doing business with them, and hopefully China, in the future.

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Japanese Peace and Soft Power: Osaka Expo '70 in the Cold War's Space Race

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Moon rock 12055 in its display case prior to shipping to Osaka. Photograph. In John Uri, "50 Years Ago: Moon Sample Rocks Osaka Expo '70," NASA. ed. Kelli Mars. March 16, 2020: <https://www.nasa.gov/feature/50-years-ago-moon-sample-rocks-osaka-expo-70>

It was a small stampede for mankind. "Please help us," a Japanese guard shouted to an official at the United States

Pavilion, "We don't have enough men to stop them!"^[1] Eight thousand visitors per hour clamored to behold a glance of a

real-life moon rock at The Japan World Exhibition, Osaka, 1970: the first World's Fair in Asia.^[2] The rock was the pride of the American pavilion, a bold statement in the Cold War's Space Race. The United States pavilion commonly saw 90-minute waits, and so too did those of Japan and the Soviet Union. Space was the attraction at Osaka Expo '70. In both the queues and the international sphere, Osaka Expo '70 was a place to see and be seen, as was true with all other World Fairs.^[3]

There, Japan also flexed its achievements in the space frontier. On February 11, 1970 (about a month before Expo '70 began), Japan launched its first satellite -- OHSUMI -- into orbit. This satellite orbited the Earth six times in twelve hours, but it subsequently lost connection to Kagoshima Space Station.^[4] The launch was still a success, and Japan finally entered into the Space Race. Outer space and the emerging sci-fi genre were everywhere at Osaka Expo '70. Looking towards the future, the Osaka Expo's theme and slogan was "Progress and Harmony for Mankind."^[5] However, the reality of security and defense for Japan was complex and contested. This paper explores Osaka Expo '70 in the context of greater security issues that challenged

Japan's presented identity as a peaceful internationalist; nevertheless, this World's Fair was a success for Japan's international rebranding because Japan's new peaceful identity still allowed the nation to showcase its power and prowess through non-military means.

Historiography

Historians of Japan, the Soviet Union, and the United States have previously analyzed Osaka Expo '70. They discovered that Japan constructed and reinforced its self-image through continuous participation in World Fairs. Historians also have studied how Cold War security issues contrasted with Article 9 of Japan's Constitution. English language essays that focus on Osaka Expo '70 during the Space Race overwhelmingly tend to focus on the United States' own science diplomacy.^[6] This essay contends that Osaka Expo '70 was "a Japanese fair for the Japanese people," as observed by American economist Angus Hone in 1970.^[7]

Japan has participated in the history of the World's Fairs, and at each fair, it redefined its national identity in the international sphere. At the 1893 World's Columbian Exhibition in Chicago, Japan sought to revise unequal treaties by commanding the respect of all nations,

especially Western ones. Historian Eric Sandweiss invoked the words of Japanese Ambassador Gozo Tatento about the 1893 exhibition. Ambassador Tatento saw Japan as “a nation suddenly emerging from the isolation of centuries into the noonday glare of the nineteenth century (...) a more accurate and comprehensive knowledge of our country, its history, its progress, and its aspirations [to] prove that Japan is a country worthy of full fellowship in the family of nations.”^[8] Japan attempted to prove itself as modern to Western audiences at the World’s Fair by constructing the Japanese Pavilion, “Ho-o-den.” The Japanese ambassadors cared greatly about representing their national identity on the world stage, committing \$630,000 to the construction of the pavilion.^[9] The Japanese planners knew that this pavilion would establish the national image of Japan in Western imaginations, as Sandweiss put it succinctly: “The Japanese Pavilion became Japan.”^[10]

Japan participated in subsequent World Fairs with much enthusiasm and purpose to continually rebrand itself on the international stage. Yamamoto Sae compared the traditional take of Japanese pavilions at the 1939 and 1964 New York

World’s Fairs, as well as the modernist Japanese pavilion at the 1937 World’s Fair in Paris.^[11] She concludes that the Japanese nation embraced uniquely Japanese modernism to avoid being “stuck in an old style.”^[12] Japan’s longtime participation in international events like the World’s Fairs is a significant continuity for Japan’s transformation into a peaceful internationalist by the postwar period.

The study that most resembles this one comes from an expert on Japanese sports and nationalism, Paul Droubie, and his research on the 1964 Tokyo Olympics.^[13] Japan, then incapable of rearmament based on Article 9 of the Constitution, reimagined itself after the dropping of the atomic bombs. According to Droubie, this suffering was “uniquely theirs,” and it was one part of “replacing guilt and responsibility [with] suffering and victimization.”^[14] Droubie argues that the 1964 Tokyo Olympics was in line with the Yoshida Doctrine.^[15] From the ashes of war, the “Phoenix” had arisen, “reborn with a new national identity based on selective memory of violence suffered, misremembered symbols of a problematic past and forgetting past wrongs committed.”^[16] Droubie used the Japanese

Olympic Village's Peace Tower and Flame of Peace as evidence of Japan rebranding into a peaceful internationalist.^[17] Studying Osaka Expo '70 with similar lenses to Droubie's on the 1964 Tokyo Olympics reveals a continuity across the 1960s and into the 1970s: between these two events, Japan maintained its status as a peaceful internationalist.

Theory^[18]

This essay utilized Karsten Werth's analysis on the U.S. Space Program in the 1960s to the history of Japan's own space program and its subsequent display at Osaka Expo '70. Werth proclaimed that the American program was "A Surrogate for War," and this framework applied perfectly to Japan, which was disbarred from engaging in traditional warfare or nuclearization. Article 9 of the Japanese Constitution renounced the right of the nation-state to belligerency:

Aspiring sincerely to an International Peace based on Justice and order, the Japanese people forever renounce War as a sovereign right of the nation and the threat or use of force as means of settling international disputes. In order to accomplish the aim of the preceding paragraph, land, sea, and air forces, as well as other war potential, will never be

maintained. the right of belligerency of the state will not be recognized.^[19]

Japan's Constitution prevented military options for the nation to showcase its power; instead, Japan emphasized its advancements in technology, most notably with its space program and its international events.

Werth's essay on the United States Space Program suggests that Japan and the Cold War superpowers had different rationales for entering the Space Race. While the "perceived Soviet challenge" was the primary motivation for the United States Space Program, Japan was in a fundamentally different geopolitical position.^[20] Still, the same aim motivated all nations entering the Space Race, the aim to show "the world their retrospective technological potential. [Space programs] gave more tangible proof of power to friend and foe than naked statistics of nuclear warheads or hardened missile bases."^[21] Japan had no offensive military options because of Article 9, but it was allowed to engage in this surrogate for war. Osaka Expo '70 was not just an international event for the United States and the Soviet Union to showcase their progress in space

exploration; it was a Japanese fair at its core.

Japan's international post-war, Cold-War diplomacy

The 1960s and 1970s were complex times for Japanese diplomacy, but the Yoshida Doctrine guided the path forward. Japan focused on soft-power diplomacy because its ability and willingness to engage in hard-power diplomacy was limited. The Yoshida Doctrine kept Japan focused on growing its economy, staying non-aligned on international issues, and trusting the security guarantees of the United States.^[22] On the international level, the San Francisco Peace Treaty of 1951 defined the Yoshida Doctrine, while the Okinawa Agreement for 1972 showed the United States' fading influence.^[23] Relying on the United States for security while maintaining autonomy allowed Japan to focus both on its economic growth and its space program.

Japan aligning with the United States did not necessarily mean turning against the Soviet Union. According to Lawrence W. Beer in the 1971 *Asian Survey*, the Soviet Union and Japan had vested interests that complicated a deep rivalry:

Russo-Japanese relations were highlighted by hard bargaining on the

details of joint development of Russia Asia's resources, fishing quotas, and the inauguration of a Tokyo Moscow route by Japan airlines. and increasing friction over the Northern Territories issue. At the UN and at home, the Japanese government is vigorously seeking to build support for the restoration to Japan of small islands off Hokkaido held by the Soviet Union since 1945.^[24]

It seems that Japan (as a whole) chose neither side in the ideological Cold War and fell in line with the Yoshida Doctrine. Japan was liberalizing trade across the board to spur economic growth.^[25] Both the United States' and the Soviet Union's participation in Osaka Expo '70 made sense because Japan embraced its image as a peaceful internationalist.

When it came to nuclear proliferation, Japan appeared to have the moral high ground because it had the unique suffering of two atomic bombs. The threat of nuclear war loomed on the world's stage and behind the 1970 Japan World's Exhibition in Osaka. American expert on Japanese defense James H. Buck outlined "Japan's Defense Options for the 1970's" in the *Asian Survey*.^[26] Buck noted how Japan was a signatory on the 1968

Nuclear Non-Proliferation Treaty (NPT), but they still relied on American nuclear deterrence against the real or perceived threat of the People's Republic of China, which tested its first nuclear bomb during the 1964 Tokyo Olympics.^[27] Both Japan and the United States renegotiated their security treaty on June 23 during Osaka Expo '70.^[28] Following the World's Fair, The Defense of Japan (*Nihon no Boei*) on October 20, 1971 "called for continued reliance upon the American nuclear umbrella and buildup of conventional forces over the next five years, with increased emphasis upon naval and air forces."^[29] American deterrence was Japanese deterrence.

Japanese soft power and science diplomacy at the fair also acted as a deterrent. As outlined by Werth, nations participating in the Space Race developed and displayed "technological power as a means to provide the necessary credibility to deterrence."^[30] Much like sports at the international level, the World's Fair was symbolic warfare: instead of "athletes serving as the representatives of the state and surrogates for the nation," technology and science displays pitted nation against nation.^[31]

Space and the Future at Osaka Expo '70

Japanese planners oriented Osaka Expo '70 around the hope for a more peaceful and cooperative tomorrow. The World's Fair was a huge deal, as Japan spent nearly two billion U.S. dollars (~\$15.5 billion in 2023) on site development, transportation, and the Japanese pavilion.^[32] The Expo was wildly popular, drawing in over 64 million visitors (~2 million of them foreigners) and making a profit.^[33] Japan's various pavilions, public and private, presented visions of space age futures in order to demonstrate the nation as a great technological power. Japan's concoction of science, diplomacy, and soft power allowed Japan to demonstrate its hard power potential despite not having offensive forces.

Looking towards the future, Panasonic Corporation and *The Mainichi Newspapers* buried a technologically impressive time capsule for the people of the year 6970 CE at the Expo.^[34] This time capsule was ten times the size of the one at the 1964-65 World's Fair and much larger than the previous New York time capsule for 6939 CE.^[35] The time capsule was also a sign of Japan's improving technology sector, for Japanese scientists

guaranteed that the recorded tapes placed inside would last over 5,000 years. Items of note among the 2,098 objects among

689 groups include an atomic timepiece and tape recordings of famous speeches.^[36]



The monument, backed by the towering donjon of Osaka Castle, Photograph. In Panasonic “The Site Today,” Time Capsule Expo ‘70 (Database): <https://panasonic.net/history/timecapsule/5/PHOTO18.html>

The time capsule at Osaka Expo ‘70 is especially interesting because it came during the nuclear age. In a world seemingly on the brink of nuclear warfare, burying a time capsule signified a peace-

minded hope for humanity to last 5,000 years. The capsule also included the 1970 Rosetta Stone engraved in Japanese and the five official languages of the United Nations.^[37] The project’s multilingualism

transformed this Japanese effort as an international one. President of *The Mainichi Newspapers*, Umejima Tadashi, wrote his fears in his personal message to the people of the year 6970: “The age we live in is sometimes referred to as the age of nuclear energy or the age of space travel, but in fact we are merely on the threshold of major developments in these fields. We are still investigating the potential of nuclear energy and making our first exploratory journeys into space.”^[38] The uncertainty that came with these technologies contrasted with the hope of 5,000 more years for humanity. Nevertheless, they hoped.

The time capsule included two compositions from Japanese youth who grew up with no experiences of the war, only historical memories. Science and space travel excited the youth’s visions for the future. Rin Masayuki, a fourth grader from Tokyo wrote excitedly about Apollo 11: “In December 1968, three Americans circled the moon for the first time and came back to earth. Everybody was surprised and happy. There was great excitement. You're surprised and saying ‘how childish,’ aren't you? I believe there will be space cities and undersea cities in your age.”^[39] The Space Race captivated

minds because it would seemingly bring ‘Progress and Humanity for Mankind.’ Dreams of an interstellar future also constellated the mind of Harima Hideki, an Osaka first grader: “Man will be able to live on Mars by sending man-made oxygen and water to the planet, and on Venus by blowing away carbon dioxide and heat to outer space with a gigantic fan. And nobody will be surprised at having a tropical holiday on Mercury or going skiing and skating on Pluto.”^[40] The imagined future was also full of leisure, further evidence of Japan’s growing middle classes.^[41] The hope that technology could save us was prevalent during this time period because technology was the cause of humanities fears.

American correspondent of Osaka Expo ‘70, Angus Hone, reported on how the World’s Fair “brought the hidden Japanese from the backwards islands (...) to an exhibition of Japanese technology, to an international propaganda War” [sic] between the United States and USSR.^[42] Japan was also involved in this international propaganda war that focused on space and technology. For instance, the Mitsui Group companies sponsored the “Creative Paradise” themed

pavilion, which contained a “journey out of space and the world of creation.”^[43]

The Mitsui Space Fiction Exposure was a hit, as Hone called this leading Japanese pavilion “particularly good.”^[44] After guests took an escalator into the dome, this space flight simulator contained 240 slowly rising and falling seats that gave “the visitor the illusion of travelling through space. One of the highlights of the trip was the view of the earth as if from a space shuttle.”^[45] After six minutes, the visitors were ‘back’ on Earth. Space-themed attractions like this one (and their foreign equivalents) connected Japanese people to space flight in a visceral manner. Japan used these attractions not only to show off its space technology, but it simultaneously debuted impressive projectors, special effects, electronics equipment, and nearly 1,700 speakers.^[46] Japan used space and science fiction to display actual Earth-level technologies and, by extension, the potential of Japan’s military, even though its powers were only defensive.

Similar *displays* of Japan’s space future and technological hard power were inside the Mitsubishi and Japanese Telecommunications pavilions.^[47] The former hosted a special effect that

allowed visitors to look down on Earth, while the latter connected Japan to the rest of the world with satellite telecommunications. The Telecommunication pavilion livestreamed images of Tokyo, Kyoto, and Tanegashima for the fair’s entire duration, 183 days.^[48] Space technologies became not only something of a sci-fi dream, but they also promised practical benefits for Japanese consumers. The Mitsubishi future Pavilion featured a walk through attraction that included similar visions of a space age future.^[49] Their pamphlet highlighted the various aspects of their moving walk-way attraction: “Seen from the space station, the soundless and mysterious “blue” planet. In the second room/chamber, the “transparent blue” wrapped outer space expands. While watching the earth gently rotate, you can go to the space station world meteorological control center and intelligence bureau dome. Meteorological map of the world. The changes in weather conditions in various locations are announced in their national language/every country’s language. Suddenly, the red light on the computer starts to blink violently, it implies the approach of an extra-large typhoon to Japan. In the next administration bureau

dome, you can see the actions of the weather control rocket Coors, which is to control/suppress typhoons.”^[50]

Visioned space technology in the Mitsubishi pavilion acted as defense against natural forces like typhoons. Space would be a place for Japanese defense capabilities, but in the spirit of “Progress and Harmony for Mankind,” Mitsubishi planners obviously did not name an international enemy, only a natural one. The Mitsubishi exhibit’s capacity to simulate a future in space, in conjunction with the Telecommunications pavilion’s actual use of space technology, was a show of soft power. The ability to display technology was evidence of Japan turning the corner.

Conclusion

Japan relied on international events like Osaka Expo ‘70 to exhibit its technological soft power because the nation had no ability to showcase any

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offensive capabilities. Japan had little desire to proliferate nuclear weapons, so they exhibited their involvement in the Space Race. Japan entered the Space Race around the time of the fair, using space as a place to conduct paramilitary operations.^[51] War in the nuclear age became “war of technology,” where space technology was “at the cutting edge of ‘combat.’”^[52] This combat especially took place in the imagination with competing visions of a future in space. Osaka Expo ‘70 is useful towards understanding Japanese defense options in the 1970s because it symbolized their non-alignment within the Cold War. This phoenix continued to rise not with flames, but with jet propulsion.

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- [16] Droubie, "Phoenix Arisen," 2319.
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visual sources, founding an understanding of how the Expo actually looked. In the bibliography are Youtube videos that I consulted but did not reference in the text.

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