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Gojira, King of the Bombs!:

Godzilla and Nuclear Scientists Against the Atomic Threat, 1946-1956

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I have always been a Godzilla fan. When I was younger, my heart soared each time Godzilla's classic roar rumbled through the speakers of my television as he fought off monsters like Biolante, Megalon, Gigan, King Ghidorah, Mechagodzilla, and Orga. But while the later Godzilla films have a safe place in my heart, I will never forget the time I first saw the original 1954 *Gojira*. I remember leaving the old, rustic theatre my dad took me to in awe of Eiji Tsuburaya's masterful model recreation of Tokyo, Akira Ifukube's impactful score, and Godzilla's terrifying nuclear presence. Since then, I have idolized Godzilla. He, in my mind, has always been the perfect encapsulation of the atomic bomb and its impact on the world.

Much to my chagrin, it has not been until recently that I have realized my minority status. In 2013, I recall mentioning my excitement for Gareth Edward's 2014 American remake to one of my friends, and his younger brother looked at me and asked, "Who is Godzilla?" I was slightly taken aback by this because I had assumed that Godzilla was always a figure in people's lives. I was wrong. This realization was exacerbated when the main criticism of the 2014 film was the minimal screen time that Godzilla received. Irritated, I began to question whether anyone had ever seen *Gojira*: a film in which Godzilla's appearance is similarly scarce. The only answer I received was "no."

To gauge the difference between what Godzilla means to me and what he means to the people around me, I started to ask everyone what they thought of when they heard his name. I received answers that ranged from "that big lizard guy," to "the monster," to "those Japanese movies," to "a visually exhilarating spectacle with the overused concept of featuring a giant

monster." No one I asked ever brought up Godzilla's historical significance as one of the first purposefully anti-nuclear films. Consequently, I have made it my duty to rectify this. Through this paper, I hope to achieve two goals: showcase the significance of the 1954 Japanese film, *Gojira*, and to go one step further and demonstrate the importance of *Gojira*'s 1956 American reedit, *Godzilla, King of the Monsters!* – a film that has been derided and dismissed since its release. Despite its reputation, I hope to demonstrate that the American remake was a crucial contribution to the debate about nuclear weapons because it carried the anti-nuclear rhetoric of the Federation of the Atomic Scientists, a small group of distinguished nuclear scientists, into United States (US) popular culture. In doing this, impact of the Federation date, and both *Gojira* and *Godzilla: King of the Monsters!* will be situated into their proper places as important pieces of anti-nuclear history.

Godzilla's message was never meant to be elusive. Ishirō Honda, director of the original 1954 movie, reminisced in a 1991 interview with *G-Fan*, the self-proclaimed "world's only journal devoted to giant movie monsters," that walking through the devastated post-World War II Hiroshima gave him the ominous feeling that the "earth was already coming to an end."¹ Honda explained that this feeling formed the basis for *Gojira*. The hope, Honda went on to declare, was that Godzilla's death in the film would "coincide with the end of nuclear testing."² This hope was understood by a multitude of *Gojira*'s cast and crew. Supporting actor Akira Takarada, or Hideto Ogata in the film, recalled that *Gojira* coincided with "the very controversial

¹ J.D. Lees, "Welcome to the World of Giant Monsters," *G-Fan Online*, accessed March 1, 2017, <u>http://www.g-fan.com/</u> and Qtd. in David Kalat, *A Critical History and Filmography of Toho's Godzilla Series*, (Jefferson, NC: McFarland and Company, 2010), 16.

² Qtd. in William Tsutsui, *Godzilla On My Mind: Fifty Years of the King of Monsters*, (New York, NY: Palgrave Macmillan, 2004), 33.

new story of the tuna boat [the *Lucky Dragon*] that was exposed to radiation. . . . The radiation – the sleeping Godzilla – is coming from the deep sea. . . . He was a warning to mankind . . . about nuclear energy. . . . When Godzilla destroyed the big clock [in the movie], it was a metaphor . . . telling us we are running out of time." Godzilla was designed to be an allegory for the bomb, but he was also designed to be a warning: stop dabbling with nuclear energy because its only outcome is destruction. Lead Actress Momoko Kochi, or Emiko Yamane in the film, has revealed a similar understanding. "I knew the film was related to the theme of nuclear weapons. . . . Godzilla is a kind of warning to mankind. Seeing it again I came to understand that; I wish audiences would."³ Not only does she acknowledge the anti-nuclear message that Godzilla was always supposed to convey, but she reacts to the message's invisibility in the minds of most audiences. *Gojira*'s message was never meant to be a secret, but as time has progressed the awareness of it has dwindled into obscurity. This phenomenon is best reflected within books on anti-nuclear and Cold War history.

In a plethora of different history books, ranging from political to cultural to cinematic, there is one consistent element: Godzilla's, almost, nonexistence. Books by political historians, like Lawrence Wittner's *Struggle Against the Bomb* and Ruth Brandon's *The Burning Question*, lack any discussion of Godzilla. Both focus on anti-nuclear movements around the world, including Japan and the US, but neglect Godzilla despite his presence in both cultures. Books by cultural historians, like Alan Winkler's *Life Under a Cloud* and Margot Henriksen's *Dr*. *Strangelove's America*, mention the importance of science fiction cinema during the Cold War, but do not spend much time developing this insight. While Henriksen, unlike Winkler, does mention Godzilla, she only spends a third of a page in her 388-page book on him. This is not

³ Qtd. in Stuart Galbraith IV, *Monsters are Attacking Tokyo!: The Incredible World of Japanese Fantasy Films*, (Venice, CA: Feral House, 1998), 49-52.

enough room to give him the time he deserves. And finally books by cinematic historians, like Cyndy Hendershot's *Paranoia, the Bomb, and 1950s Science Fiction Films,* Joyce Evans' *Celluloid Mushroom Clouds,* and Jerome F. Shapiro's *Atomic Bomb Cinema,* expand on Winkler's and Henriksen's mention of science fiction, but still neglect Godzilla. Hendershot and Evans discuss films like *The Day the Earth Stood Still* (1951) and *Them!* (1954) in lieu of the Japanese monster, and Shapiro merely mentions *Gojira* and *Godzilla, King of the Monsters!* in order to relate them to similar monster movies of the decade. This almost complete negligence toward Godzilla is astounding, especially because of his confirmed anti-nuclear origins.

The only exceptions to Godzilla's neglect are within the niche Godzilla-focused history books written in the past few decades. For example, Steven Ryfle's book *Japan's Favorite Mon-Star* states, "To the unconverted, the sight of Godzilla rampaging through Tokyo . . . is pure cheap camp, [and] a symbol of low-tech, inferior moviemaking."⁴ Historian William Tsutsui later expanded on this sentiment in *Godzilla on My Mind*. "Many critics have looked upon films that exploited Cold War nuclear paranoia – and especially those in the 'monster on the loose' genre – with a certain cynicism . . . for trivializing the specter of nuclear war." Disagreeing with this nonchalant and dismissive attitude toward his childhood hero, Tsutsui countered by saying, "*Gojira*'s message may not have been terribly deep or particularly subtle . . . [but] there is an appealing ingeniousness and honesty about *Gojira* that makes its antinuclear subtext . . . immedia[te], [authentic], and passion[ate]."⁵ Developing this further, Peter H. Brothers declares in *Atomic Dreams and the Nuclear Nightmare* that, "Great films are always more than they appear to be on the surface [and while] *Godzilla* was and still is an unusual . . . and controversial

⁴ Steve Ryfle, *Japan's Favorite Mon-Star: The Unauthorized Biography of "The Big G*," (Toronto, Ontario: ECW, 1998), 13.

⁵ Tsutsui, Godzilla on my Mind, 33-35.

[film] . . . [its importance transcends time as] one of the finest cinematic recreations of a civilian population decimated by war."⁶ While it is clear from these examples that some have understood Godzilla's importance, they are merely exceptions to the whole.

Ishirō Honda has tried to understand why so many people have been blind to Godzilla's anti-nuclear message, and he has blamed himself. "The film represents only about 65% of what I wanted to achieve . . . [and] audiences could see that it wasn't a real story." It was easy for them to miss the message because it was not aggressively direct. Nonetheless, Honda has come to believe that, despite his failings, *Gojira* is his best film. "Always in the back of your mind," he stated when discussing *Gojira*, "there's the realization that a film is forever and its influence is going to outlive you."⁷ In Godzilla's case, this is indisputably true: Godzilla now has twenty-nine Japanese productions, three financially successful American adaptations, and in 2015 he was appointed to the position of Japan's official tourism ambassador. More than fifty years after his conception and more than twenty years after Honda's death, Godzilla is still in demand. Ergo, it is important now more than ever to bring his originally intended significance into the minds of everyone around the world, and the best way to begin this effort is to recall the exact story of the 1954 film.

Narratively, the 98-minute *Gojira* is very simple. After a string of ships sink under mysterious circumstances and fish become scarce, the elders of the remote Odo Island start to mutter the name Gojira: a combination of the Japanese words for gorilla, *Gorira*, and Whale, *Kujira*. Soon after, a hurricane bearing an even more terrible force swoops into an Odo Island town, destroys seventeen houses, and claims nine lives. This unexpected occurrence catches

⁶ Peter H. Brothers, *Atomic Dreams and the Nuclear Nightmare: The Making of Godzilla (1954)*, (Seattle, Washington: CreateSpace Books, 2015), xv-xvii.

⁷ Qtd. in Galbraith IV, Monsters are Attaking Tokyo!, 52.

esteemed paleontologist Dr. Kyohei Yamane's eye, and he organizes a scientific investigation of the island. While investigating, he discovers traces of radiation in massive footprints on the island's beach. This discovery is then made even more intriguing when a massive reptilian creature rears its head over the mountains, startles everyone present on the island, and then disappears back into the ocean.

Dr. Yamane quickly becomes convinced that this creature, which he begins to call Godzilla, is a life form from the Jurassic period that was awakened by atomic testing. He brings the news back to mainland Japan with the desire to capture and study the unique beast, but the panic of Godzilla's existence causes a rushed governmental decision: kill Godzilla with a depth charge. After this expedition is complete, everyone believes that Godzilla is dead until he rears his giant head once more within Tokyo's harbor. During the panic that ensues, a reporter receives word that Dr. Daisuke Serizawa, one of Dr. Yamane's previous students who was injured in World War II and now lives as a recluse, may have a solution. Upon visiting him, Serizawa denies having any solution and turns the reporter away. As soon as he is gone, however, Serizawa reveals to his fiancé Emiko Yamane, Dr. Yamane's daughter, a terrible secret he had been keeping and asks her to stay silent about it.

Godzilla then strikes the mainland and destroys part of Tokyo's harbor before returning to his watery home. Out of desperation, the scientists and the military combine their efforts and, after evacuating as much of the city as they can, prepare the gigantic electrical towers that surround Tokyo to deliver a massive shock to anything that passes through it. This action is pointless, however, because Godzilla soon rises back up from the water and goes through the defenses unfazed and proceeds to steamroll over Tokyo sending men, women, and children to the hospital without mercy or reservation. Disturbed by the images of death, Emiko reminisces to her secret lover, a sailor in the navy named Hideto Ogata, about what Dr. Serizawa had shown her: a doomsday weapon known as the Oxygen-Destroyer that has the power to kill Godzilla. She decides that her promise to keep it a secret means little while Japan's existence is at stake, and she and Ogata try to convince Serizawa to use his creation. At first, he is reluctant and claims that using the weapon would reveal it to the world and that it is a power that everyone would want, but no one should be allowed to have. As their argument escalates, a saddening memorial to the death caused by Godzilla airs on the television. Being deeply moved by this memorial, Serizawa decides that Godzilla must be destroyed, but that it would be the only time that the Oxygen-Destroyer would be used. Consequently, Serizawa burns all his research.

In the final act of the film, Serizawa, Emiko, Yamane, and Ogata head out on a navy ship in search of Godzilla. Upon finding him, Serizawa and Ogata descend into the water with the Oxygen-Destroyer. At the last minute, Serizawa sends Ogata back up to the ship, but personally stays behind to die so that he could never be forced to remake the Oxygen-Destroyer for a nefarious purpose. The weapon works, and Godzilla rears up to the water's surface in agony before reeling back to die. In the last moments of the film, the crew of the ship salutes the memory of Dr. Serizawa, and Dr. Yamane reflects on all that has happened. He openly states that if we continue to do nuclear testing it is very possible that another Godzilla might appear. The camera then pans off into the horizon and the credits begin to roll.

Within this summary, Honda's intended themes of nuclear destruction are clear. In the very first scene, for instance, a jovial crew of fishermen on the Eiku-Maru are playing music and laughing when a sudden flash of white light occurs on the water. The crew members stop what they had been doing and look overboard. Suddenly, they begin to scream and run wildly around

leaving their belongings on the deck as their ship begins to sink. They did not see the cause before it was too late. This catastrophic event mysteriously repeats with other ships until the first survivor washes up on Odo Island claiming that he saw a monster.

As Akira Takarada has acknowledged, this opening scene is an exaggerated retelling of the *Lucky Dragon*, or *No. 5 Daigo Fukuryu Maru*, incident. Departing from Yaizu port at 11:30 a.m. on Friday January 22, 1954, Captian Hisakichi Tsutsui and his crew of twenty-two went into the Pacific in search of tuna.⁸ On the morning of March 1, as the *Lucky Dragon* slowly edged toward the Utrik, Rongerik, Rongelap, and Bikini atolls, the crew witnessed the sun rise in the west. No one was positive about the light's origins until about five minutes later when "the ship seemed to tremble as though shaken from below and a great sound wave enveloped the ship, seeming to come from above and below." Two hours later, "the sky began to change . . . as though a high fog were forming . . . [and then] tiny bits of sandy[, solid, volcanic-like] ash came swirling down onto the deck" like snow.⁹

When the *Lucky Dragon* finally returned to Yaizu on Sunday, March 14, 1954, some of the crewmen realized that their skin had been darkened by burns. Further investigation into the cause revealed that some of the tuna they had caught spiked to two-thousand counts of radioactive decay per minute on a Geiger counter, or one-thousand-nine-hundred-eighty counts above the average. This coincided with two of the twenty-three crewmen, Sanjiro Masuda and Chuji Yamamoto, starting to show the adverse effects of radiation poisoning. In response, each crewmember was given a blood test and sent to Tokyo hospital. In the end, one of the

⁸ Ralph E. Lapp, *The Voyage of the Lucky Dragon*, (New York, NY: Harper & Brothers, 1958), 1-5.

⁹ Ibid., 30-35.

crewmembers, Aikichi Kuboyama, died.¹⁰ This event was then translated into *Gojira*'s story: the *Lucky Dragon* became the Eiku-Maru and the Bikini Atoll became Odo Island.

An even more visceral retelling of a nuclear incident within *Gojira* is revealed through the parallels that Godzilla's attacks have with the atomic bombings of Hiroshima and Nagasaki, as well as the fire bombings of Tokyo. Firstly, Godzilla's presence is the perfect encapsulation of an atomic bomb. Both are sudden, unexpected, and towering forces born from atomic testing that strike with atomic radiation suddenly and viciously on major Japanese cities. Secondly, statements made by the characters within the film reveal a narrative connection. For example, when Ogata accuses Dr. Yamane of wanting to study Godzilla, Ogata says, "Isn't Godzilla a product of the atomic bomb that still haunts many of us Japanese?" This question connects Godzilla directly to the atomic bomb's haunting devastation of Hiroshima and Nagasaki. This subtle reference is revealed again when the public first finds out about Godzilla. In a scene where three bystanders are reading a newspaper, a conversation develops as follows: "I guess I'll have to find a shelter soon." "Find one for me, too!" "The shelters again? That stinks." This, again, connects Godzilla with the war and the memory of needing to take shelter from bombing raids. One last time that this happens within the film is when a news reporter comments on Godzilla's rampage through Tokyo. "Right now, Godzilla is leaving behind a sea of flame! From Ginza-Owari to Shinbashi, Tamachi, Chiba, and Shinabara, it's all become a sea of flames!" To those who lived in Tokyo during World War II, this brings back the haunting memories of the constant fire bombings that happened across the city. For Japanese audiences, Godzilla was supposed to be a brutal reminder of what World War II did to their country.¹¹

¹⁰ Ibid., 55-175.

¹¹ Gojira, directed by Ishirō Honda (1954; New York, NY: Classic Media, 2006), DVD.

Gojira's nuclear themes and retellings culminate into one overarching message: that for the sake of humanity's survival, atomic testing must stop and all atomic weapons must be abolished. This outlook on nuclear weapons originated with Japan's unique experience with the atomic bomb. To the Japanese, the bomb was a symbol of complete loss: the loss of war, the loss of life, and the loss of faith. In *Gojira*, this opinion is voiced through Dr. Serizawa when he refuses to use the Oxygen-Destroyer on Godzilla. "If my device can serve a good purpose, I would announce it to everyone in the world! But in its current form, it is just a weapon of horrible destruction! . . . [P]oliticians . . . [will] want to use it as a weapon. Bombs vs. bombs, missiles vs. missiles, and now a new super weapon to throw upon us all! As a scientist, no, as a human being, I can't allow that to happen." Serizawa, representing the Japanese, believes that super weapons, like the atomic bomb, need to stay out of the hands of everyone because their destructive power is too great. Dr. Yamane voices a similar opinion after Godzilla dies: "I can't believe that Godzilla was the only surviving member of its species.... But, if we keep on conducting nuclear tests, it's possible that another Godzilla might appear ... somewhere in the world, again." This statement serves as a warning to the world that if nuclear testing continues, the threat of atomic bombs will rise once again. We, as a human race, must not let this happen.¹²

Despite the film's timely themes, *Gojira*'s critical reception upon its November 3, 1954 release was lackluster, and its messages went largely unnoticed. *Yomirui Evening Shimbun* declared that, "Godzilla has no personality . . . [and t]he film [poorly] incorporates . . . drama. . . . The special effects are the only redeeming feature." *Asahi Arts* similarly proclaimed that "Both Ishirō Honda's script and the performances lack a feeling of completion." *Mainichi Shimbun* concurred by stating, the "peoples' stories are told quite poorly." *Current News* told its readers

¹² Ibid.

that the film leaves "an aftertaste like a comedic farce." *Hochi Shimbun* wrote that, "[the] story doesn't feel very entertaining." And *Fukunichi News* claimed that, "The only intriguing element is the design." In summary, *Gojira* was not a critical success.¹³

Yet where critical acclaim failed for *Gojira*, its attraction for audiences succeeded. The film was Japan's most expensive one to date, costing upwards to 62,898,455 Yen (\$900,000) to make, and this gamble paid off because its box office earned a respectable 152,000,000 Yen (\$2,225,000).¹⁴ Consequently, when *Gojira* got a limited screening in the US in 1955, American investors smelled profit. Film distributer Edmund Goldman bought the movie's distribution rights on September 27, 1955 for \$25,000, and then, with additional support from producers Harold Ross, Richard Kay, and Joseph E. Levine, financed a reedit. To achieve this goal, the production team hired B-movie star Raymond Burr to play the newly created role of the American reporter Steve Martin, filmed new scenes with him, cut out scenes from the original, adjusted some dialogue, and shipped it out to the public as *Godzilla, King of the Monsters!* (*GKotM*!) on April 27, 1956.

Despite *Gojira*'s original 98-minute runtime being reduced to 80-minutes, *GKotM*! remains narratively the same. The Eiku-Maru still sinks, Dr. Yamane still investigates Odo Island, Godzilla is still depth charged, he still comes back afterward to wreak havoc on Tokyo and its harbor, Dr. Serizawa still creates the Oxygen-Destroyer, he still shows it to Emiko, she still eventually convinces Serizawa to use it on Godzilla, and Serizawa still dies along with Godzilla. Amidst the few major changes that are present, the biggest one comes in the form of Raymond Burr as the American World News reporter Steve Martin. His narrative addition consists of the following: he was flying to Egypt for a story when he stops off in Tokyo to visit

¹³ Qtd. in Brothers, Atomic Dreams and the Nuclear Nightmare, 144-154.

¹⁴ Ryfle, Japan's Favorite Mon-Star, 33-34

his college friend, Dr. Serizawa. Upon landing in Tokyo, however, Serizawa is away doing research. In the meantime, Martin receives word of the mysterious ship destructions and decides to investigate. He is then able to secure a trip with Dr. Yamane, who knows Martin through Serizawa, to Odo island. From this point, the film progresses just like the original with Martin standing in the background and periodically reporting to his editor, George Lawrence. Martin is not a hero. He does, however, play a very important role. Instead of dubbing, or voicing over, all the original Japanese dialogue, *GKotM*! uses Martin as an intermediary. Most of the film is spent with him sitting in the background getting interpreters to translate what is going on for him and, at the same time, for US audiences. In the end, this is all Steve Martin is: a cross cultural translator.

GKotM!'s initial reception reflected *Gojira*'s: it was a critical failure, but a financial winner. After its release, film critics gave it some faint praise for its visuals, but trashed the rest. The most blatant example of this was the review by *New York Times*' Bosley Crowther who bemoaned that, "As though there are not enough monsters coming from Hollywood . . . Jewell Enterprises has had to import one from Japan." He then proceeded to claim that, "Godzilla' . . . is an incredibly awful film. . . . [The destruction has] no clear reason . . . [and] The whole thing is in the category of cheap cinematic horror-stuff, and it is too bad that a respectable theatre has to lure children and gullible grown-ups with such fare."¹⁵ Nevertheless, the film's lure was quite an attractive one, and it managed to make a net income of more than \$2,000,000.¹⁶ This sizable box office meant one thing: *GKotM!* would be screened around the world.

¹⁵ Bosley Crowther, "Horror Import 'Godzilla' a Japanese Film," *New York Times*, April 28, 1956. <u>https://search-proquest-com.gate.lib.buffalo.edu/docview/113865382?accountid=14169</u>

¹⁶ Tsutsui, Godzilla on my Mind, 41.

To Godzilla historians, this spreading of GKotM! instead of Gojira was a tragedy. For example, William Tsutsui declared that, "Although Gojira was not exactly eviscerated in [the American] transition . . . much of the emotional power, intellectual depth, social relevance, and visceral impact of Gojira was lost."¹⁷ David Kalat agreed and stated, "As a monster movie, the structure of the American version is by far the more dramatically satisfying, but what it gains in cinematic effectiveness it loses in historical allegory."¹⁸ Similarly, W. Scott Poole stated in Monsters in America that, GKotM! "added an American reporter as the hero and sublimated the atomic theme. All references to Hiroshima and Nagasaki were eliminated."19 A few others, like Steven Ryfle, are slightly less critical toward the Americanization and state that, while the U.S. version "[weakened] the film's dramatic and thematic underpinnings, and [eliminated] some necessary character development," it still "bridged the gap between Honda's somber, nightmarish film and the atomic monster genre that was so popular in 1950s America."²⁰ In the end, there has only been one person entirely positive about the American release: Ishirō Honda. In regards to *GKotM*!, he said, "I felt that if *Godzilla* was going to be shown overseas, then the American version was probably better, since it was so easy to understand."²¹ The irony of this, however, is that it seems Godzilla's message has been lost on Western audiences.

This ironic predicament is exacerbated by the easy way that the two most common criticisms that *GKotM*! receives can be countered. Firstly, the criticism that *GKotM*! is inferior the *Gojira* because of its removal of direct references to Hiroshima and Nagasaki is narrow minded. To the Japanese, the two cities were terrifying reminders of national damage, so

¹⁷ Ibid., 38-39.

¹⁸ Kalat, A Critical History and Filmography, 28.

¹⁹ W. Scott Poole, *Monsters in America: Our Historical Obsession with the Hideous and the Haunting*, (Waco, TX: Baylor University Press, 2011), 115.

²⁰ Ryfle, Japan's Favorite Mon-Star, 51 and 55.

²¹ Qtd. in Galbraith, Monsters are Attacking Tokyor!, 64.

referencing them in *Gojira* was done to resurface memories of terror. In *GKotM!*, however, simply mentioning Hiroshima and Nagasaki would not have been as effective. Los Alamos nuclear scientist Philip Morrison perfectly described this in his essay "If the Bomb Gets Out of Hand." "The streets and the buildings of Hiroshima are unfamiliar to Americans. Even from pictures of the damage, realization is abstract and remote."²² To a US citizen, Hiroshima and Nagasaki were just the two cities that were bombed. In fact, to US citizens passionate about the 1941 bombing of Pearl Harbor, the Japanese got what was coming to them. Consequently, the removal of references to Hiroshima and Nagasaki in *GKotM!* was not damaging to the message of the film because its impact would have been misunderstood by and ineffective on its target American audience. The goal of the reedit was not to emulate the Japanese version exactly, but to adapt the messages and themes to an American audience: one that was paranoid about both communists and the US's loss of atomic dominance to the Soviet Union or other comparable power.

Given the political atmosphere of the 1950s, the second criticism, that *GKotM*! purposefully removed themes such as the call to end atomic testing and abolish atomic weapons, is revealed to be supported by a similarly shaky foundation. Despite Richard Kay, one of the film's producers, stating that he and his coworkers "weren't interested in politics . . . [and] only wanted to make a movie [that would] sell," it is important to remember what the US political environment was like in 1956. In other words, to fully understand the faults of the second criticism, the clock needs to be turned back to almost two decades before *GKotM*!'s release.

In 1938, the US government created a committee to weed out disloyal and subversive individuals from influential positions: the House Un-American Activities Committee (HUAC).

²² Philip Morrison, "If the Bomb Gets Out of Hand," in *One World or None*, ed. Dexter Masters and Katharine Way, (New York, NY: The New Press, 2007), 7.

While HUAC was originally designed to be precautionary, it quickly transformed during the post-World War II years. The primarily progressive government that began in the 1930s under Roosevelt was suddenly replaced by a more conservative one in 1947. The result of this was an increase in HUAC's aggression. Having heard rumors of communist sympathy within Hollywood, on November 24, 1947 Congress subpoenaed eleven suspected writers and directors. Of these eleven, ten refused to testify. In response, these ten were blacklisted from working in Hollywood until the 1960s. This put all of Hollywood's employees on red alert. They would need to distance themselves from anything profoundly liberal if they wanted to make sure their careers remained secure. So, if any political or anti-nuclear agendas were placed within a film, they needed to be subtle and subliminal if those involved wanted to maintain their job.²³

HUAC's aggressiveness was exacerbated on September 23, 1949 when the Soviet Union detonated their own atomic bomb. President Truman reflected on this and declared that "Ever since atomic energy was first released by man, the eventual development of this new force by other nations was to be expected."²⁴ But despite President Truman's declaration, the news was followed by panic. Politicians began to utilize this for personal gain. On February 9, 1950, Senator Joseph McCarthy came forth and presented his infamous "Enemies from Within" speech. "When a great democracy is destroyed, it will not be from enemies from without, but rather because of enemies from within." McCarthy claimed that he had the names of two-hundred-and-five subversives within the government: a proclamation that effectively put the government on lockdown.²⁵ Anyone who had a past of progressivism was liable to be

 ²³ Allen Pusey, "Congress Holds 'Hollywood 10' in Contempt," *APA Journal* 99, no. 11 (2013): 72.
 ²⁴ Harry S. Truman, "Statement by the President on Announcing the First Atomic Explosion in the U.S.S.R.," September 23, 1949. <u>https://www.trumanlibrary.org/publicpapers/index.php?pid=1234&st=&st1</u>=
 ²⁵ Joseph R. McCarthy, "Enemies from Within," February 9, 1950. https://liberalarts.utexas.edu/coretexts/ files/resources/texts/1950% 20McCarthy% 20Enemies.pdf

investigated, labelled a security threat, and fired. The peak of this occurred on March 6, 1951 with the trial of Julius and Ethel Rosenberg. Relatives of a convicted communist, the Rosenbergs were accused of selling state secrets, primarily the plans for the atomic bomb, to the Russians. Their judgement, which was dealt on June 19, 1953, was execution. Thus, any anti-nuclear advocates in Hollywood received a strong warning: "emphasize it in your movies and getting fired could be the least of your worries." For those who still wanted to brave the risks, however, the safest way to push an agenda and get away with it was subtlety. Utilizing this information to look back at Richard Kay's testimony, it becomes difficult to fully gauge his intentions from his word alone. In conclusion, it is impossible to discount *GKotM!*'s significance as an anti-nuclear message based on the criticisms provided by most Godzilla aficionados. This becomes even more apparent upon understanding, amidst all the 1950s US paranoia, the already present anti-nuclear messages within US culture.

While most progressive groups kept their mouths shut during the late 1940s and early 1950s, one group was, comparatively, very willing to express their anti-nuclear agenda to the public: The Federation of Atomic Scientists (FAS). Most of the members of the FAS were scientists who had worked on the Manhattan Project, the US's top secret nuclear research team, in either its Chicago or Los Alamos divisions. After witnessing the destructive power of their creation, they became terrified. Acting on this, Russian-born biophysicist Eugene Rabinowitch organized his contemporaries into the FAS. Their goal was simple: to warn the public about the dangers of the bomb and nuclear energy. In 1945, they began to publish the propagandistic *Bulletin of the Atomic Scientists* to reveal the facts of the atomic situation and various solutions to them.²⁶ In 1946, they published their foundational text, *One World or None*, that pushed for

²⁶ Paul Boyer, *By the Bomb's Early Light: American Thought and Culture at the Dawn of the Atomic Age,* (New York, NY: Pantheon, 1985), 52.

the formation of international collaboration. *One World or None* went on to sell one-hundredthousand copies and was then listed as a *New York Times* bestseller. Through this book, the ideas and solutions promoted by the FAS permeated the mind of the public. Of the solutions, the most emphasized one was the need for worldwide communication and peace.

While wrongly dismissed by its researchers as an attempt that failed by the early 1950s, the FAS has nevertheless received significant scrutiny. Some have seen it as a pivotal, influential, and admirable movement that suffered from deaf politicians and the onslaught of McCarthyism and HUAC discrediting its prime player, such as Los Alamos spearhead J. Robert Oppenheimer.²⁷ Others have conversely seen it as being full of complications, disunity, and ignorance: characteristics which ultimately led to its own demise.²⁸ Contrary to both of these interpretations, an analysis of *GKotM*! reveals that the messages of the FAS, expressed through *One World or None*, persisted well into the later 1950s and beyond. The scientists' effort did not fail, as most of its researchers have believed, but transitioned from an explicit, political movement to a subconscious, cultural one: a manifestation that was just as, if not more, influential.

The most visible connection between *GKotM*! and the FAS comes in the form of how the scientist characters are portrayed within the film. The biggest difference between *Gojira* and *GKotM*! is that Serizawa is a lot more open in the latter. This is emphasized by one of Steve Martin's lines from the beginning of the film, "I was looking forward to a visit with an old

²⁷ For more on Oppenheimer being discredited, see "Oppenheimer Security Hearing," *Atomic Heritage Foundation*, accessed March 29, 2017, <u>http://www.atomicheritage.org/history/oppenheimer-security-hearing</u>.

²⁸ See Boyer, *By the Bomb's Early Light;* Milton Katz, *Ban the Bomb: A History of SANE, the Committee for a Sane Nuclear Policy, 1957-1985,* (Westport, CT: Greenwood Press, 1986); April Carter, *Peace Movements: International Protest and World Politics Since 1945* (London, UK: Longman, 1992); Lawrence Wittner, *The Struggle Against the Bomb Volume 1: One World or None* and *Volume 2: Resisting the Bomb* (Standford, CA: Stanford University Press, 1993); and Zia Mian, "Out of the Nuclear Shadow: Scientists and the Stuggle Against the Bomb," *Bulletin of the Atomic Scientists* 71, no. 1 (2015): 59-69. DOI: 10.1177/0096340214563680.

college friend, Dr. Serizawa: a theoretical physicist who was gaining great recognition in the Far East for his unusual experiments." This friendship with a reporter reveals that nuclear scientists have an open and friendly connection to the public and the media. This represents the FAS's desire to help everyone in the world through the publication of their solutions to the atomic threat. In Serizawa's case, he is presented exactly how the FAS wanted themselves to be portrayed: friendly, open, and knowledgeable.

A less clear connection between *GKotM*! and the FAS is the film's portrayal of the scientists' academic disputes: a connection that requires a solid understanding of the conflicts within the FAS and its members. While it is doubtful that the FAS was impacted by these disagreements in a harmful way, they were very common and very defining. Dating back to June 11, 1945, for instance, the Committee on Social and Political Problems consisting of James Franck, Eugene Rabinowitch, Leo Szilard and a handful of other scientists began to grow uncomfortable about the bomb and released a document known as the Franck Report to the US government. Through it they declared that dropping the bomb on any nation without notification was an immoral deed: "We believe that . . . [an] unannounced attack against Japan [is] inadvisable. If the United States would be the first to release this new means of indiscriminate destruction upon mankind, she would sacrifice public support throughout the world." They insisted that, "The best possible atmosphere for the achievement of an international agreement could be achieved if America would be able to say to the world, 'You see what weapon we had but did not use. We are ready to renounce its use in the future and to join other nations in working out adequate supervision of the use of this nuclear weapon." Unfortunately for Franck and his coworkers on the Committee on Social and Political Problems, the Franck Report was

ignored by politicians and other scientists, such as Oppenheimer. In the end, the Manhattan Project continued as usual.²⁹

On July 16, 1945, the Franck Report dispute resurfaced. On this date, the first atomic bomb was detonated out in a desolate desert in New Mexico during the codenamed "Trinity" test. In reflection to his experience at this test, Oppenheimer declared that everyone present "knew the world would not be the same. A few people laughed, a few people cried, most people were silent. I remembered the line from the ... Bhagavad-Gita ... 'Now I am become Death, the destroyer of worlds.""³⁰ It was at this point, that many of the scientists knew that they had to get their voices heard in politics. Leo Szilard quickly put together a petition that was released the day after, on July 17, 1945, that declared, "attacks by atomic bombs may very well be an effective method of warfare. We feel, however, that such attacks on Japan could not be justified. ... Such a step [dropping the bomb] ... ought not to be made at any time without seriously considering the moral responsibilities which are involved" and giving Japan time to surrender beforehand.³¹ This petition circulated around the Chicago office of the Manhattan Project and managed to procure sixty-nine signatures in addition to Szilard's. Nonetheless, the petition was dismissed by the government, possibly because Oppenheimer disagreed with it and refused to spread it around the Los Alamos division, and Hiroshima and Nagasaki were bombed on August 6 and 9, 1945 respectively.³²

²⁹ James Franck, Donald J. Hughes, J. J. Nickson, Eugene Rabinowitch, Glenn T. Seaborg, J. C. Stearns, and Leo Szilard, "Report of the Committee on Political and Social Problems, Manhattan Project 'Metallurgical Laboratory,' University of Chicago, June 11, 1945 (The Franck Report)," June 11, 1945. http://www.dannen.com/decision/franck.html

³⁰ Qtd. in *The Day After Trinity*, directed by Jon H. Else (1981; Los Angeles, CA: Image Entertainment, 2002), DVD.

³¹ Leo Szilard, "Szilard Petition," July 17, 1945. <u>http://www.dannen.com/decision/pet-gif.html</u>

³² Lawrence S. Wittner, *The Struggle Against the Bomb Volume 1: One World or None*, (Stanford, CA: Stanford University Press, 1993), 30.

This series of internal disagreements among the FAS members was not limited to the pre-FAS years, and after the group's formation in the post-bombing era their disagreements continued: a fact that can be seen within One World or None. The first of these came in the form of the effectiveness of an inspection system as a solution to the nuclear threat. Albert Einstein was convinced in his essay "The Way Out" that, "Mutual inspection by the leading military powers of methods and installations used for the production of offensive weapons, combined with an interchange of pertinent technical and scientific discoveries, would diminish fear and distrust, at least for the time being."³³ He was adamant that an inspection system would bring down tensions just enough to allow nations across the world to formulate a better plan together. Unfortunately for Einstein, this argument was not agreed upon by many other scientists, especially Leo Szilard. Szilard argued, in his essay "Can We Avert Arms Race by an Inspection System?," that an inspection system was not a very adequate response because it could not work forever. While an inspection system might work for a short period of time, "We cannot expect [it] ... to hold up indefinitely the peacetime uses of atomic power for the sake of security, and we shall have to go as soon as possible beyond such temporary expedients."³⁴ Szilard declared that a long-range program, such as the immediate abandonment and scrapping of the US's own atomic bombs and "manufacturing facilities," would need to be put in place in addition to the short-range one provided by the inspection system for true arms control to work.³⁵ While both Einstein and Szilard had a similar consensus for the inspection system's short term benefits, Einstein was more optimistic about them than Szilard.

³³ Albert Einstein, "The Way Out," in *One World or None*, ed. Dexter Masters and Katharine Way, (New York, NY: The New Press, 2007), 212.

³⁴ Leo Szilard, "Can We Avert an Arms Race by an Inspection System?," in *One World or None*, ed. Dexter Masters and Katharine Way, (New York, NY: The New Press, 2007), 177.

³⁵ Ibid., 178-179.

A second post-war disagreement found in *One World or None* dealt with the possibility of nuclear energy's peaceful applications. Nuclear scientist Gale Young's essay, "The New Power," brought forth the argument that there are peaceful aspects of atomic energy that should be considered. "[U]ranium may be able to compete [with other energy sources] so far as fuel cost is concerned" because it is more than three times cheaper than its equivalence in gasoline, its light weight makes its transportation cost low, and it would be a viable source of energy in "submarines, underground [vehicles], or, if various difficulties can ever be overcome, outside the earth's atmosphere in spaceships" because it does not give off combustion gases. These traits, Young argued, make uranium power invaluable to mankind and, thusly, "there is now quietly underway a worldwide buried-treasure hunt such as had never been seen before."³⁶ Young believed that nuclear energy's precious, treasure-like quality trumped any of its adverse effects.

Many other scientists disagreed with Young. Oppenheimer mentioned that because of its cost, "Ton for equivalent ton, atomic explosives are vastly cheaper than ordinary explosives."³⁷ While the low price of nuclear energy is unbeatable when it comes to peaceful applications, it means that we will have equally cheaper ways to kill each other. US Army General H. H. Arnold agreed with Oppenheimer on this point. "The biggest change that atomic explosives have made in the nature of airpower is to decrease the cost of destruction. . . . With the decreased cost of destruction . . . the effort required to knock out completely all phases of an enemy's war industry is within practical reach."³⁸ Again, just because there is some possibility of a peaceful use does not counter the fact that nuclear energy is dangerous. Theoretical physicist Eugene P. Wigner

³⁶ Gale Young, "The New Power," in *One World or None*, ed. Dexter Masters and Katharine Way, (New York, NY: The New Press, 2007), 44-57.

³⁷J. Robert Oppenheimer, "The New Weapon: *The Turn of the Screw*," in *One World or None*, ed. Dexter Masters and Katharine Way, (New York, NY: The New Press, 2007), 64.

³⁸ H.H. Arnold, "Air Force in the Atomic Age," in *One World or None*, ed. Dexter Masters and Katharine Way, (New York, NY: The Nee Press, 2007), 73.

summed this argument up by stating, "The amount of energy that available sources are able to furnish is so ample that we are not in need of other or more abundant sources. Present sources are able to fulfill all reasonable – and some unreasonable – needs for energy."³⁹ Since nuclear energy's peaceful applications are cheap and efficient, its destructive qualities are equally cheap and efficient.

The multitude of conflicting scientific ideas revealed in *One World or None* was communicated to the public in the 1950s through the ubiquitous "Science Fiction Scientist" stock character. To exemplify this, Susan Sontag, writer, filmmaker, teacher, and political activist, invited the reader of her foundational 1965 article "The Imagination of Disaster" to imagine three science fiction stories. In the first, a scientist foresees a threat, but cannot get anyone to heed his warnings. But after the threat begins to wreak havoc, the scientist is called upon and is successful in defeating it through the creation of an atomic weapon. The second story features another scientist. This time, though, instead of witnessing a threat, he "unwittingly causes a frightful metamorphosis in some class of plants or animals." Then to stop the chaos of his own creation and win back his reputation, he creates an atomic weapon to destroy the "frightful metamorphosis." The third story features yet another scientist. This time, however, he is a "mad . . . scientist . . . [who] pursues his experiments against good advice[,] . . . creates a monster or monsters, and is himself destroyed." In each story, the scientist is both deeply involved with the threat and with the solution. He is both the hero and the villain of his story.⁴⁰

Within *GKotM*!, however, the "Science Fiction Scientist" stock character is unique because it is split into two separate characters: Dr. Yamane and Dr. Serizawa. Dr. Yamane – who

³⁹ Eugene P. Wigner, "Roots of the Atomic Age," in *One World or None*, ed. Dexter Masters and Katharine Way, (New York, NY: The New Press, 2007), 42.

⁴⁰ Sontag, Susan, "The Imagination of Disaster," *Commentary*, October 1, 1965, 42-45. <u>https://americanfuturesiup.files.wordpress.com/2013/01/sontag-the-imagination-of-disaster.pdf</u>

looks surprisingly, with his mustache, graying hair, and fancy clothes, like Einstein – represents the scientist who does not foresee the dangers of the science on the path in front of him and only sees it as scientific progress. This parallels the stories of the nuclear scientists like Einstein, Young, and many of the ones who disregarded the Franck Report and the Szilard Petition. This is portrayed through Dr. Yamane's belief on what to do about Godzilla. "They are so wrong," Dr. Yamane tells Emiko at one point, "Godzilla should not be destroyed, he should be studied." Yamane thinks that Godzilla's benefits to science far outweigh his dangers. Yamane, like Young, thinks that we need to look toward what Godzilla can positively do for humanity. Dr. Serizawa, on the other hand, is representative of Young's adversaries, Franck, and Szilard. Serizawa has come back from the war injured, and he no longer trusts humanity. He had begun his research optimistically with the hope that his experiments with oxygen could help save the world. Unfortunately, "Serizawa had [only] found a terrible destructive power, and until he could find a counteracting good that could come from [his] discovery, he didn't want the world to know his secret." He hoped that he could save humanity with his discovery, but the reality was that his creation was too easily weaponized to make its positives outweigh its negatives. This is why he is so dismissive of politicians and the military when they approach him about it. As he said to Emiko upon showing his secret to her, "The world must not know of this. Promise to keep my secret." He recalls what governments did during World War II, like the bombing of Hiroshima and Nagasaki, and he does not want to rehash the issue: the world is better off without his creation.41

Below the veneer of scientist stock characters reflecting real scientists, *GKotM*! stands above other 1950s science fiction films because of its equally impressive ability to reveal the

⁴¹ Godzilla, King of the Monsters!, directed by Ishirō Honda and Terry O. Morse (1956; New York, NY: Classic Media, 2006), DVD.

FAS's entire foundational platform, *One World or None*, within its 80-miniute runtime. While many of the scenes that showcase this could be shunned because they are merely reedited scenes from *Gojira*, the exact wording within them, their presence in a US produced film, and their unmistakable reflection of the FAS's main messages is too perfect to dismiss. In fact within *GKotM!*, five FAS messages consistently repeat themselves: nuclear energy's dangerous origins, its power of saturation, its causation of unendurable fear and unreasonable decision making, the impossibilities of defending against it, and the necessity for international cooperation to create universal arms control over it.

First and foremost, there is a clear parallel between the origin of nuclear energy as presented within *One World or None* and the origin of Godzilla. Distinguished astronomer Harlow Shapley's essay, "It's an Old Story With the Stars," stated that atomic energy is an ancient force that "entered the economy of the stars in the year 3,000,000,000 B.C."⁴² While not exactly three billion years old, Godzilla is still, according to Dr. Yamane, a two million year old Jurassic force. This is emphasized twice by Steve Martin. The first occurs when he witnesses an ancient, "all but forgotten," Godzilla ceremony during his visit to Odo Island. And the second occurs when Godzilla attacks Tokyo and Martin remarks that, "[H]ere in Tokyo, time has been turned back two million years."⁴³ In both examples, Godzilla is shown to be a force far older than mankind can comprehend. Additionally, Godzilla is revealed to be sustained by nuclear power: the very energy that Shapley stated sustains the stars. This is emphasized through Godzilla's fiery, atomic breath and the radioactive residue that he leaves in his wake. These traits are the key pieces of evidence behind Dr. Yamane's Godzilla origin theory: one that, once again,

⁴² Harlow Shapley, "It's an Old Story with the Stars," in *One World or None*, ed. Dexter Masters and Katharine Way, (New York, NY: The New Press, 2007), 16.

⁴³ Godzilla, King of the Monsters!

blatantly connects Godzilla to nuclear energy. "[N]ow that analysis of radioactivity of the creature's footprint shows the existence of Strandium-90, a product of the H-Bomb, it is my belief that Godzilla was resurrected due to the repeated experiments of H-Bombs."⁴⁴ Godzilla, just like the energy of the stars, is the embodiment of both the atomic bomb and the ancient nuclear force that led to its creation.

Continuing this parallel, Shapley commented that while atomic energy has been present for billions of years in the stars, it has only been a recent discovery for mankind. The cause of this discovery, he described, was serendipity, or the "faculty or fact of accidentally finding a result of superior significance while searching for something else." This serendipitous discovery was more accurately made by "[t]he fossil pickers and chemists working with radioactivity in the rocks."⁴⁵ In other words, nuclear energy was discovered by scientists studying ancient rocks and dinosaur bones. Reflectively, the first concrete evidence of the appropriately dinosaur shaped Godzilla is made by Japan's leading fossil expert, or paleontologist, Dr. Yamane. Additionally, within one of Godzilla's footprints, the fossil of a trilobite – or extinct species of arthropod – is found. Each of these examples reemphasizes the ancientness of Godzilla and showcases his discovery by the "fossil pickers." In conclusion, the description of man's discovery of radioactivity detailed within *One World or None* perfectly mirrors that of Godzilla's discovery in *GKotM*!

Shapley then warned, however, that this discovery of nuclear power, or Godzilla, comes with a plethora of dangers. This warning began with the small explosions that can be seen when observing the stars. "As the explosive outburst subsides in the course of hours or days, we find, . . . wreckage of the violence . . . blown out into space in all directions[,] . . . the result, apparently,

⁴⁴ Ibid.

⁴⁵ Shapley, "It's an Old Story with the Stars," 20.

of the mishandling by a star of its resources in atomic energy."⁴⁶ While not outright stating that we need to be careful with atomic power, Shapley made sure that his warning is overpoweringly implicative. Atomic power is the blood of the stars, but even they are sometimes unable to control its full power. Consequently, unless we stay away from nuclear power mankind is destined to destroy itself; the second that we think we can control it, nature will lash out and set things right again. Like Steve Martin's guide tells him during the ancient ceremony that he witnesses, Godzilla is a force "too terrible for a mortal to conceive."⁴⁷ Not only are we not able to understand nuclear energy's terrible side-effects, but as mere mortals we are not able to understand the extent to which it will change our lives. In the film, Godzilla is the ancient force of nature coming to set right what we, as a dabbling and ignorant people, unnaturally tampered with.

The combination of interest and fear that Shapley had for nuclear energy is a sensation that FAS members had felt for decades. After Otto Hahn and Fritz Strassmann successfully attempted nuclear fission in 1938, Albert Einstein wrote a letter to US President Franklin Delano Roosevelt. "[I]t has been made probable . . . to set up a nuclear chain reaction [that could] lead to the construction of bombs . . . [with the power to] destroy [an entire] port together with some of the surrounding territory."⁴⁸ These fears were not Einstein's alone, and quite a few contemporary scientists felt the same way. Leo Szilard, who fled the Nazis in the early 1930s and brought the attention of atomic danger to Einstein had personally theorized nuclear fission and its bombmaking potential well before 1938. This theorization made Szilard fear for one thing in particular: Hitler getting his hands on the bomb first. This is the fear that Szilard used to

⁴⁶ Ibid., 26.

⁴⁷ Godzilla, King of the Monsters!

⁴⁸ Albert Einstein, letter to President Franklin Delano Roosevelt, August 2, 1939. <u>http://www.fdrlibrary.marist.edu/archives/pdfs/docsworldwar.pdf</u>

convince Einstein of the urgency of nuclear fission's research and, as a result, led Einstein to end his letter to Roosevelt as follows: "I understand that Germany has actually stopped the sale of uranium from Czechoslovakian mines which she has taken over[, and] . . . that the son of the German Under-Secretary of State, von Weizsäcker, is attached to the Kaiser-Wilhelm-Institut in Berlin where some of the American work on uranium is now being repeated."⁴⁹ The potentialities and dangers were both real, and the scientists were interested in what it meant for the future of science, but also scared of what it meant for the future of mankind. This information, from one of the most esteemed scientists in America at the time, pushed Roosevelt to found the Manhattan Project in order to learn about the significance of nuclear energy and to beat Hitler to the discovery of its dangerous potential.

This origin of the Manhattan Project has parallels in *GKotM*! in the scenes following Godzilla's attack on Odo Island. Steve Martin reveals to the audience that, after the incident, "the terror-stricken people [representing the scientists] demanded action be taken. Security officials and scientists were called together." Just like the fear of nuclear energy's dangers brining President Roosevelt and the world's foremost scientists into collaboration, Godzilla brought Japan's political officials and foremost scientists into collaboration. The Einstein-like Dr. Yamane then declares, "A research party should be organized to make a scientific survey of Odo Island." Just like how Einstein pushed Roosevelt to create a scientific group to study the threatening possibilities of nuclear fission, the Einstein-looking Dr. Yamane pushes the Japanese government in *GKotM*! to formulate a scientific group to study the threatening possibilities of Odo Island: a study which reveals the main threat to be both nuclear energy and Godzilla.⁵⁰

⁴⁹ Ibid.

⁵⁰ Godzilla, King of the Monsters!

The nuclear threat that was discovered by the Manhattan Project scientists is then elucidated within One World or None. Oppenheimer summarized this discovery in his essay "The New Weapon: The Turn of the Screw" by writing, "[T]he truly radical character of atomic weapons lies . . . in their vastly greater powers of destruction, [and] in the vastly reduced effort needed for such destruction."⁵¹ The threat that atomic weapons pose is not within their historically groundbreaking powers of destruction. It is in fact the opposite. "So far as blast is concerned, an atomic bomb is perhaps five times less effective than the same equivalent tonnage delivered in blockbusters or smaller missiles. . . . But in the strikes against Hiroshima and Nagasaki the effects, especially the antipersonnel effects, of heat were comparable to the blast effects."52 Philip Morrison identified this effect as "saturation." The definition of this term, he explains, begins when you attack someone and they defend themselves. "He hits you, he throws up flak, he fights the fires, he cares for the wounded, he rebuilds the houses, he throws tarpaulins over the shelterless machinery. The harder you strike, the greater his efforts to defend himself... . The atomic bomb[, however,]... destroys so large an area so completely and so suddenly that the defense is overwhelmed."⁵³ Afterward, they do not have the strength to rebuild houses or protect their machinery. This totality of destruction by the atomic bomb is saturation.

Saturation is exactly what Godzilla does to the cities he strikes. He does not destroy Tokyo or Odo Island in totality. He merely shows up out of the blue and causes death and panic on a widespread, but not complete, scale. Not everyone dies and not every building is destroyed, but Godzilla leaves behind a path of devastation that is more effective than an ordinary attack. "This is Tokyo," Steve says in the beginning of *GKotM*!, "Once a city of six million people. . . .

⁵¹ Oppenheimer, "The New Weapon," 59.

⁵² Ibid., 65.

⁵³ Morrison, "If the Bomb Gets Out of Hand," 5.

There were once many people here who could tell what they saw. Now there are only a few."⁵⁴ There are survivors from Godzilla's attack which reveals that his damage is not total, but the scale and speed of his destruction created an equally devastating effect: a complete saturation of the city's defenses and hope. Godzilla strikes his victims with gusto and leaves them without a means to effectively recuperate.

This complete saturation, the FAS argued, brings a whole other element along with it: unendurable fear. After the atomic bomb was dropped on Hiroshima and Nagasaki, the Japanese Emperor Hirohito said, "The hardships and suffering to which our nation is to be subjected hereafter will be certainly great. . . . However, it is according to the dictates of time and fate that we have resolved to pave the way for a grand peace for all the generations to come by enduring the [unendurable] and suffering what is unsufferable."⁵⁵ Philip Morrison understood this as the following: an "alert [will need] to be sounded now night and day in every city. If the raiders [are] over Sapporo, the people of Shimonoseki, a thousand miles away, must still fear even one airplane. This is unendurable."⁵⁶ It is impossible to be safe anymore because the damage that a single bomb can do is sudden, unexpected, and impossible to imagine. All it took was one bomb to devastate Hiroshima – one plane – and now the people of the world fear the sound of any aircraft flying overhead because the sound of its engine is synonymous with death.

In *GKotM*!, the message of unendurable fear is revealed a few times throughout the film. Right in the beginning, during the aftermath sequence, Steve mentions that for the survivors of Tokyo's destruction, "The only thought left was the paralyzing fear that it could happen again today or tomorrow." This theme recurs after the Odo Island incident when Dr. Yamane brings

⁵⁴ Godzilla, King of the Monsters!

⁵⁵ Emperor Hirohito, acceptance of the Potsdam Declaration via Radio Broadcast, August 14, 1945. <u>https://www.mtholyoke.edu/acad/intrel/hirohito.htm</u>

⁵⁶ Morrison, "If the Bomb Gets Out of Hand," 6-7.

the evidence of Godzilla's existence to the Japanese government. Instead of calmly thinking of a solution, panic escalates and everyone present begins to fear the possibility of Godzilla striking Tokyo despite there being no evidence to suggest that Godzilla was even heading toward it. In the politicians' eyes, the very fact that Godzilla existed was evidence enough. A third example of this occurs when Emiko is talking with Steve Martin about whether she should keep Serizawa's secret or not. In response to her hesitation, Martin says, "Emiko, last night Tokyo was destroyed. Tomorrow it might be Osaka or Yokohama. If you can help, you must." Godzilla, or the atomic bomb, caused paranoia on a massive scale because the mere existence of him meant that death could strike anywhere at any time.

An effect of this unendurable fear, according to Nobel Prize winning chemist Harold C. Urey, was the causation of something that was even worse than the bomb: unreasonable decision making. "The atomic bomb is such a grave threat to all men in all countries that frantic and desperate means of handling the problem have been proposed."⁵⁷ Just because the US was the only one with the bomb at the time of *One World or None*'s publication, it would not stay that way. Nuclear scientists Frederick Seitz and Hans Bethe discussed this fact by stating that, "[A]ny one of several determined foreign nations could duplicate our work [on the bomb] in a period of about five years . . . [and] even if we have more powerful bombs than they, our preferred position will be greatly weakened."⁵⁸ This was proven true in 1949 when the USSR tested their first bomb and the playing field was equalized by the incipient atomic arms race. Nobel Prize winning chemist Irving Langmuir argued that this "will undoubtedly end, as all previous armament races have ended, in war. . . . An atomic armament race has thus started that brings

⁵⁷ Harold C. Urey, "How Does It All Add Up?," in *One World or None*, ed. Dexter Masters and Katharine Way, (New York, NY: The New Press, 2007), 161.

⁵⁸ Hans Bethe and Frederick Seitz, "How Close is the Danger?," in *One World or None*, ed. Dexter Masters and Katharine Way, (New York, NY: The New Press, 2007), 129-130.

insecurity to all nations."⁵⁹ Every nation would want to find security and the only method of security was the development of comparable arms. This was reflected upon by H. H. Arnold: "Against this future of increasing range, speed, and destructiveness of the weapons of airpower, adequate protections by pure defense seems unlikely. Our defense can only be a counteroffensive; we must be prepared to give as good as we take or better."⁶⁰ One bomb leads to another all because of the unendurable fear that the first one caused the world. Whether because of the bomb itself or because of the consequential decisions it drives politicians to make, Oppenheimer effectively summed up the atomic era by stating, "It would thus seem that the power of destruction that has come into men's hands has in fact been qualitatively altered by atomic weapons."⁶¹ Because of the bomb, the world would never be the same.

This whole cause and effect relationship of rushed decisions and offensive-defensives begins in *GKotM*! with the revelation of Godzilla's existence. Referring back to the rushed, fear induced governmental decision to depth charge Godzilla in a preemptive defense, Godzilla – representing a struck enemy nation – does not keel over from the attack, but rebounds and strikes Japan with full force.⁶² He does not swim away and secure himself, but counters with his own attack that is even more devastating. Like Arnold said, he was "prepared to give as good as [he took and] better."⁶³ The threat of Godzilla, or the atomic bomb, was enough to start a chain reaction of militaristic mobilizations where the only defense was an offense.

This is not to say that the idea of a defensive-defense did not cross the mind of the FAS, and quite a lot of time was spent in *One World or None* on it. Radar developer Louis N.

⁵⁹ Irving Langmuir, "An Atomic Arms Race and Its Alternatives," in *One World or None*, ed. Dexter Masters and Katharine Way, (New York, NY: The New Press, 2007), 131-132.

⁶⁰ Arnold, "Air Force in the Atomic Age," 89.

⁶¹ Oppenheimer, "The New Weapon," 67.

⁶² Godzilla, King of the Monsters!

⁶³ Arnold, "Air Force in the Atomic Age," 89.

Ridenour wrote in his essay "There is No Defense" that, "There is no such thing as a specific countermeasure. . . . Regardless of our state of preparedness for an atomic-bomb attack . . . the maximum efficiency . . . is around 90 percent. . . . There is no defense."⁶⁴ Similarly, Philip Morrison declared that, "The bombs will never again . . . come in ones and twos. They will come in hundreds, even thousands. Even if . . . we are able to stop as many as 90 percent of these missiles, their number will still be large. . . . The cities of men on earth will perish."⁶⁵ In both explanations, it is assumed that no defense can be largely effective. As a result, when at least one bomb inevitably gets through a nation's defenses it will cause saturation and a counteroffensive. This process will then repeat itself until mankind is extinct. In short, it is pointless to consider a defense when dealing with atomic bombs.

Godzilla is similarly immune to defenses. After he survives the depth charge and heads toward Tokyo, the military attempts a defensive twice. The first attempt is done with guns and tanks. The second attempt is done with even more guns and tanks in addition to the skillful use of the electrical towers surrounding Tokyo. As Steve Martin's liaison told him, "To get to the heart of the city, Godzilla would have to break through three-hundred-thousand volts of electricity." Alas, all of these defenses are pointless because Godzilla, just like in *Gojira*, walks right through them and only looks mildly annoyed by their effect. Martin is horrorstruck by this: "I can hardly believe what just happened. Now it seems Tokyo has no defense. . . . [T]he tanks have been wiped out by a wall of flames. Neither man nor his machines are able to stop this creature. . . . Godzilla has turned the heart of Tokyo into a sea of fire. Beneath the flames, thousands lay dead or dying. . . . Nothing can save the city now." As missiles fly into and around

⁶⁴ Louis N. Ridenour, "There is No Defense," in *One World or None*, ed. Dexter Masters and Katharine Way, (New York, NY: The New Press, 2007), 105-106.

⁶⁵ Morrison, "If the Bomb Gets Out of Hand," 7-15.

Godzilla, he just shakes them off like they are an itch and continues his onslaught. There is no defense from the destructive power of Godzilla and there is no defense from the atomic bomb.⁶⁶

All of these themes – nuclear energy's dangerous origins, its power of saturation, its effect of unendurable fear and unreasonable decision making, and the impossibilities of defending against it - culminate into one overarching message within One World or None: that the best solution to the atomic problem is through international cooperation and arms control. Oppenheimer wrote, "[I]t seems to me that an awareness of the consequences of atomic warfare to all people of the earth, to aggressor and defender alike, can hardly be a less cogent argument for preventing such warfare."⁶⁷ Arnold said that, "Through international collaboration we must make an end to all wars for good."68 Nuclear Scientist E. U. Condon declared that, "The saboteur cannot be found, but the factory that makes his bomb need never exist."⁶⁹ Langmuir dictated that, "We may someday come to regard the atomic bomb as the discovery that made it possible for mankind to bring an end to all war."⁷⁰ The respected political commentator Walter Lippmann argued that our chance to create peace has never surfaced before. However, it is here now, but only for a brief moment "if we do not seize it."⁷¹ And finally, Einstein repeated that "there is . . . only one way out. It is necessary that conditions be established that guarantee the individual state the right to solve its conflicts with other states on a legal basis and under international jurisdiction."⁷² In conclusion, the bomb is too dangerous for any one nation to have, and atomic

⁶⁶ Godzilla, King of the Monsters!

⁶⁷ Oppenheimer, "The New Weapon," 68.

⁶⁸ Arnold, "Air Force in the Atomic Age," 89.

⁶⁹ E. U. Condon, "The New Technique of Private War," in *One World or None*, ed. Dexter Masters and Katharine Way, (New York, NY: The New Press, 2007), 115.

⁷⁰ Langmuir, "An Atomic Arms Race," 148.

⁷¹ Walter Lippmann, "International Control of Atomic Energy," in *One World or None*, ed. Dexter Masters and Katharine Way, (New York, NY: The New Press, 2007), 208.

⁷² Einstein, "The Way Out," 211.

energy needs to be controlled in a way that does not escalate its problem. The only way to do this is through international cooperation so paranoia can be reduced and peace can be achieved.

This message of international cooperation is equally propagated within *GKotM*! When Serizawa is approached by Ogata and Emiko in regard to using his Oxygen-Destroyer, he states, "The Oxygen-Destroyer cannot be used. . . . [W]hat will become of us if a weapon such as I now have falls into the wrong hands." This implies that there are both right hands and wrong hands for the Oxygen-Destroyer, or atomic bomb. Consequently, in order to keep the bomb in the right hands and out of the wrong ones, global control of the bomb is a necessity. This message is brought forth again during the television broadcast that convinces Serizawa to use the Oxygen-Destroyer. In it the broadcaster states, "The voices of our children now raised in a prayer for the courage to surmount the destruction of today, and look forward with hope for peace and light." This states that it is important for us to look beyond the destruction of cities like Hiroshima, Nagasaki, and Tokyo, to think clearly, and to find a way to make peace with each other around the world. Following this broadcast, Serizawa acknowledges the need to kill Godzilla and, as he burns his research, declares, "this must be the only time that the Oxygen-Destroyer [atomic bomb] will be used." He is effectively stating that the dropping of atomic bombs on Hiroshima and Nagasaki were one time deals that need never happen again. It was an act that revealed both the terribleness of atomic energy and the necessity to control it internationally. This message's climax is then revealed in the last scene of the film after Serizawa dies: an act which represents an end to the potentiality of an atomic threat and the FAS members' hope that they need never continue or redevelop their research. In response to this event, a random bystander declares, "People of the world, Godzilla is dead. Give us strength to rebuild our beloved land." This quote is then followed closely by Steve Martin's line, "The menace was gone. So was a great man. But the whole world could wake up and live again."⁷³ This is effectively stating that the world needs to work together to make peace. The war was over and it was okay for every nation to open their eyes and see the world for what it truly was: a land that needs to be rebuilt together, and not torn apart by menaces. The FAS's methods stopped the menace once, but it will not be enough. Everyone needs to open their eyes and recognize the menace that was the atomic bomb, or Godzilla, and learn how to live again – not in fear or paranoia of each other, but as an international conglomerate that works with each other to stop the atomic threat from destroying the world.

The connections between *GKotM*! and the FAS's rhetoric showcase two things: an elevated relevance of a film that even the most devoted Godzilla fans discount, and a persistence of a movement that many historians have deemed short-lived and ineffectual. *GKotM*! lays out each point made by the FAS in a very definitive, albeit subtle, way. Not only do the scientist characters of Dr. Yamane and Dr. Serizawa help to retell the story of who the atomic scientists were and what they did, but each scene references a foundational point of the FAS's primary text *One World or None*. Beginning with the origins of atomic energy paralleling the origins of Godzilla all the way up to the quotes and reactions of the characters paralleling the appearance, destructive power, impact, impossibility of defense, and possible counter measures of the bomb all showcase a definitive, even if unintentional, connection between the FAS and *GKotM*!

Godzilla was always meant to be an antinuclear metaphor. From before he even graced the silver screen, his creators molded his appearance and destructive force after the terrible incident at Hiroshima and Nagasaki. Despite this, however, the significance of Godzilla has not been acknowledged in academic writings. He is either ignored completely or given the tiniest

⁷³ Godzilla, King of the Monsters!

fraction of attention. This is simply nonsensical. Luckily, there are some Godzilla aficionados who have understood the significance of his first appearance in 1954's *Gojira*, including both his connection to the *Lucky Dragon* incident and his impeccable characterization as an anti-nuclear metaphor.

Where these Godzilla aficionados fail, however, is in their dismissiveness of the 1956 American reedit, Godzilla, King of the Monsters! While most of them conclude that the American reedit was a worthless endeavor because it did not retain the explicit anti-nuclear message of the original, they are selling the movie short. When Edmund Goldman bought the film's distribution rights in 1955, the political atmosphere of the US was not a friendly one for anti-nuclear and progressive ideas. The Hollywood blacklist was in effect, McCarthy had begun his Red Scare, and Julius and Ethel Rosenberg had been executed for treason. If any message was going to be placed in a film, it needed to be subtle. While Richard Kay, one of the producers of Godzilla, King of the Monsters!, said that he was only looking for was money when he Americanized the film, the presence of multiple connections between the film and the loudest US anti-nuclear movement of the time, the Federation of Atomic Scientists and their foundational text One World or None, is too perfect to be coincidental. From the impeccable similarities between the origins of atomic energy and Godzilla's origins, to the revelation of the bomb's and Godzilla's effect of saturation and unreasonable decision making, to the possibility – or lack thereof – for defense against both atomic bombs and Godzilla, to the call for international peace, the connections between the two mediums is not only apparent, it is abundant.

Godzilla, King of the Monsters! is the perfect example of taking the anti-nuclear theme of a film that was targeted toward one culture – Japan with its experiences of Hiroshima, Nagasaki, and the *Lucky Dragon* – and slightly readjusting to, whether consciously or not, target a whole

other culture – the US with its explicit FAS propaganda. While the story in both *Gojira* and *Godzilla, King of the Monsters!* is largely the same, the subtle variations make a huge impact. *Gojira* is, without a doubt, a groundbreaking piece of anti-nuclear filmmaking, but so is, despite what many Godzilla aficionados have said, its 1956 American offspring *Godzilla, King of the Monsters!*

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